AN INVESTIGATION INTO THE FIRST AND SECOND -ORDER FACTOR STRUCTURE OF THE SOUTH AFRICAN PERSONALITY INVENTORY (SAPI)

Sonica Mouton

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SUPERVISOR: PROF CC THERON

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DECLARATION

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ABSTRACT

Due to our free market economy, it has become immensely important for organisations in the 21st century to utilise scarce resources as optimally as possible to ensure a lucrative place in the market as well as to ensure maximum profits. In other words, organisations must focus on competing effectively in terms of innovation, flexibility, cost, service and quality. This can however only happen if the right people with the right skills who can perform their jobs the best are employed. It is for this reason that human resource management becomes crucial as it contributes to an organisation's success, through the acquisition and maintenance of a high quality and competent work force, as well as to ensure the effective and efficient use of human talent in a manner that will add value to an organisation. Personnel selection is one of the critical interventions used to regulate the movement of human capital into, through and out of the organisation. To enable Human Resource Practitioners/Industrial and Organisational Psychologists to make more informed decisions, assessment measures are used. However, to make accurate predictions, construct valid and reliable information pertaining to the predictor constructs is needed, as this is necessary to make accurate predictions of the criterion construct. Personality represents an influential determinant of job performance.

The South African Personality Inventory (SAPI) is a new personality questionnaire developed specifically for use in South Africa for amongst other personnel selection. The primary objective of this research is to evaluate the construct validity of the SAPI by evaluating the fit of both the first-and second-order measurement models of the SAPI through a confirmatory factor analytic investigation on a relatively large sample of the South African working population. The data that was used in this study was obtained from the data archives of the SAPI project, with written permission from the intellectual property holders, to utilise the sample data for the purpose of this research. Questionnaires were completed by a non-probability sample of participants from a variety of industries. The total sample size comprised of 3912 respondents. Item and dimensionality analyses were performed on the 20 subscales of the final version of the SAPI as set out by the scoring key. This was done to assess the extent to which the subscales represented the underlying personality constructs. In the item analysis no items were identified as seriously problematic. Results from the dimensionality analysis showed that 11 of the 20 personality dimension measures were compatible with the position that the items comprising these

subscales measure what they are designed to measure. In contrast, nine out of the 20 subscales failed the uni-dimensionality test.

A wide array of goodness-of-fit statistics was used to analyse the first order measurement model fit. The measurement model's overall fit was acceptable. The null hypothesis of exact fit was rejected but the null hypothesis of close fit could not be rejected ($p>.05$). The fit indices reflected a close fit in the parameter and a very good model fit in the sample. The factor loadings, although statistically significant were generally also of a moderate to high degree. All of the completely standardised factor loadings fell above the critical cut-off value of .50. This would suggest that the item parcels do represent the latent personality dimensions they were designed to reflect acceptably well. Discriminant validity was also investigated. The results showed that SAPI, regardless of some difficulty, permit the successful discrimination between the distinctive aspects of the latent personality dimensions. The SAPI's second order measurement model did not successfully converge. As a result inferences could not be made about the fit of the second order measurement model or the statistical significance and magnitude of the freed measurement model parameter estimates. Overall, this study contributed to the understanding of the psychometric properties of the SAPI. Its findings should guide and assist in eliciting the necessary further research needed to establish the psychometric credentials of SAPI as a valuable assessment instrument that can be used with confidence in South Africa. Recommendations for future research are made.

OPSOMMING

As gevolg van ons vrye mark ekonomie het dit baie belangrik geword vir organisasies in die 21ste eeu om hul skaars hulpbronne so effektief en optimaal moontlik te gebruik. Dit alles met die doel om ‘n winsgewinde plek in die mark te bekom en om maksimum wins te verseker. Met ander woorde, organisasies moet fokus om effektief te kompeteer in terme van innovasie, buigsaamheid, koste, dienste en kwaliteit. Dit kan slegs gebeur as die regte mense met die geskikte vaardighede wat hulle werk die effektiefste moontlik kan doen aangestel word. Dit is om hierdie rede dat menslike hulpbronbestuur noodsaaklik is omdat dit bydra tot die organisasie se sukses, deur die verkryging en instandhouding van ‘n doeltreffende werksmag en om te verseker dat werknemers se talente effektief en doeltreffend gebruik word op so ‘n manier dat waarde tot die organisasie gevoeg word. Personeelkeuring is een van die mees belangrike intervensies wat gebruik word om die vloei van die mensekapitaal in, deur en uit die organisasie te reguleer. Psigometriese toetse word gebruik om die menslike hulpbronpraktisyne / Bedryfsielkundiges in staat te stel om meer ingeligte besluite te neem. Akkurate voorspellings kan egter slegs uit sodanige psigometriese/sielkundige toetse afgelei word indien die konstrukte wat hulle probeer meet, in werklikheid determinante van werkprestasie is, indien die toetse betroubare, geldige en onsydige metings van hierdie konstrukte gee en indien die aard van die verwantskap tussen die voorspellerkonstrukte en die kriteriumkonstruk geldig verstaan word. Persoonlikheid is 'n invoedryke determinant van werkprestasie.

Die ‘South African Personality Inventory’ (SAPI) is 'n nuut ontwikkelde persoonlikheidsvraelys wat spesifiek ontwikkel is vir gebruik in Suid-Afrika onder andere vir personeelkeuring. Daarin lê die regverdiging vir die primêre doel van hierdie navorsing, naamlik om die konstrukgeldigheid van die instrument te ondersoek deur die eerste- en tweede-orde faktor struktuur van die SAPI deur 'n faktor-analitiese ondersoek op 'n relatief groot steekproef van die Suid-Afrikaanse werkende bevolking te evalueer. Die data wat in hierdie studie gebruik is, is verkry uit die data-argiewe van die SAPI projek, met die skriftelike toestemming van die intellektuele eiendom-eienaar, om die steekproefdata aan te wend vir die doel van hierdie navorsing. Die vraelyste is voltooi deur 'n nie-waarskynlikheid steekproef van deelnemers uit verskeie industrieë. Die totale steekproefgrootte het bestaan uit 3912 respondente. Item- en dimensionaliteitsontledings is uitgevoer op die 20 subskale van die SAPI soos deur die finale weergawe van die SAPI

nasienmasker uiteengesit. Dit is gedoen om die sukses te bepaal waarmee die subskale die onderliggende persoonlikheidskonstrukte verteenwoordig. Die resultate van die itemontleding het getoon dat nie een van die SAPI subskale, ernstig problematies was nie. Resultate van die dimensionaliteitontleding het getoon dat 11 van die 20 persoonlikheidsdimensiesmetings versoenbaar is met die standpunt dat die items waaruit hierdie subskale bestaan, meet wat hulle ontwerp is om te meet. In teenstelling hiermee het nege uit die 20 subskale nie die uni-dimensionaliteitstoets geslaag nie.

‘n Verskeidenheid pasgehalte-maatstawwe is gebruik om die pasgehalte van die eerste orde metingsmodel te ondersoek. Oor die algemeen was die pasgehalte van die metingsmodel aanvaarbaar. Die nulhipotese van presiese passing is verwerp maar die nulhipotse van benaderde passing is nie verwerp nie ($p>.05$). Die pasgehalte-maatstawwe het gedui op ‘n benaderde passing in die parameter en baie goeie modelpassing in die steekproef. Die faktorladings, ofskoonstatisties beduidend, was oor die algemeen matig tot groot in omvang. Al die volledig gestandaardiseerde faktorladings was groter as die kritieke afsnywaarde van .50. Die bevindinge is versoenbaar met die posissie dat die items wel die latent persoonlikheidsdimensies wat hul geoormerk is om te reflekteer, bevredigend reflekteer. Diskriminantgeldigheid is ook ondersoek. Die resultate dui daarop dat die SAPI, ofskoon nie sonder probleme nie, wel die suksesvolle onderskeid tussen die unieke aspekte van die persoonlikheidsdimensies moontlik maak. Die tweede-orde metingsmodel van die SAPI het nie suksesvol gekonvergeer nie. As gevolg hiervan kon daar geen afleidings aangaande die pas van die tweede-orde metingsmodel of die statistiese beduidendheid en grootte van die vrygestelde metingsmodelparameter-ramings gemaak word nie. In die algeheel, het hierdie studie bygedra tot ‘n groter begrip van die psigometriese eienskappe van die SAPI. Die bevindinge sal help om die nodige verderde navorsing te ontlok wat nodig is om die SAPI met vertroue as 'n waardevolle meetinstrument in Suid-Afrika te vestig. Aanbevelings vir toekomstige navorsing word gemaak.

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INTRODUCTION, RESEARCH INITIATING QUESTION AND OBJECTIVE OF THE STUDY

The introductory chapter presents the research initiating question and the research objective and presents an explanation as to why the research initiating question and the research objective are considered relevant and important for the discipline and practice of Industrial Psychology in South Africa.

1.1 INTRODUCTION

Today, in the world of work, organisations find themselves facing a lot more challenges than before. As a result of information, biotechnology as well as the workforce revolution, a new competitive paradigm has immerged (Kotze, 2003). Moreover, according to Bolt (2011) organisations in the 21st century are being pushed towards globalisation and convergence due to continuous technological developments.

Thus, due to the multiple needs of society as well as changing market trends, it has become increasingly more challenging to render products and services that will ensure organisational profitability (Theron, 1999). In the 21st century the emphasis has been placed upon maximum economic utility which refers to the belief that, in buying goods or services, human beings strive to derive the most value, whilst spending as little as possible money. In essence, this means that people strive to acquire maximum output for minimum input (Investor Words Inventory Glossary, 2015).

Thus the objective is to combine and transform the scarce/limited resources of society into products/services that has value/utility to society. To rationally serve society the value that society/market attaches to the product or service should exceed the value of the resources that are combined and transformed to create the product/service. It is here where organisations have a big role to play. Organisations are created by human beings and do not constitute natural phenomena and because human behaviour is goal-directed behaviour, organisations exist to achieve some specific objectives. This amounts to organisations having a strategic vision and in its whole, operating to achieve organisational goals derived from these strategic imperatives. What all this means is that because most organisations aim to be profitable and meet the challenges posed by the world of work and people's needs, it has become immensely important for such entities to try and utilise scarce resources as optimally as possible. If an organisation can get this right, then it will ensure a lucrative place in the market as well as a competitive market position in their respective areas (Theron, 1999).

A variety of organisational functions are involved in the process of ensuring the profitable combination and transformation of scarce resources into products and services that the market value. The human resource (HR) function is one of these organisational functions. The HR function earns it place amongst the organisational functions because organisations are run and managed by people. The performance of employees is therefore an important factor that determines organisational success. Employee performance should be understood as a set of structurally interlinked outcome variables, structurally interlinked with a structurally interlinked set of behavioural competencies.

The level of employee performance is not the outcome of a random event. Rather the level of performance achieved on the behavioural competencies and through those also the latent outcome variables is determined by a complex nomological net of latent variables characterising the employee and characterising the work environment in which the employee works. HR attempts to affect the level of performance that employees achieve on competencies and outcome variables that constitute performance through an integrated array of human resource interventions. The human resource function or rather human resource management aims to increase employee's productivity and raise quality whilst developing and growing employees, all for the sake of ensuring organisational competiveness and effectiveness (Denisi & Griffin, 2005). To be successful, organisations have to change their strategies towards being competitive in the 21ste century. This means competing effectively in terms of innovation, flexibility, cost, service and quality. For this to happen, the right people need to be employed, who possess the right skills required to be the best in their jobs (Jantan et al., 2010). Basically, what most of the authors are trying to say is that the emphasis today is on the importance of human resource management in organisations. Human resource management is therefore tasked with finding, maintaining and developing talent (Denisi & Griffin, 2005).

Burma (2014) defines human resource management as a means of managing organisation's most valued assets strategically and coherently. In addition, Burma (2014) noted that due to changes in the economy and competitive business environments, human capital has become critical to the success of an organisation. The organisation's talent pool is a determinant of organisational success and due to competiveness between organisations, competing for scarce talents is also something that needs to be considered (Aksakal, Dagdeviren, Eraslan & Yuksel, 2013). In addition, matching the right people to the right jobs in the organisation are an important part of the human resource function. Internal and external sources are utilised for this purpose. Hiring the right people also has a big impact on overall performance and cost implications for the organisation. Looking at it from the other end, hiring the wrong people due to inappropriate selection procedures can result in job accidents; decrease in motivation, less job satisfaction, productivity lost and increased supervision. Research suggests, for employees to have higher commitment to the organisation, enhanced performance and positive work attitudes, person-organisational fit has proved to be a key determinant for organisational success (Burma, 2014).

It therefore only makes sense that human resource management has deemed personnel selection as a critical intervention with the hope of improving employees' performance at work by controlling human capital movement in, within and out of the organisation (Theron, 2007).

According to Cronbach and Gleser (1965), when selection for a position occurs, the selection decision-maker's task is to identify from the vast number of applicants recruited, the subgroup that will perform the highest on the competencies that constitute success, and make a decision with regards to who gets the job based on limited information available from the candidates at the time of the selection decision for the purpose of maximising the gain on the utility scale. The aim of selection, like all other HR interventions, is to enhance performance. The emphasis in selection therefore falls on the criterion and not on the predictors.

Selection attempts to achieve this by controlling the flow of employees into the organisation, up in the hierarchy and out of the organisation. Selection attempts to ensure that those that will perform best will be selected into vacant positions. The ideal would be to base the decision on who should be assigned to a vacant position on the level of the applicants' job performance that they will achieve once they have been appointed. The key focus here is the criterion construct and ideally the selection decision should be based directly on measures of the criterion construct. This information is, however, not available at the time of the selection decision because it still needs to manifest itself in future. An individual's true performance behaviour only becomes known after the employee has been appointed. The one option is to make random or subjective decisions which could have undesired consequences with regards to the appointed candidate's performance on the job. The other is to make better decisions with regards to who optimally fits the job by clinically or mechanically predicting the criterion performance expected and to then base the selection decision on the expected criterion performance of each candidate (Theron, 2007). The APA sanctioned interpretation of predictive validity formally acknowledges Schmitt's (1989) view that in personnel selection, the focus should be on the criterion as opposed to focussing on the predictor from which predictions are made about the criterion (Ellis & Blustein, 1991; Landy, 1986; Messick, 1989; Society for Industrial and Organisational Psychology, 2003). This position also underlies the generally accepted regression-based interpretations of selection fairness (Cleary, 1968; Einhorn & Bass, 1971; Huysamen, 2002; Theron, 2007). To allow valid criterion inferences to be derived from the information obtained during the selection process the information needs to be systematically related/correlated with future criterion performance and the nature of this relationship should be validly understood.

This argument may at first glance not seem significant; however the criterion-centric nature of selection is in fact very important and consequential. Failure to recognise and appreciate its value lies at the root of a number of misconceptions that have generally become accepted with regards to testing in personnel selection. An appreciation of the criterion-centric nature of selection should force psychologists, test developers, organisations and the like to critically rethink (a) the use of construct-referenced norms in personnel selection, (b) the belief that tests are the villains responsible for adverse impact, and (c) the belief that assessments techniques can be certified as Employment Equity Act (EEA) compliant (Theron, 2007).

In order to obtain an accurate (clinical or mechanical) estimate of measures of the criterion construct from predictor information available at the time of the selection decision, the following conditions must be met. A statistically significant correlation between the predictor and a (valid, reliable and unbiased) measure of the criterion must be achieved and the nature of the predictor-criterion relationship in the appropriate applicant population must be validly understood. Moreover construct valid measures of the predictor construct must be available (Theron, 2009b). A valid selection procedure will result in employees that are more productive as opposed to using procedures that are less valid (Hunter & Hunter, 1984).

To meet the conditions proposed above, Binning and Barrett (1989) mentioned two qualitatively different approaches to finding predictors that can logically be expected to systematically correlate with criterion performance, namely the content- and construct-orientated approaches. These approaches could provide such correlates of performance by (1) aiming to evaluate (via off-the-job performance (or competency) measures X_i) how well a person responds to the job demands, constraints and opportunities that needs to be met to be considered successful or (2) operationalising the person-centred constructs (ξ_i) that determine the level of success that the job incumbent achieves on the job, derived from the job description (Theron, 1999b), via suitable predictor measures (X_i). The first option referring to a content-orientated approach to selection, while the latter pointing to a construct-orientated approach.

With regards to the *content-oriented approach,* job analysis techniques are used to determine which behavioural performance constructs (or competencies) collectively constitute performance on the job (Gatewood & Feild, 1994; Theron, 2009b). These then need to be operationalised by identifying behavioural manifestations of success and failure via a systematic analysis of the job. Under a content-orientated approach predictor stimuli elicit actual behaviourial expressions of the competencies (i.e. performance constructs) that constitute success on the job. What this means is that if the identified competencies are displayed on the job, this in turn will lead to the desired outcome in terms of job success. To obtain the predictor information under a content-orientated approach (Binning & Barrett, 1989), competency scores are obtained off-the-job either in simulations of the job (e.g. assessment centres, in-baskets or behavioural event interviews) or in a related job for which the same performance demands are required by recalling historical behavioural denotations relevant to the various competencies on which information is required. These assessments are done before the selection decision are made and occur away from the job in question. The results obtained from these assessments are then either clinically or mechanically combined to derive estimates of the criterion (Moyo, 2009). If the sample of demands, constraints and opportunities with which the applicant is confronted during the selection assessment is representative of the demands, constraints and opportunities that will be encountered on-the-job, the selection assessments should in principle correlate significantly with performance on-the-job because the level of performance that is achieved in the two contexts is determined by a common set of person-centred and situational latent variables (Binning & Barrett, 1989).

The *construct-orientated approach* is also rooted in the assumption that the level of competence that employees achieve on the competencies that constitute job performance is not the outcome of a random event but rather systematically determined by a complex nomological network of latent variables characterising the employee and his/her work environment. It is therefore expected that off-the-job measures of the person-centred determinants (or job competency potential latent variables) of performance obtained at the time that the selection decision is made should systematically correlate with on-the-job measures of performance. Criterion inferences derived from the person-centred determinants of performance used for selection show predictive validity if these (clinically or mechanically derived) inferences correlate significantly ($p<.05$) with a person's level of competence on the competencies that constitute job success. To the extent that specific person attributes correlate with job performance they may be designated as inherent job requirements (Guion, 1998; Messick, 1989). Under a construct-orientated approach the manner in which the inherent job requirements in the predictor construct (or competency potential) domain structurally relate to each other and to performance dimensions (or competencies) in the criterion/performance domain (Binning & Barrett, 1989) needs to be validly understood. This is done by developing a performance hypothesis in the form of a performance structural model. The main intent of the structural model is to map the job competency potential latent variables onto the job competencies and to in turn plot the job competency latent variables onto the outcome latent variables (Moyo & Theron, 2011).

Here the job in question will also be analysed in a systematic way as *per* the content-orientated approach described above, however the purpose will be to infer from the described job content as well as job context, the critical attributes that are believed to be determinants of the level of criterion performance that would be attained. If the complex performance hypothesis is valid, it would in principle be possible to estimate job performance from measures of competency potential latent variables. This is, however, only possible if the predictor constructs could be measured in a construct valid manner at the time of the selection decision. Moreover the relationships between the criterion and its person-centred determinants should be validly understood (Theron, 2007). The efficiency of selection procedures as described above thus depends on the extent to which the underlying performance hypothesis reflects the nature of the determinants (full complexity of sources shaping job performance) and how they combine.

Determining whether the performance hypothesis is valid can be established by operationally defining the performance and explanatory constructs. Operational hypothesis are deductively derived from the overarching substantive hypothesis. The operational definition of the performance construct as well as the operational definitions of the explanatory predictor constructs constitutes premises in the deductive argument. The validity of the deductive argument is dependent on the validity of these premises (Copi & Cohen, 1990; Mouton & Marais, 1985). The conclusions in a deductive argument therefore only necessarily follow from the initial statement (in this case the substantive performance hypothesis), if the premises (in this case the claim that the predictor measures and criterion measure provides reliable, construct valid and unbiased measures of the relevant predictor and criterion constructs contained in the performance hypothesis) are true. Therefore the operational hypothesis only is necessarily true if the substantive hypothesis is true and if the operational definitions of the predictor and criterion constructs are valid.

The validity of the premises, through which the operational performance hypothesis encompassing an empirically testable representation of the theoretical performance hypothesis is derived, therefore depends on the construct validity of the operational measures of the performance construct and the predictor constructs. If empirical evidence is found in support of the operational performance hypothesis, then the substantive performance hypothesis may be regarded as valid (i.e. permissible) for the reason being that it survived an opportunity to be falsified (Popper, 1972). However, the conclusion on the validity of the substantive performance hypothesis, conditional on support for the operational hypothesis, is dependent on evidence on the construct validity of the operational measures of the psychological constructs in the performance hypothesis. To convincingly justify the claim that job performance can be inferred from a selection of operational predictor measures developed under a construct-orientated approach (Theron, 1999) requires (*inter alia*) that the construct validity of the predictor measures should be demonstrated (Binning & Barrett, 1989).

Predictor measures display construct validity if inferences about an individual's standing on the construct as constitutively defined may permissibly be derived from the individual's observed score on the instrument. Strictly speaking it would be more accurate to say that the *inferences* derived from the observed scores on an instrument (rather than the measures *per se*) are construct valid if an individual's standing on the construct as constitutively defined may permissibly be derived from the individual's observed score on the instrument (Guion, 1998).

A construct is an abstract idea created by, and because of, the abstract thinking capacity of man to allow him to make sense of the world around and within him. Two dimensions of meaning are relevant when defining a construct (Kerlinger & Lee, 2000). A construct is represented by some symbol (a written word or a spoken sound). The connotative meaning of a construct lies in the abstract idea that this symbol represents and that constitutes the construct. The connotative meaning lies in the internal structure that is attributed to the construct and in the manner in which the construct is understood to be embedded in a larger nomological network of latent variables. The connotative meaning of a construct is explicated through conceptualisation and captured in a constitutive definition (Kerlinger & Lee, 2000). A constitutive definition provides an intellectual grasp on the construct.

The denotative meaning of a psychological construct lies in the observable behaviours in which the level of the construct expresses itself and, in the case of malleable constructs, the situations that affect the level of the construct. The denotative meaning is explicated through operationalisation and is captured in (measured or experimental) operational definitions (Kerlinger & Lee, 2000). An operational definition provides an empirical grasp on a construct. A measured operational definition describes the architecture or design of an instrument that is meant to provide an indirect measure of the construct through its denotations.

The internal structure attributed to a construct by the constitutive definition of the construct taken in conjunction with the measured operational definition of the construct defines a measurement model in which the individual items serve as indicator variables of the latent dimensions of the construct. Inferences derived from the observed scores on a predictor measure are construct valid if an individual's standing on the construct as constitutively defined may permissibly be derived from the individual's observed score on the measure. This will be the case if:

- The measurement model in which the individual items serve as indicator variables of the latent dimensions of the construct shows at least close fit;
- The unstandardised factor loadings are statistically significant ($p<.05$);
- The completely standardised factor loadings are large ($\lambda_{ij}\geq.50$);
- The unstandardised measurement error variances are statistically significant ($p<.05$);
- The completely standardised measurement error variances are small ($\theta_{\delta}\leq.75$); and
- The correlations between the latent dimensions of the construct are not excessively large ($\phi_{ij}<.90$).

In addition, in the multicultural and multilingual South African context another important aspect in personnel selection is the question whether the instruments used as predictors in selection measure the same construct, and if so, whether they measure the intended predictor constructs in the same way across different race and cultural groups (Moyo, 2009). The question is therefore whether predictor instruments display measurement bias and more specifically construct- and item bias. The Society for Industrial and Organisational Psychology of South Africa (SIOPSA) in their Guidelines for the Validation and Use of Assessment Procedures for the Workplace (SIOPSA, 2005) stipulated the requirement for psychological tests to measure constructs in the same way across groups reliably and validly. Moreover the Employment Equity Act (EEA) Republic of South Africa, 1998) imposes strict principles on the use of psychological measures and both the professional guidelines and the EEA aim to ensure ethical and unbiased test use across all different cultural groups (Foxcroft & Roodt, 2009) in an attempt to prevent unfair indirect discrimination. Specifically the EEA's prohibition of the use of biased tests (i.e. tests suffering from measurement bias) is (seemingly) for the purpose of protecting individuals from unfair discrimination in selection and other forms of decision-making. The belief is seemingly that the psychometric quality of the predictor measure determines whether a selection procedure will discriminates (indirectly) unfairly or fairly against members of constitutionally protected groups. More specifically the belief is that if a psychometric test displays measurement bias against members of a specific group selection decisions will invariable discriminate unfairly against those members, and conversely, if a psychometric test does not displays measurement bias against members of a specific group selection decisions will invariable not discriminate unfairly against those members. Because of this line of reasoning the Employment Equity Act 55 of 1998, amended in 2014 (Republic of South Africa, 2014), included the clause that tests are to be certified by a state-authorised official body like the HPCSA for example. Although not explicitly stated as such the purpose of the certification is probably to formally verify that the instrument provides a reliable, construct valid and unbiased measure of the construct as constitutively defined.[1]

The belief that a valid, unbiased measure will not discriminate unfairly and that an valid, but biased measure will discriminate unfairly, represent a psychometric oversimplification of the manner in which the psychometric qualities of the predictor, impacts on the fairness of the decisions based on the inferences derived from the predictor measures. Although it is true that lack of predictive validity will invariable result in unfair indirect discrimination, the converse is not true (Theron, 2007; 2009). Moreover unfair indirect discrimination will not invariably follow from the use of biased predictors nor will the absence of measurement bias (specifically item bias[2]) ensure that discrimination is fair. Fair discrimination cannot be ensured by being judicious in the choice of predictor instruments. Fair discrimination in selection can only be ensured by determining whether the nature of the relationship between the criterion and predictors differ across groups, and if so, whether the (clinical or mechanical) prediction model accurately takes these differences into account. The onus thus lies with the industrial psychology fraternity to determine whether the regression of Y on X_i differs across groups, and if so, to adjust the prediction model through which the criterion inferences are derived.

[1] It is acknowledged that in recent court ruling this clause was set aside. The ruling, however, was not grounded in substantive psychometric concerns about the merits of the requirement but rather in in concerns about the inclusiveness of the process that was followed to allow participation in the amendments to the Act.
[2] It needs to be conceded that the presence of aggressive construct bias could cause single-group validity (Guion, 1998) and that the use of the predictor for selection in the group where the predictor is not significantly related to the criterion would constitute unfair indirect discrimination.

It is thereby not implied that test developers should display a *laisses faire* attitude towards measurement bias in predictors. The onus still lies with the industrial psychology fraternity to demonstrate that psychological tests used for personnel selection do in fact measure the intended predictor constructs as defined across different ethnic groups and that the target constructs are measured across cultures in the same way (Moyo, 2009). This should, however, be motivated by a passionate commitment to proud psychometric workmanship and not by the need to avoid unfair indirect discrimination.

In South Africa four major ethnic groups exist: (1) African descents referred to as Blacks; (2) Mixed descents (Coloureds); (3) Asian descents (Asians or Indians) and (4) European descends (Whites). Furthermore, South Africa has 11 official languages comprising of nine Bantu languages (first language) and two Germanic languages (one is English and the other Afrikaans) and according to Foxcroft and Roodt (2013) psychological assessments has not made adequate provision for these rich diversities. Moreover, the trend in South Africa pertaining to the practice of personality research and assessment are to adopt and adapt tests from abroad (Foxcroft et al., 2004). Most of these tests does not cater for and take into account South Africa's cultural, social, economic and political history (Nel et al., 2012). Despite legislative requirements and professional guidelines, studies indicate that many of the instruments that are currently being used have not been examined for measurement bias or measurement invariance and equivalence (Dunbar, Theron & Spangenberg, 2011). Additionally, where bias analysis has been conducted, evidence of measurement bias has often been found (Foxcroft & Roodt, 2013; Meiring, 2007). An example is The South African Personality Questionnaire (SAPQ) that was developed by Steyn in 1974 (Taylor & Boeyens, 1991). The SAPQ can be described as an objective trait-based technique that consists of five scales labelled Social Responsiveness vs. Social Unresponsiveness, Tranquillity vs. Anxiety, Amity vs. Hostility, Flexibility vs. Rigidity, and Submissiveness vs. Dominance. An investigation was done by Taylor and Boeyens (1991) on the SAPQ and found that the interpretation of scores obtained by white participants was different from the interpretations of black participants' scores. This finding hereby confirms the need for the development of new personality measures for use in the South African context.

1.2 THE USE OF PERSONALITY AS A PREDICTOR IN SELECTION

Personality seems to be an important job competency potential latent variable, however, there has been some controversy amongst scholars on the value of having personality as a predictor, especially pertaining to selection measures in a work context. In a research review that was published in the *Journal of Applied Psychology and Personnel Psychology*, spanning over a time period of 12 years from 1952 until 1963, it was concluded by Guion and Gottier (1965) that personality measurements should not be used to make informed decisions pertaining to personnel decisions. Generally this position with regards to personality testing was not contested until Barrick and Mount (1991) and Tett, Jackson and Rothstein (cited in Morgeson et al., 2007a) opposed this view in their meta-analyses published in 1991.

Although studies done by Schmidt and Hunter (1998) prove that cognitive ability is the best single predictor of performance in a job, various other studies point to the fact that when a test is designed specifically to measure personality within a work context, the criterion-related validity increases and this in essence also increases the value of personality constructs from an industrial and organisational perspective (Sanz, Gil, Barras, & García-Vera, 2006). Moreover, in the recent past, personality assessments pertaining to selection decisions has sparked a lot of interest from researchers (Mount & Barrick, 1995; Ones, Dilchert, Viswesvaran & Judge, 2007; Tett & Christiansen, 2007). While there are researchers arguing against the trend to enthusiastically accept personality as a predictor of job performance, there has been a resurgence of research focussing on personality variables and using them in selection as predictors. This could to some extent be related to a general realisation that in order to acquire meaningful validation research, more than just relating a multitude of personality dimensions indiscriminately to overall job performance is required (Morgeson, Campion, Dipoye, Hollenbeck, Murphy & Schmitt, 2007a; Morgeson et al., 2007b).

It is very clear that using personality measurement for selection has been heavily disputed over the past years. Whilst some researchers are for personality testing in selection, others like Morgenson et al. (2007a; 2007b) are concerned about low validity of personality tests when attempting to predict job performance and while the numerous meta-analytic studies have corrected some of the validity coefficient factors (range restriction, criterion unreliability, predictor reliability), the effects of these factors can normally not be controlled when inferences are made of criterion performance taken from personality assessments (Moyo & Theron, 2011). Nevertheless, Morgeson et al.'s (2007a; 2007b) concerns with regards to being careful when using personality measures when it comes to selecting personnel holds true to some extent, personality's importance and contribution to work behaviour cannot be negated and has been researched from a multitude of perspectives (Anderson & Lewis, 1998) with the basic premise being that job performance is complexly determined (Cilliers, 1998).

Given the research evidence that personality does play an influential role in the nomological network of latent variables that determine the level of job (and learning) performance that employees (and learners) achieve, South African researchers together with researchers from the Netherlands embarked on a research project to develop the South African Personality Inventory (SAPI). The SAPI project was set up to address both the practical need to aspire to reduce bias in personality measurement, and to answer theoretical questions of indigenous personality in South Africa. The project aimed to develop an indigenous model and an instrument for its measurement, covering the implicit personality conceptions deemed relevant across ethnic groups and languages (Meiring, Van de Vijver & Rothmann, 2006; Nel et al., 2012; Valchev *et al*., 2011; Valchev *et al* 2013).

To confidently use the SAPI for personnel selection in the South African context it is required to:

- Firstly develop an argument that convinces as to why and how personality (as interpreted by the SAPI) should be related to job performance.
- Secondly ensure that a structural model derived from the foregoing argument fits empirical data and that the freed structural model parameter estimates are statistically significant, in other words that there is support for the performance hypothesis.
- Thirdly ensure evidence is available that the predictor and criterion constructs are validly and reliably measured in the various sub-groups typically comprising applicant groups in South Africa.

- Fourthly make sure evidence that race and gender group membership do not systematically affect the manner in which the predictor and criterion constructs express themselves in observed measures is available.
- Fifthly ensure that the mechanical or clinical criterion inferences derived from the scores on the SAPI correlate statistically significantly with a construct valid measure of the criterion and that group membership does not explain unique variance in the criterion not explained by the predictor.

The objective of this research is to contribute to the available psychometric evidence with regards to the third aspect mentioned above. The confident utilisation of the SAPI in specific personnel selection procedures aimed at filling posts in specific positions in specific organisations would, however, in addition to the above, also require credible evidence on the predictive validity, fairness and utility (Guion, 1998) of the selection procedure.

1.3 RESEARCH INITIATING QUESTION

The current study is set in motion by the research initiating question as to the connotative meaning of the personality construct as constitutively defined by the SAPI and the question whether the SAPI provides a reliable and construct valid measure of the personality construct as constitutively defined?

1.4 OBJECTIVES OF THE STUDY

The SAPI is based on a specific interpretation of personality. The qualitative stage of the SAPI project focussed on the development of a conceptual model. The process was not based on a predefined first-order personality factor model. Rather the SAPI's aim was to uncover implicit personality conceptions, using a combined emic-etic approach, as they manifest in free personality descriptions in all of the 11 languages of South Africa (Fetvadjiev, Meiring, Nel and Hill, 2015). A multistep approach was followed which consisted of regular consultations with experts (culture and language), an initial data analysis using a subset of three Nguni languages, after which a complete analysis followed as well as a partial quantitative validation that focused on the midlevel sub clusters. Nine broad clusters were identified via this qualitative process

(Conscientiousness, Emotional Stability, Extraversion, Facilitating, Integrity, Intellect, Openness, and Relationship) with 37 sub clusters (Nel, Valchev, Rothmann, van de Vijver, Meiring, & de Bruin, 2012).

In the quantitative stage, the first experimental version of the SAPI contained 146 items. The first experimental version of the SAPI comprise 18 facet scales (the number of items per facet scale are indicated in brackets next to the name of each facet) formed based on the per-cluster factor analysis of the last stage of item selection. These are: Facilitating (10), Integrity (12), Social Intelligence (4), Interpersonal Relatedness (9), Warm-Heartedness (12), Deceitfulness (3), Conflict-Seeking (6), Hostility–Egoism (13), Emotional Balance (8), Negative Emotionality (10), Playfulness (6), Sociability (7), Achievement Orientation (10), Orderliness (11), Traditionalism–Religiosity (4,), Intellect (10), Broad-Mindedness (5), and Epistemic Curiosity (6,). All scales were unipolar, with items formulated in the direction of the target construct. Moreover, the 18 facet scales corresponds in level of abstraction to the 37 sub-clusters of the qualitative model. The 18 facet scales measured what could be described as 18 latent first-order personality dimensions. According to Paunonen, Haddock, Forsterling, and Keinonen, (2003) midlevel facet scales are of importance due to the incremental validity they offer. In addition they give an indication of the continuity between qualitative and quantitative models.

Fetvadjiev et al. (2015) studied the pooled within-correlation matrix of the facet scales via maximum likelihood exploratory factor analysis. They eventually decided that a six-dimensional oblique second-order factor structure (comprising a positive and a negative Social-Relational factor, Neuroticism, Extraversion, Conscientiousness, and Openness) provides the best explanation for the observed facet scale correlation matrix.

It should however be noted that the SAPI is still in its research phase. In the second (electronic) experimental version of the SAPI twenty subscales as opposed to eighteen were created. Two additional latent first-order personality dimensions, namely, Empathy and Arrogance were added that have a bearing on the social-relational domain of personality (Valchev, van de Vijver, Meiring, Nel, Hill, Laher & Adams, 2014). The second experimental version of the SAPI still hypothesises to the same six latent second-order personality dimensions referred to above. Empathy was hypothesised to load on the

Positive Social-Relational second-order personality factor and Arrogance, on the Negative Social-Relational factor (Velichko Fetvadjiev, personal communication, 26 June 2017).

The architecture of the second (electronic) experimental version of the SAPI reflects a specific design intention. The design of the SAPI questionnaire reflects the intention to construct twenty sets of items, to reflect variance in each of the twenty latent first-order personality dimensions collectively comprising the personality construct as constitutively defined by the SAPI. The SAPI items are designed to function as stimuli that will provide a fairly uncontaminated expression of a candidate's standing on the underlying latent personality dimension through the manner in which the candidate behaviourally responds to the item as stimulus. What this means is that the items selected for each subscale are believed to reflect a specific first-order[3] personality dimension.
The scoring key of the SAPI reflects the expectation that all items comprising a specific subscale should load on a single dominant personality factor. It is because of this assumption that these items can be used to derive an observed score for that specific personality dimension. Furthermore, when calculating a subscale score for a specific personality dimension, only the items comprising that specific subscale are combined. The SAPI interpretation of personality in terms of 20 personality facets combined with the design intention that each item is to reflect the standing on one specific personality facet implies a specific first-order measurement model. However, the twenty first-order personality dimensions do to a certain degree share variance. The basic first-order measurement model could, therefore be expanded into a second-order measurement model also reflecting the manner in which the 6 second-order personality factors express themselves in the 20 first-order personality dimensions.

The objective of this research study is:

- to evaluate the fit of both the first-and second-order measurement models of the SAPI, as implied by the architecture of the instrument and the SAPI's constitutive definition of the personality construct,
- to evaluate the statistical significance of the first- and second-order factor loadings, the statistical significance of the measurement error variances, the statistical significance of the inter-factor correlations and;

[3] It is acknowledged that strictly speaking, given the development history of the SAPI, the 20 personality facets are not first-order personality factors.

- to evaluate to magnitude of the completely standardised factor loadings, measurement error variances and inter-factor-correlations.

1.5 STRUCTURE OF THE THESIS

Overall there will be a total of five chapters. Chapter 2 will report the history and development of the SAPI. Chapter 2 will also present the definition of personality underlying the SAPI. Available psychometric evidence on the reliability and validity of the SAPI as a measure of personality (given its specific constitutive definition) will also be reviewed. Chapter 3 will describe the methodology used to evaluate the SAPI measurement models and Chapter 4 will present the research results. In Chapter 5 the conclusions and implications for future research will be presented.

CHAPTER 2

AN OVERVIEW OF THE SAPI AS A MEASURE OF PERSONALITY IN THE WORK ENVIRONMENT

2.1 INTRODUCTION

The need for an in-depth psychometric analysis of the construct validity of inferences derived from the dimension scores obtained on the SAPI as a measure of personality in the multicultural South Africa has been argued in Chapter 1.

Chapter 2 gives a literature overview of different conceptualisations of personality. Chapter 2 also explicates the constitutive definition of the personality construct that underlies the SAPI as well as indigenous approaches to personality assessment on which the SAPI was based. Moreover, the history, development, structure and features of the SAPI will be delineated. Furthermore, this chapter will report on the currently available psychometric properties of the SAPI in the South African context for the groups it was developed for.

2.2 CONCEPTUALISATION OF PERSONALITY

Personality is a psychological construct. It is therefore an abstract idea created by the abstract thinking ability of man that allows him to achieve intellectual control over that which he experiences around and within himself and to communicate these experiences (Kerlinger & Lee, 2001). As such it does not physically exist. The essence of the abstract idea that which one has in mind when referring to the construct lies in the connotative meaning of the construct. The connotative meaning of a construct is explicated in a constitutive definition through a process of conceptualisation. The connotative meaning firstly lies in the nature of the internal structure of the construct. This refers to the number of dimensions comprising the construct, their identity and the manner in which these dimensions are structurally related to each other. The connotative meaning secondly lies in the manner in which the construct is embedded in a larger nomological network of latent variables that fall outside the conceptual boundaries of the focal construct (Theron, 1999). The aim of Chapter 2 is to explicate the connotative meaning of the personality construct as interpreted by the developers of the SAPI.

Personality is a representation of the self and expresses itself to some degree in almost all human behaviour. The term 'personality' comes from the Latin word 'persona'. 'Persona' refers to the *mask* used in Greek theatres to represent a variety of characters that play a particular stage/life role. Later the meaning changed to portray the character behind the mask as opposed to the mask alone (Anderson & Lewis, 1998).

Personality has been defined throughout history in many ways due to its complexity. Some of these definitions are reviewed below.

Allport (1961, p. 28) defines personality as "the dynamic organisation within the individual of those psychophysical systems that determine his characteristic behaviour and thought'. Whereas Child (1968, p. 83) gives a personality definition that is integrative and describe personality as "more or less stable, internal factors that make one person's behaviour consistent across, and different from, the behaviour other people would manifest in comparable situations". Moreover, Mischel (1976, p. 2) views personality as "the distinctive patterns of behaviour (including thoughts and emotions) that characterise each individual's adaptation to the situations of his or her life". Cattell (1965, p. 25) refers to personality as "that which people will do, think or say when placed in a specific or given situation" and Schultz and Schultz (1994, p. 10) suggest that personality is " the unique, relatively enduring, internal and external aspects of a person's character that influence behaviour in a different situations".

No universal definition for personality exists, however as can be seen from the foregoing definitions some agreement with regards to some of the aspects that the definitions of personality exists. Thus it seems important that the following criteria are considered to do the construct 'personality' justice. These are (1) the mask of personality (physical appearance, behaviour as well as traits) which refers to those aspects that can be observed and are visible; (2) emotions, thoughts, attitudes and values that are unconscious behaviour and invisible; (3) changeable nature of behaviour as well as enduring patterns (consistencies); (4) every individual's uniqueness; (5) differentiation as well as wholeness in personality; (6) the acceptance that personality refers to a human being (living) who is able to adapt to his/her circumstance (Bergh, 2013).

Moreover, it seems that most psychologists agree that the interaction between the situation as well as the person's characteristics must firstly be considered before personality can be adequately explained and while, most theorists deem the notion that personality determines behavioural consistency across different situations as credible, Mischel (2004) is but one of the people that have critically challenged this claim, although his criticism has been frequently misunderstood. His claim has been understood as stating that the construct of personality does not exist (Smith & Smith, 2005), which is not what his stance is intended to suggest. What Mischel (2004) argued was that interactions between personality and situational characteristics results in the behaviour variability of individuals possessing a stable personality structure across situations. Thus, he suggests that both the characteristics of the situation as well as personality traits are necessary and are fundamental components of personality theory and need to be treated as such. Here, how the person subjectively interprets the situation is more important than the actual objective characteristics of the situation. Therefore a person possessing a stable personality structure can only be expected to behave consistently if the salient characteristic of the situation is perceived to be similar (Mischel, 2004).

Mischel's stance raises some concern with regards to how personality can be measured, especially if the manner in which a specific personality structure manifests itself is not consistent across different situations (Murphy & Davidshofer, 2001). To complicate the personality construct even further, is the importance of the cultural context of personality when considering personality definitions.
Bergh (2013, p. 280) defines culture as:

> Those collective norms, values, beliefs, thinking, perceptions, and behaviours, based on past events especially, which characterise the unique or distinctive ways in which people or communities share and do things and which may influence personality and behaviours.

Even though culture is unlikely to alter the genetic makeup of a person, it may have an effect and influence on how personality is expressed or manifested in various situations. Thus it may influence how dispositional traits are elaborated or reinforced. Moreover, it is the view of cultural psychologists that culture could have an impact on personality conceptions of the self. It could also have an impact on implicit or lay beliefs about the significance and role of dispositional traits as well as other self-processes (e.g., self-enhancement, self-regulation). These can be viewed as characteristic adaptations (Church, 2010). Therefore, culture and personality cannot be seen as two separate entities and according to Schweder and Sulivan (1993) interpenetrate and affect the identity of one another.

In the following section, some theories that emerged (schools of thought) that try to explain the process through which personality develops as well as the cultural context are discussed. The theories that are discussed are those that are considered relevant in a South African work context.

2.3 THEORIES OF PERSONALITY

2.3.1 PSYCHODYNAMIC THEORY

These theories propose that personality is mostly unconscious and while people are mostly unaware of why they behave the way they do in situations, they nonetheless strive for awareness of the reasons why they act a certain way. Sigmund Freud was coined as the father of psychodynamic/psychoanalytic theory (Albertyn, 2003).

The underlying assumption of this theory postulates that personality differences occur from the manner of which three separate psychological forces that are interdependent on one another work together. Freud named these forces the *id* (found in the unconscious and comprises of irrational impulses that are uncontrolled and strive to immediately gratify sexual, physical and emotional pleasures irrespective of moral or social acceptability; the *superego* (the second part of personality which operates according to the morality principle: values and morals with regards to what is right and wrong). The *superego* consists of two parts, (1) the conscience that uses guilt to punish what is wrong and (2) the ego ideal that is responsible for rewarding what is right and develops during childhood and through socialisation. These act as inhibitors as opposed to oppressors of the pleasure-seeking demands of the *id*. The psychological force that forms the last part of personality as proposed by psychoanalytical theory is the *ego*; the *ego* acts as the balancing agent between the *id* and the *superego*. Thus the *ego* chooses the best manner to gratify the *id*'s needs whilst being socially acceptable and limiting undesirable consequences. However, the bigger the conflict between the impulse and what is right, the more difficult this becomes. From this interplay, defence mechanisms are born to maintain a positive self-image whilst solving conflicts (Albertyn, 2003; Anderson & Lewis, 1998).

Emphasis is thus placed upon conflicts people experience due to the norms of society, internal biological drivers, past events and unconscious motives. Psychodynamic theory/depth psychology assumes that the most important part of development happens during early childhood as opposed to adult life. They further believe that any problems in early life can potentially create disruptive influences in later (adult) life (Bergh, 2003).

Translated to a work context these theories suggest that people's performance differs from one another as a result of the interaction between unconscious forces (Bergh, 2003,).

2.3.2 BEHAVIOURISM AND LEARNING THEORIES

Contributors to behaviouristic theories on personality are Darwin (idea of evolution); Pavlov (conditioning research); Bandura, Mischel and Rotter (cognitive learning approaches) and Skinner (Bergh, 2003,).

The fundamental idea behind these theories is that personality is shaped by the environment and external stimuli. Personality can be characterised as the acquired typical observable behaviour and thoughts as reinforced (either positively or negatively) by dominant influences within an individual's environment. In this context personality is less stable because of continuous learning that takes place. It is believed that individual differences are dependent on the specific individual's environmental influences as well as their learned behaviour. Moreover, behaviourism theorists are of the view that these circumstances or influences could override natural and genetic dispositions (Bergh, 2003,). As stated in Pervin, Cervone and John (2005) the behaviourist approach deems it unnecessary to try and explain difference in human behaviour by making use of personality constructs. According to behaviourism for behaviour to be controlled the principles of learning should be applied and for behaviour to be predicted the learning history needs to be understood.

2.3.3 HUMANISTIC PERSECTIVE

These approaches explain personality as being more person-orientated, where the person is seen as unique in his/her being and not controlled by external forces and unconscious motives. Emphasis here falls on striving towards self–actualisation and the development of personality based on unique experiences. In addition, these theorists are more concerned about personality that is strongly influenced by phenomenologically interpreted social factors as well as the impact that important people have on an individual's personality (Bergh, 2013).

The main assumptions of the humanistic approaches postulates (1) self-experience, which points to the believe that people also react to subjective and phenomological experiences and not only to the physical realities; (2) that each individual's experience is unique and different form other people; (3) that personality is a holistic phenomenon and that social characteristics, physical, mental, all attributes as well as relationships and experiences should be taken in account; (4) intrinsic goodness in people and self–actualisation; and lastly (5) free will and self–determination (Bergh, 2003).

Theorists like Maslow and Rogers are renowned for their contribution to the humanistic perspective (Bergh, 2003).

2.3.4 COGNITIVE AND SOCIAL COGNITIVE THEORIES

The cognitive and social-cognitive theories postulate that people use their cognition to shape their cognitive processes, schemas and constructs with regards to reality. Thus it is believed that people create their own destiny and personality according to cognitive constructs (self-created). Social-cognitive theory, the more recent approach to personality, also focus on self-regulation, schemas and processes, these they use as ways to control and understand their own behaviour, other people and the world in general. Here the concept relational schema applies which refers to self images of all the relationships and interactions a person have experienced (Bergh, 2003). What this theory implies is that, people learn through observing model behaviour, consequences and sequence of events and these influence their behaviour and the way they conduct themselves. Thus people's survival is dependent on the replication of other's actions and not merely by learning new behaviour by means of either failing or succeeding. In observing other's behaviour, a person's behaviour that is already learned may be prompted into action (Bandura, 1986, Bandura, 2002)

2.3.5 BIOLOGICAL AND EVOLUTIONARY PERSPECTIVES

The theories that approach personality from this perspective propose that human behaviour is influenced by genetic factors. Some of the determinants of personality from these perspectives are neurologically and physiologically-based as well as specific genes (Pervin as cited in Bergh & Theron, 2013). Moyo (2009) stated that it seems highly unlikely that personality differences could be solely dependent on environmental factors and that this stance should be integrated with biological determinants to better explain and understand personality. Eysenck (1970; 1990) also emphasised the importance of identifying biological underpinnings of traits to avoid circular explanations of traits.

Moreover according to the evolutionary perspectives (under Darwin's influence) individual behaviour and personality traits are seen as the result of genetic transfer from generation to generation. This suggests that the evolutionary history of the human race might be able to change the biological nature common to all people (Pervin as cited in Bergh & Theron, 2013). Individual differences thus exist because of inheritance as well as social survival behaviour (Bergh, 2003).

2.3.6 TRAIT AND TYPE THEORIES

These theories describe personality either as collections of traits, factors and dimensions or as types which can be operationally defined in terms of behaviour patterns that are consistent and enduring (Bergh, 2003).

Type theory attempts to describe personality by classifying people into a limited number of personality types. Here individuals are assigned to discrete categories by means of using the distinctive patterns of personality characteristics. Moreover, type theories also endeavour to use an individuals' personality type to predict the future (Anderson & Lewis, 1998). With regards to the origin and history of type theory, Hippocrates was one of the first theorists to suggest type theory by believing an individual's personality consisted out of four humours (blood, phlegm, black bile and yellow bile) and that these are associated with a particular temperament. His basic believe was that if for example a person's main humour was blood, that individual would have a sanguine type of personality, thereby postulating that a person's personality was dependant on his/her predominant humour (Smith & Smith, 2005). One of the most popular type theories belongs to Jung (1921, 1971). Jung's theory suggests that every individual possesses a psychological type determined by a combination of four bipolar dimensions. These are named extraversion-introversion (E-I), thinking-feeling (T-F), sensing-intuition (S-N), and judgment-perception (J-P) and were designed to categorise people into several personality patterns (Foxcroft & Roodt, 2005). However, as with most theories, type theories do not exist without a number of criticisms. The first being that they ignore the vast amount of empirical evidence suggesting that individuals cannot be restricted to just a small number of groups. Also the fact that the standing on latent personality traits is normally distributed (Smith & Smith, 2005). A second criticism of type theories is that types are all-or-nothing phenomena; that in turn suggests that type theory oversimplifies the complexities of personality. Thirdly, type theories only describe and identify characteristics correlating to behaviour and do not explain how a person's behaviour is caused or how personality develops. Lastly, some type theories predictive validity has been questionable (Anderson & Lewis, 1998).

Personality types differ from personality traits, in that (1) personality traits embody a smaller grouping of behavioural tendencies and; (2) personality type involve *qualitative* differences that exist between people, as opposed to traits that can be construed as *quantitative* differences. An example of the difference between these two phenomena's is that in type theories introverts and extraverts are two distinctly different categories of people whereas according to trait theories, introversion and extraversion are the end-poles of a continuum, with many shades in between (Bernstein, Penner, Clarke-Stewart, & Roy, 2008).

The definition of a trait suggest that the determinants of a person's typical behaviour can be found within the person himself as opposed to the situation and can be used to make predictions of future behaviour as well as explanations of an individual's day to day conduct (Pervin et al., 2005). In addition the trait theories assume that the environment will have less of an influence on behaviour as opposed to the neurobiological basis of the traits that predispose individuals to a specific standing on traits (Bergh, 2003). Even though there does exist some different views with regards to trait theories, there are basic views that are shared. The following main assumptions are generally accepted by most of the trait theorists. The first assumption is that traits are the basic building blocks of personality. Trait theorists believe that people respond in a certain way due to the traits (broad predispositions) that they possess. Traits are therefore seen as generalised behavioural tendencies of people (Pervin et al., 2005).

Although the same traits apply to all people, traits do manifest differently in behaviour between individuals due to differences in experiences (social, learning). Another assumption is that the behaviour that is an observable manifestation of a specific trait provides an indicating of a person's standing on the underlying trait. Trait theorists thus believe that overt behaviour and the inherent traits a person has, have a direct, one-to-one link (Bergh, 2003).

Moreover a third assumption is the premise that personality and behaviour can be ordered according to a hierarchy (Pervin et al., 2005). Here, groups of specific behavioural responses combine into behavioural habits which then combine into (first-order) personality traits. Thereafter, these groups of first order personality traits combine into a somewhat more limited number of second-order factors (Eysenck, 1970; 1990; Pervin et al., 2005).

Most personality assessments are based on trait theory; this is part of the reason that the trait approaches are also referred to as psychometric approaches (Bergh, 2003). In trait theory emphasis is placed on quantitatively analysing and measuring the different components of personality objectively. This is because traits exist to a variable degree within and across different people and these traits/elements can be used to compare or differentiate between individuals when measured. Traits could be measured in terms of motives, interests, interpersonal behaviour, attitude, values and emotions (Bergh, 2003).

Psychometric approaches can be used in practice to identify, explain and predict human behaviour within and out of an organisational setting (Moyo, 2009). In fact, trait theories made a big contribution to objective psychological measurement and are currently mostly used in the work context (Bergh, 2003).

Cattell, Goldberg, Eysenck, Allport and Costa and McCrae are some of the important trait theorists (Bergh, 2003.). Some of their contributions to trait theory are described below. Allport (1937) was very much aware of the fact that the manner in which traits are activated and expressed in behaviour is affected by particular characteristics of situations. He divided traits into more manageable categories. He distinguished between three types of traits (1) cardinal traits (outstanding dispositions that are so pervasive that it affects most behaviour); (2) central traits (common dispositions with an influential effect on behaviour, however more selective across situations); (3) secondary traits (less conspicuous and more subtly expressed in limited situations) (Pervin et al., 2005).

Perhaps one of the most influential trait approaches is Eysenck's three factor theory. According to Eysenck personality is made up of three key factors/traits. These are extroversion – introversion (E), neuroticism-stability (N) and psychoticism-superego functioning (P). These second order personality factors are described by narrower, more specific traits (subfactors) (Bergh, 2003). Because he was motivated to develop measures that provide reliable measures of personality traits, his model is backed by factor analytic research and represents a hierarchical structure of personality (Smith & Smith, 2005).

Raymond Cattell (1943; 1965; 1979; 1990) became known for structuring personality into sixteen first-order or primary traits. His main aim was to simplify the enormous number of attributes that can be utilised to describe that which differentiate people as unique and distinct individuals so as to obtain a more parsimonious description. He did this by constructing a more parsimonious scientific taxonomy of personality traits by analysing and narrowing down (through a lexical approach) Allport and Odbert's list of adjectives found in the English language to describe personality traits (John & Srivastava, 1999). According to Cattell (Hefner, 2011), the sixteen first-order personality factors each form a bi-polar continuum which means that every person is characterised by each trait to varying degrees. For example, Person A may be low on some traits and high on others. To determine exactly how much of each trait a person possess, Cattell developed the well-known 16-Personality Factor Questionnaire (16PF) (Bergh, 2003,). Even though, Cattell did state that for a comprehensive understanding of personality a description in terms of the narrower, more specific first-order factors are required, he nonetheless made provision for a smaller number of broader second-order factors that categorises personality into five second-order personality factors. These are extraversion, anxiety, independence, toughmindedness and self- control (Moyo, 2009). Just like Cattell, Costa and McCrae (1985b; 1989; 1992; 1995) also conducted a factor analyses which resulted in them proposing the renowned Big Five personality dimensions (extraversion, agreeableness, conscientiousness, emotional stability and openness to experience). The trait theory in general, and the Big Five model in particular, integrates the biological view of traits as well as environmental influences with personality variables that can be indirectly observed through the behavioural denotations of the traits.

2.3.7 APPROACHES TO CULTURE AND PERSONALITY

South Africa is a multi-cultural country. Whether or not culture holds any relevance to the conceptualisation and assessment of personality, two aspects should be considered.

The first aspect pertains to the manner in which the personality construct is conceptualised. There is a vast amount of research available that points to differences that exists cross-culturally pertaining to the traits that people mobilise to describe and conceptualise personality (Valchev, Van de Vijver, Nel, Rothmann & Meiring, 2013; Christie & Geis, 1970; LeVine, 1973; Shweder, 1991; Marsella, Dubanoski, Hamada, Morse 2013). It is for this reason, amongst others, that the SAPI authors believe that to make current personality models more comprehensive and better able to predict behaviour, the traditional personality structure can and should be extended by personality factors that are currently not yet considered in traditional models (Fetvadij, Meiring, Nel, Hill, Van de Vijver, 2016).

The SAPI argument should be questioned. Constructs are abstract ideas created by the fluid intelligence of man. A construct like personality therefore does not in an absolute sense have a correct connotative meaning. Scientists and the man in the street both develop and conceptualise constructs. Both do so to obtain an intellectual grasp on events occurring in World 1, to develop explanations of phenomena in World 1 and to communicate their experiences and explanations of phenomena in World 1 (Babbie & Mouton, 2001). Scientists and the man in the street therefore can differ in their conceptualisation of the connotative meaning of personality. Likewise the people from different cultures can differ in their conceptualisation of personality. Given the purpose of constructs it does not seem unreasonable to argue that these differences arise because of differences in the behavioural events and phenomena that people in different cultures attempt to make sense of and need to explain. Whether personality factors that are unique to some indigenous culture, but that are currently ignored by traditional scientific conceptualisations of personality, have any explanatory utility to industrial psychologists attempting to explain work performance therefore depends on whether the behaviours that the particular culture constructed the personality dimension for is also applicable to work behaviour the industrial psychologist is trying to explain. Extending the traditional personality structures with personality factors that are currently not yet considered in the traditional model will therefore not, simply by being more comprehensive, be better able to explain variance in work performance.

The second aspect pertains to the manner in which the personality construct is operationalised. Personality is most often indirectly measured through self-report personality inventories by having test stimuli elicit an observable response that reflects the nature of historical behavioural manifestations of one's standing on specific latent personality factors. The different behavioural denotations that reflect differences in standing on the latent personality dimension that are offered as response options might, however, differ across cultures. Berry, Poortinga, Segall, and Dagen (2002) state that even though the assumption could be made that a personality structure can be applied universally, cross-cultural variations may exist in the expression of the structure. The behavioural denotations can therefore be shaped by culture and therefore differ across cultures. This will most likely cause problems with regards to assessment of individuals from different cultures. This will most likely cause the slope, intercept and/or error variance of the regression of personality items on the latent personality dimension that the item is designed to reflect to differ across cultures. South Africa's legislation with regards to assessment, specifically Section 8 of the Employment Equity Act (Act 55 of 1998), is very strict and prescribes that psychological measures should be reliable, valid and unbiased (Republic of South Africa, 1998). As long as the item remains a valid reflection of the latent personality dimension that the item is designed to reflect the problem caused by cultural differences in the manner in which personality traits are expressed in behaviour can still be managed without developing equivalent forms of the same test. When the cultural differences become more extreme and what is seen as an expression of one trait in one culture is seen as an expression of another trait in another culture then equivalent tests may become unavoidable unless a sufficient number of shared behavioural expressions still remain.

2.4 PERSONALITY IN THE SOUTH AFRICA CONTEXT

Different approaches exist to explore and compare personality structures across the different cultures (Nel et al., 2012). Three of them will be discussed here. These are (1) an emic approach, (2) an etic approach and (3) a combined emic-etic approach.

2.4.1 ETIC APPROACH

The etic (cross-cultural) approach focuses on how transferable Western tools and models (or those that originate in other cultures) are across cultures. This can also be referred to as a top-down approach and assumes that Western models sufficiently represent the personality dimensions presented in other cultures (Fetvadjiev et al., 2015). Here, amongst others, the Big Five factor model as well as its measurement instruments is seen as an etic accomplishment. Moreover although there does exist somewhat weak factor comparisons across cultures, especially with regards to openness, it is attributed to data quality issues as opposed to the transferability of the model (McCrae, 2013). To only apply an etic approach, salient indigenous personality factors that are culture-specific could be missed by researchers. Examples could include local folk concepts as well as taxonomy of descriptions used by these locals (Cheung, Van de Vijver & Leong, 2011).

2.4.2 EMIC APPROACH

The emic approach (also known as indigenous psychology) aims to use conceptions and methodologies embedded in, as well as, derived from the cultural group being studied to gain an inside perspective (Ho, Peng, Lai & Chan, 2001). The origin of this approach came about due to cross-cultural researchers finding that the personality tests created for Western cultures did not quite capture the non-western culture constructs as it intended to do. Consequently, different strategies and methodologies were developed to portray and understand the local constructs by using suitable culture specific measures (Cheung et al., 2011). There are, however, some limitations to the indigenous approach to personality.

Early attempts to develop measures for assessment that are reliable and valid, struggled to sustain a thorough research programme that is needed to constantly build such measures. Moreover, few managed to standardise these instruments on representative norm groups. Theoretical challenges were also reported (Cheung, Cheung, Wada, & Zhang, 2003).

In addition, criticism from Church (2001) was that even though indigenous approaches and their measures attempts to identify culture-specific constructs to explain differences as well as to distinguishing human universality, at the end some of these constructs could in fact fall under universal models (personality).

2.4.3 COMBINED EMIC-ETIC APPROACH

From the above descriptions of emic and etic approaches it becomes apparent that each one of these has certain inherent limitations. Thus even though early movements towards indigenisation tried to develop local constructs, strategies and methodologies in non-western cultures, they failed to give integrative perspectives on human universals in personality. It is with respect to this realisation that a combined emic and etic approach is useful. The combined emic and etic approach attempts to use both universal as well as cultural specific aspects of personality (Cheung et al., 2011), an important goal being to obtain a more integrative, balanced and synergistic view (Morris, Leung, Ames & Lickel, 1999). This combined emic and etic approach can, according to Cheung et al., (2011, p. 597), comprise of:

> ... (a) the use of a combination of etic and emic measurement, (b) studies in which universal and culture-specific aspects are delineated in an iterative process of data collections with continually adapted instruments, and (c) the use of mixed methods (e.g., the use of an etic measure combined with interviews for collecting information about culture-specific features not covered by the etic instrument).

It is with this latter approach in mind that the SAPI project aimed to develop a conceptualisation of the personality construct based on universal and culture-specific personality traits and a measurement tool that measures this expanded personality construct in a manner that minimises bias in assessment (Fetvadjev, Meiring, van de Viver, Nel & Hill, 2015).

2.5 OVERVIEW OF THE DEVELOPMENT OF THE SAPI FOR SOUTH AFRICA

To address the need for a valid, reliable and unbiased personality measure in South Africa that could be used on all English-speaking adults in South Africa, Prof Deon Meiring, Prof Fons van de Vijver, Prof Ian Rothmann and Prof Deon de Bruin initiated the construction of a personality measure and together with researchers from the Netherlands and master's and doctoral students from various universities across South Africa started the SAPI project[4]. The project's aim was to develop an indigenous personality measure that is applicable to all of the 11 language groups of the South African population that are proficient in South African English. The project was initiated in 2005 and it took a period of 12 years to develop the current version of the inventory (Hill et al., 2013).

The SAPI researchers used a combined etic-emic approach which served the purpose to seek out terms that are descriptive of personality and that are culturally and linguistically appropriate in all the South African language groups (Cheung et al., 2011; Nel et al., 2012). The project comprised of two phases, namely the qualitative stage, during which a conceptual personality model was developed and a quantitative phase during which the instrument was developed (Fetvadjiev et al., 2015).

2.5.1 THE QUALITATIVE STAGE

During this stage the goal was to identify inherent personality conceptions as they manifest in free personality descriptions for all 11 official South African languages (Fetvadjiev et al., 2015). A popular method that has been widely used in indigenous personality studies is the psycho-lexical method. It is based on the notion that the most significant individual differences in psychological functioning are embedded in language (Allport & Odbert, 1936). This approach entails the selection of terms that are descriptive of personality from dictionaries and also includes analysis of self and peer ratings on these

[4] The SAPI, an acronym for the South African Personality Inventory, is a project that aims to develop an indigenous personality measure for all 11 official languages in South Africa. The participants are Byron Adams (University of Johannesburg and Tilburg University, The Netherlands), Deon de Bruin (University of Johannesburg), Karina de Bruin (University of the Free State), Carin Hill (University of Johannesburg), Leon Jackson (North-West University), Deon Meiring (University of Pretoria and University of Stellenbosch), Jan Alewyn Nel (North-West University), Ian Rothmann (North-West University), Michael Temane (North-West University), Velichko Valchev (Tilburg University, The Netherlands), and Fons van de Vijver (North-West University and Tilburg University, The Netherlands).

terms (De Raad & Mlacic, 2015). Thereafter these ratings are usually factor analysed (Nel et al., 2012).

To date, in most of the psycho-lexical studies the personality constructs do show support for the Big Five structure (Saucier & Goldberg, 2001), however research studies found that only Extraversion, Agreeableness and Conscientiousness replicate across languages (De Raad, Barelds, Levert, Ostendorf, Mlaci´c, Di Blas, Katigbak, 2010). It is also necessary to take note that in South Africa there has not been a lot of systematic research done on indigenous personality conceptions. Although the popular dictionary-based lexical approach has been used extensively for personality research, the test developers of the SAPI chose to deviate somewhat and use an alternative approach that uses free personality descriptions instead. Reasons being that at the time of their study there were not appropriate dictionaries available for all of the 11 languages in South Africa. Moreover, English translation of the free descriptions was readily available to members of the research team. The enhanced ecological validity of the free descriptions compared to single term descriptions was an additional advantage (Nel et al., 2012).

In the qualitative stage (semi-structured) interviews were conducted with 120 representatives from each of the 11 language groups in their own language. They were asked to describe themselves as well as a minimum of nine people close to them (Nel et al., 2012). Examples included siblings, parents, grandparents, colleagues and neighbours (Valchev et al., 2011). During this process of interviews and gathering information, *circa* 49818 personality descriptive terms were identified, and then reduced to 550 sub facets, 188 narrow facets, 37 sub-clusters and 9 broad representative personality clusters. The nine clusters, as can be seen in Table 2.1 (left pane), were named Conscientiousness, Emotional Stability, Extraversion, Facilitating, Integrity, Intellect, Openness, Relationship-Harmony, and Soft-Heartedness.

These 9 clusters are similar in abstraction to the Big Five factors; however there are some differences between the two models. While the Conscientiousness, Emotional Stability, Extraversion, Soft Heartedness, Intellect and Openness clusters broadly correspond to the Big Five factors, research showed that the nine- clusters had a richer representation of social relational concepts than the Big Five factor model. Extensions of this domain include (1) Facilitation, which refers to being able to guide others; (2) Integrity, referring to what is right and wrong, trustworthiness and honesty values; (3) Relationship-harmony, which focuses on harmony maintenance and promotion; and lastly, (4) Soft-Heartedness, that incorporates consideration and having empathy, with the latter represented by Agreeableness in the Big Five (Nel et a., 2012). Facilitation, Integrity and Relationship-Harmony had a weaker correlation with the Big Five model and seemed to reach beyond this model extending to some similarity with the Interpersonal relatedness of the CPAI-2 (F.M. Cheung et al., 2001) and the Honesty factor of the HEXACO model (Ashton & Lee, 2001).

Nel et al. (2012) state that an interesting and yet important aspect of this indigenously derived model is that it is representative of data collected from all 11 cultural-linguistic groups of South Africa. The model further comprises of common facets as well as facets found only in some of the groups. On the sub-cluster level though, the personality model that emerged from the qualitative phase does not favour some of the groups over other, accounting for the implicit structure of personality in all groups. In an attempt to validate the model depicted in Table 2.1, the authors combined ratings from 299 students (204 of South Africa, 95 of Netherlands), to assess the internal structure of the 37 sub clusters. The degree of relatedness between all 666 possible pairs of sub clusters was rated and subject to hierarchical cluster analysis (Nel et al., 2012). While the results of this study broadly supported the conceptual model, it did not replicate it in detail. There were 2 dominant distinctions between positive and negative; person-focused and relationship-focused characteristics. Generally, the nine-cluster model emerged in all groups, however there were certain components emphasised more in some groups than others for example:

- Whites referred more often to personal growth descriptions whereas Blacks preferred social-relational descriptions (Valchev, Nel, et al., 2013).
- Blacks described behaviour generally more as person-specific and in context, whereas Whites leaned towards using personality descriptions that were more abstract and decontextualised (Valchev, Van de Vijver, et al., 2013).

Table 2.1

Qualitative (conceptual) and quantitative (factor-analytic) model of the SAPI

Qualitative Model		Quantitative Model	
Cluster	**Sub cluster (Number of Facets)**	**Factor**	**Facet Scale (Number of Items)**
Conscientiousness	Achievement Orientation (6) Dedication (6) Orderliness (7) Self-Discipline (6) Thoughtlessness (2)	Conscientiousness	Achievement Orientation (10) Integrity (12)* Orderliness (11) Traditionalism–Religiosity (4)
Emotional Stability	Balance (4) Courage (2) Ego Strength (5) Emotional Control (4) Emotional Sensitivity (3) Neuroticism (5)	Neuroticism	Emotional Balance (8) Negative Emotionality (10)
Extraversion	Dominance (4) Expressiveness (6) Positive Emotionality (6) Sociability (8)	Extraversion	Playfulness (6) Sociability (7)
Facilitating	Encouraging Others (4) Guidance (7)		
Integrity	Fairness (2) Integrity (8)		
Intellect	Aesthetics (5) Reasoning (4) Skillfulness (4) Social Intellect (3)	Openness	Broad-Mindedness (5) Epistemic Curiosity (6) Intellect (10)
Openness	Broad-Mindedness (9) Epistemic Curiosity (3) Materialism (2) Openness to Experience (2)		
Relationship Harmony	Approachability (10) Conflict-Seeking (3) Interpersonal Relatedness(8) Meddlesomeness (2)	Positive Social-Relational	Facilitating (10) Integrity (12) Interpersonal Relatedness (9) Social Intelligence (4) Warm-Heartedness (12)
Soft-Heartedness	Active Support (6) Amiability (6) Egoism (5) Empathy (8) Gratefulness (2) Hostility (11)	Negative Social-Relational	Conflict-Seeking (6) Deceitfulness (3) Hostility–Egoism (13)

Note. *For presentation purposes, the factors of the quantitative model are arranged to match the clusters of the qualitative model as closely as possible. Clusters and subclusters in the qualitative model and facet scales in the quantitative model are presented alphabetically. * In the pooled data across ethnic groups, the Integrity facet had an equal double loading on Conscientiousness and Positive Social-Relational, and is thus included in both factors. More recent data suggest that Integrity may be more strongly linked with the Positive Social-Relational factor.*

Adapted from Fetvadij et al. (2016)

It was thus found that the extent to which different cultural groups emphasise specific personality clusters differed along Hofstede's individualism-collectivism dimension from the more collectivistic Blacks towards the more intermediate (Indians and Coloureds) to more individualistic Whites (Valchev, Van de Vijver, et al., 2013).

Overall, the approach that was followed was a multi-step approach, which included (1) language and cultural expert consultations; (2) analysis of in a subset of Nguni languages (three); (3) analyses of all the data; and lastly a partial quantitative validation study which focused on midlevel sub clusters. The conceptual model described here, formed the foundation for the SAPI instrument that was to be developed later (Fetvadjiev et al., 2015).

2.5.2 THE QUANTITATIVE STAGE

The instrument development involved two stages, item generation and item selection. Items were generated in English from the original free descriptions obtained from the qualitative phase (Hill et al., 2013). The reason English was chosen is because it has a rich lexicon of personality descriptions, it is commonly known by the diverse culture groups in South Africa due to it being widely used in educational settings as the primary language of instruction. Lastly English was the research team's commonly spoken language (Fetvadjiev et al., 2015). The items were developed, keeping transferability, factor replication across cultures/groups in mind. Language was kept simple and no negations were used. Paraphrased items as *per* the qualitative study were most often used (Hill et al., 2013). At a later stage the items were translated into the other 10 languages (Fetvadjiev et al., 2015).

For each of the 188 narrow facets between 2 and 34 (M=13) items were developed. Items per cluster ranged between 117 and 482 with a total number of 2574 items (Fetvadjiev et al., 2015). The rules used in item generation had similar formation criteria to those used for the Five-Factor Personality Inventory (Hendriks, Hofstee, & De Raad, 1999). The items often contained direct or paraphrased statements found in the qualitative data and when possible they specified concrete behaviour with an object (e.g., "I help others cope with their problems"). In addition, items were kept short, simple and clear. Single activity, habit, or preference terms were avoided. Temporal qualifiers were also avoided and no negations were used in item stems (e.g. "I do not express my opinion" vs. "I do what others expect without expressing my opinion") (Hill et al., 2013). With regards to item selection, the items generated from the qualitative data were examined using pilot studies for each cluster separately and were administered to university students (n = 1041). Relationship-Harmony as well as Soft Heartedness items, which were the largest of the clusters were divided into two questionnaires each (with 117 to 482, and 439 to 1041 participants per cluster) (Fetvadjiev et al., 2015., Fetvadij et al., 2016).

It should be noted that the authors did encounter a few problems[5] along the way with regards to refining and constructing items and in the end 2573 items were developed by the SAPI authors for the nine clusters and were put together into questionnaires separately for the different populations. The authors' aim was to use explanatory factor analysis to replicate sub-cluster occurrence per cluster. Items with low secondary loadings; loadings of a minimum of .30 and .40 (when needed for better distinction) on the factor that they were meant to represent (so as to ensure adequate discrimination power), low (and preferably insignificant) kurtosis (b_1) and skewness (b_2) estimates; and mean scores ranging between 1.50 and 4.50 (on a 5 point Likert scale) were selected (Hill et al., 2013; Fetvadjiev et al., 2015). According to Fetvadij et al. (2016) the statistical criteria as stipulated above left the authors with 1583 suitable items to make a selection from, necessitating the use of substantive criteria to select items from those that meet the statistical criteria. The authors' final item selection was consequently also guided by the following three substantive criteria: The extent to which items minimised content overlap across and within clusters, the extent to which items complied with syntactic rules of the English language and the extent to which items had maximum construct representation[6] possible. Based on these statistical and substantive criteria 571 items were selected and these were translated into the other 10 South African languages. At the last stage of selection, translator feedback was combined with the SAPI developer's criteria, removing a further 321 items from the selected 571 items because they comprised of difficult idiomatic expressions, complex long sentences and abstract trait terms. In the end 250 items were selected and included in a single English questionnaire (Fetvadjiev et al., 2015; Hill et al., 2013).

After developing the 250-item questionnaire, the authors fully embarked on the quantitative stage of the SAPI development project. In doing so, they administered the questionnaire (all 250 items) to a relatively large multi-ethnic sample group (n= 1364). The

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[5] The dataset (50 000 + statements in 11 official languages) had to be evaluated and turned into items. Here the challenge was to establish which of the responses were relevant for item development, because some of the personality facets were common to all 11 languages whilst other were more specific to only one language. In addition, a number of the items were too abstract / vague. Lastly, items selected had to be free of idiomatic expressions.

[6] According to Embretson (1983) *construct representation* is concerned with "identifying the theoretical mechanisms that underlie responses, such as information processes, strategies, and knowledge stores"(p. 180).

sample consisted of adults from the general population and university students. The four ethnic groups included 671 Blacks, 198 Coloureds, 104 Indians and 391 Whites with ages ranging from 18 to 73 years. The percentage females were 53% in the Black group and ranged to 85% in the White group (Fetvadjiev et al., 2015). In the first phases items that did not meeting statistical criteria were removed by using iterative steps. The criteria stipulated was replicability of factors across groups, factor loadings (.30 or lower, or in some cases .40 in cases where a better distinction was needed) as well as items that reduced internal-consistency reliability (Fetvadjiev et al., 2016).

After the reduction, the first experimental version of the SAPI contained a set of 146 items[7]. After explanatory (per-cluster) exploratory factor analysis, 18 facet scales were formed (see Table 2.1). The facets identified via exploratory factor analysis of the items assigned to each cluster at the final selection phase were termed Facilitating, Integrity, Social Intelligence, Interpersonal Relatedness, Warm-Heartedness, Deceitfulness, Conflict-Seeking, Hostility–Egoism, Emotional Balance, Negative Emotionality, Playfulness, Sociability, Achievement Orientation, Orderliness, Traditionalism–Religiosity, Intellect, Broad-Mindedness and Epistemic Curiosity (see Appendix A). Table 2.2 below illustrates the internal consistency reliability coefficients that were obtained.

Table 2.2

Cronbach's alphas of the 18 facets-scale scores per ethnic group

Scale (number of items)	Black	Colored	Indian	White	Mean
Facilitating (10)	.84	.85	.87	.88	.86
Integrity (12)	.76	.83	.84	.79	.81
Social Intelligence (4)	.71	.75	.82	.74	.75
Interpersonal Relatedness (9)	.77	.81	.83	.78	.80
Warm-Heartedness (12)	.83	.89	.83	.87	.85
Deceitfulness (3)	.58	.59	.75	.53	.61
Conflict-Seeking (6)	.67	.70	.71	.64	.68
Hostility–Egoism (13)	.80	.84	.89	.83	.84
Emotional Balance (8)	.71	.77	.73	.74	.74
Negative Emotionality (10)	.75	.73	.76	.77	.75
Playfulness (6)	.71	.76	.84	.81	.78
Sociability (7)	.75	.80	.84	.86	.81
Achievement Orientation (10)	.79	.78	.81	.82	.80
Orderliness (11)	.81	.85	.88	.86	.85
Traditionalism–Religiosity (4)	.57	.65	.78	.75	.69
Intellect (10)	.74	.81	.79	.76	.78
Broad-Mindedness (5)	.60	.66	.72	.75	.68
Epistemic Curiosity (6)	.66	.77	.83	.80	.76
Mean	.72	.77	.81	.78	.77

Note. 671 Blacks, 198 Coloureds, 104 Indians, 391 Whites.

[7] The total number of items in the SAPI includes 12 items dedicated to a social desirability scale (Deacon, 2016). The personality, measure *per se* therefore contains 134 items.

Adapted from Fetvadjiev et al. (2015)

When looking at the Cronbach's alpha values in Table 2.2., the values obtained for the different scales ranged from .57 to .88 with a mean coefficient of .77. It can be seen that most of the scale scores had satisfactory internal consistency and some had very good internal consistency, except for the Deceitfulness scale. In addition all items was formulated in the direction of the target construct and presented randomly, with unipolar scales. Moreover, these facet scales correspond in level of abstraction to the 37 subclusters of the qualitative model (Fetvadjiev et al., 2015). In an attempt to describe the higher-order internal structure of the SAPI for the four ethnic groups, the authors extracted from the facet scales scores the pooled-within correlation matrix and subjected it to exploratory factor analysis. The resultant factor structure is depicted in Table 2.3 (Fetvadjiev et al., 2015).

Table 2.3

Factor loadings in the pooled-within correlation matrix, factor correlations, and congruence coefficients of groups target-rotated toward the pooled-within matrix

	SR-Pos	SR-Neg	N	E	C	O
Facilitating	.78	.13	- .11	.07	.05	- .16
Integrity	.37	- .22	.01	.05	.35	- .05
Social Intelligence	.55	- .02	- .01	- .21	.14	.08
Interpersonal Relatedness	.83	- .06	- .04	- .01	- .02	.02
Warm-Heartedness	.88	- .11	.12	- .06	- .04	.03
Deceitfulness	- .02	.65	.04	- .01	- .05	.04
Conflict-Seeking	.03	.75	.06	- .10	- .02	.03
Hostility-Egoism	- .03	.92	.03	.05	.05	- .02
Emotional Balance	.30	- 0.7	- .38	- .06	.18	- .13
Negative Emotionality	.02	.12	.81	.03	.04	- .06
Playfulness	.07	.03	.06	- .64	- .08	- .14
Sociability	- .01	.03	- .11	- .83	.07	.01
Achievement Orientation	.07	.02	- .08	.01	.63	- .32
Orderliness	.02	- 0.6	- .03	.04	.81	- .01
Traditionalism -Religiosity	.10	- .12	.08	- .17	.36	.12
Intellect	.16	.06	- .22	- .16	.30	- .43
Broad-Mindedness	.08	- .04	.02	- .29	- .02	- .59
Epistemic Curiosity	.11	- .20	.06	- .06	.20	- .48
Factor correlations						
SR-Pos 1	1					
SR-Neg	- **.45**	1				
N	-.19	.36	1			
E	- **.56**	.05	.05	1		
C	.69	- .51	- .22	- .31	1	
O	- **.45**	.06	.21	.38	- .37	1
Tucker's φ						
Blacks (*M* _ .94)	.95	.99	.94	.97	.85	.92
Coloreds (*M* _ .97)	.99	.99	.98	.97	.95	.95
Indians (*M* _ .95)	.96	.97	.98	.97	.89	.92
Whites (*M* _ .98)	.99	.99	.97	.98	.97	.99
Mean (*M* _ .96)	.97	.99	.97	.97	.92	.95

Note. N 1,364. Factors were extracted using maximum likelihood with oblimin rotation. Loadings and correlations with absolute value of .30 or higher are in boldface. SR-Pos = Positive Social-Relational; SR-Neg = Negative Social-Relational; N = Neuroticism; E = Extraversion; C = Conscientiousness; O = Openness.

Adapted from Fetvadjiev et al. (2015)

The authors conducted maximum likelihood factor analysis (with obliman rotation) examining factor solutions (three to seven). Six factors were identified with 7.87, 2.30, 1.13, 0.96, 0.78 and 0.75 as the first six eigenvalues that explains 77% of variance in the data. These factors (refer to Appendix A) were labelled Social-Relational Positive (SR-Pos); Social-Relational Negative (SR-Neg); Neurotism (N); Extraversion (E); Conscientiousness (C) and Openness (O). See Table 2.1 for an overview of factors and defining facets (right panel). Except for the SR-Neg and SR-Pos factors (which presented broader than the Big Five Agreeableness factor) the other scales closely resembled the Big Five factors. Target rotations toward the structure in the pooled matrix, on each group's structure were performed to test the factor structure's equivalence across ethnic groups. This correspondence between the factors was evaluated using Tucker's φ (Tucker, 1951). The Tucker congruent coefficients are indicated at the bottom of Table 2.3. Indications of fair replication ranges between .85 and .95 with .95 indicating structural equivalence (Lorenzo-Seva & Ten Berge, 2006; van de Vijver & Leung, 1997). Overall, and with these criteria, the factor replication of the SAPI 6 factor structure was fair, with Tucker φ congruent coefficients ranging from .85 to .99 and presented only 5 coefficients lower than .95 out of the 24 coefficients across groups (Fetvadjiev et al., 2015, Fetvadijiev et al., 2016).

The final structure was replicated independently with a sample of 139 Blacks and 270 White students. Here the Tucker coefficients also showed fair replicability with a values ranging between .87 and .97 (Fetvadjiev et al., 2015).

In a subsequent second (electronic) experimental version of the SAPI final measure the eighteen subscales were expanded to twenty. More specifically two additional latent first-order personality dimensions, namely, Empathy and Arrogance were added that have a bearing on the social-relational domain of personality (Valchev et al., 2014). The second experimental version of the SAPI still hypothesises to the same six latent second-order personality dimensions that were measured by the first experimental version of the SAPI. Empathy was hypothesised to load on the Positive Social-Relational second-order personality factor and Arrogance, on the Negative Social-Relational factor (Velichko Fetvadjiev, personal communication, 26 June 2017).

2.5.3 COMMENTS ON THE QUANTITATIVE APPROACH

The SAPI was developed to be a personality measure that reflects indigenous personality conceptions across all the South African language groups. The qualitative phase of the study remained true to this ideal. The qualitative phase derived 37 first-order personality dimensions and 9 second-order factors from the *circa* 50000 descriptive terms that were obtained from the 120 x 11 semi-structured interviews. Items were subsequently generated in English from the original free descriptions obtained from the qualitative phase. Items were at this stage earmarked to reflect specific personality facets. Each item was therefore written to represent one of the 37 first-order personality factors that emerged from the qualitative phase. This resulted in an extremely large pool of 2574 items.

To reduce the number of items to a more manageable quantity, exploratory factor analysis was performed on the items of each of the 9 second-order factors. Based on statistical criteria items were culled without taking into account which of the 37 first-order factors the item was earmarked to reflect. The item pool was subsequently further reduced by culling additional items based on substantive qualitative criteria without taking into account on which of the 37 first-order factors it loaded. The final number of 146 items were finally subjected to per-cluster exploratory factor analyses. Eighteen facet scales were identified in this manner. Exploratory factor analysis of the pooled-within correlation matrix and subjected it to exploratory factor analysis identified six second-order factors.

Constructs are created to allow the development of explanations of behaviour. As such they have to carry a specific connotative meaning. Instruments are developed to measure a specific construct carrying a specific connotative meaning because information is required on that construct under that specific constitutive definition. Instruments are not developed to measure an arbitrary construct. The constitutive definition should be paramount and non-negotiable. The instrument should adapt to the constitutive definition of the construct. The instrument construction should not mould the connotative meaning of the construct.

If the item reduction had occurred within each of the 37 facets that emerged from the qualitative phase via statistical and substantive criteria it would have been possible to have fitted a 37 first-order factor measurement model via confirmatory factor analysis and as well as a second-order measurement model in which each of the 37 first-order factors load on one of the 9 second-order personality factors. Under this approach the ideal to develop a personality measure that reflects indigenous personality conceptions across all the South African language groups would have been better served.

2.6 SUMMARY

Chapter 2's purpose was to clarify the process followed in constructing the SAPI. Moreover, the constitutive definition that underlies the SAPI was presented as well as the currently available psychometric evidence on the success with which the SAPI measures the personality construct was reported. In a country where numerous multi lingual- and – cultural contexts exist, the importance of an assessment measure that can be used across all language groups in South Africa is critical, especially in the workplace. When taking this into consideration, the available evidence on the SAPI's psychometric properties is promising and reassuring especially because it is a new instrument. Chapter 3 will discuss the overarching research problem, the overarching substantive research hypothesis, the operational research hypotheses, the research design, statistical hypotheses, statistical analysis techniques, the sample design as well as the measuring instrument.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

In Chapter 1 of this study the SAPI, a relatively new instrument that is being developed with the aim to serve as an indigenous South African measure of personality at work, was introduced. Moreover, Chapter 1 argued the need to carefully evaluate the psychometric properties of measures used in South Africa in the work context for personnel selection. This argument filtered down to the research objective to evaluate the construct validity of the SAPI. To achieve this objective a factor analytical investigation was undertaken to evaluate the fit of both the first-and second-order measurement models of the SAPI, as implied by the architecture of the instrument and the SAPI's constitutive definition of the personality construct to determine whether the items of the SAPI successfully reflect the latent personality dimensions they were designed to reflect in the selected group being studied.

3.2 RESEARCH METHOD

The SAPI is based on a specific constitutive definition of personality[8] and the instrument's architecture reflects a design intention where specific items are tasked to reflect specific personality dimensions. Together with the design, the constitutive definition attached to the personality construct and the scoring key a specific measurement model is implied. The measurement model expresses the belief that the behavioural response to specific items of the SAPI reflects specific underlying personality traits and that collectively the items of the SAPI reflect the full connotative meaning of the personality construct as the developers of the SAPI conceptualised it. What the first-order measurement model does is to map the specific items (those believed to reflect a certain first-order personality

[8] The fact that the constitutive definition was not derived up front and that it did not guide the construction of the final version of the SAPI but that it was derived from the final version of the constructed instrument had been criticised. It, nonetheless, remains true that the claim is currently made that inferences may permissibly be made about the standing of an adult South African, proficient in South African English, on a personality construct carrying a specific constitutive definition from the scores obtained on the SAPI.

dimension) onto the relevant latent personality dimension. To validate the claims made by the SAPI, a confirmatory factor analysis, where the implied measurement model's fit, as well as the statistical significance and magnitude of the freed measurement model parameter estimates, are evaluated, is required.

The methodology that is used to evaluate the fit of the SAPI measurement model is crucial because the credibility of the findings depends on the methodology used to derive the conclusion. Research methodology is meant to serve the epistemic ideal of science (Babbie & Mouton, 2001) and should the methodology be flawed the researcher's chances to arrive at a valid conclusion on the merit of the measurement model as a hypothesis on the nature of the personality construct and the manner in which the personality construct is measured by the SAPI, would be jeopardised. This would render the conclusions flawed that are derived on the SAPI's ability to measure the personality construct as constitutively defined amongst South African employees through its intended design, which could seriously harm the credibility of the verdict on the merits of the SAPI as a measure of personality in a work context.

Research methodology serves the epistemic ideal of science through its characteristics of objectivity and rationality (Babbie & Mouton, 2001). Objectivity refers to the scientific method's conscious, explicit focus on the reduction of error. A number of critical points exist in the process of testing the fit of the measurement model, where the epistemic ideal could derail. Appropriate preventative steps need to be taken at these points to reduce the likelihood this and to increase the likelihood of valid and credible findings. Furthermore it would be wrong to expect that the members of the scientific community would accept the conclusions made in the study without having insight into the methodology used to reach the conclusions. Rationality refers to the scientific method's insistence that the credibility of the research findings should be critically evaluated by knowledgeable peers through the evaluation of the methodological choices that were made by the researcher under the banner of objectivity (Babbie & Mouton, 2001). Because scientific methodology is meant to serve the epistemic ideal of science a scientific inquiry should subject its methods to critical inspections by these expert members in order to detect and correct methodological flaws. This will make it more likely that the claims made on the validity of hypotheses are credible and valid (Babbie & Mouton, 2001).Such inspection of the methodological choices that were made is, however, only possible if these methodological choices had been thoroughly described and motivated through reasoned arguments. Thus to serve the epistemic ideal of science, the current study comprehensibly described and thoroughly motivated the methodology that was used to test the operational hypotheses. The section that follows systematically and in detail discusses the methodology used in the current study and includes the (1) research problem, (2) substantive and operational research hypotheses, (3) research design, (4) statistical hypotheses; (4) sampling; (5) measuring instrument and; (6) statistical analyses techniques.

3.3 RESEARCH PROBLEM AND SUBSTANTIVE RESEARCH HYPHOTHESIS

As a new personality measure in South Africa there has been some research done on the psychometric properties of the SAPI (Deacon, 2016; Nel et al., 2012; Valchev et al., 2013; Valchev et al., 2014; Fetvadjiev et al., 2015), enough so to make it to the HPCSA's list for classification as a psychometric test in development. However, more research is needed on the SAPI in terms of using it in personnel selection within a work context. Moreover the previous psychometric studies conducted have not as yet evaluated the fit of the measurement model on a large South African working sample and thus necessitates such an investigation into the construct validity of the SAPI.

As a result, the overarching research problem in the current study is the question whether the SAPI provides a reliable and construct valid measure of the personality construct in a multi-cultural South African context, as it is constitutionally defined by the instrument.

The first overarching substantive research hypothesis (Hypothesis 1) is that the second experimental version of the SAPI provides a reliable and construct valid measure of the 20 first-order personality dimensions that constitute the personality construct as it is constitutionally defined by the instrument. The first overarching substantive research hypothesis translates into the following specific operational hypotheses:

- Operational hypothesis 1: The first-order measurement model implied by the scoring key of the second experimental version of the SAPI as well as the design intention of the developers can closely reproduce the observed 170 x 170 inter-item co-variance matrix[9];

- Operational hypothesis 2: The factor loadings (λ_{ij}) of the items on their designated latent first-order personality dimensions are large ($\lambda_{ij} \geq .50$) and statistically significant ($p<.05$);
- Operational hypothesis 3: The measurement error variance ($\theta_{\delta ii}$) associated with each item is small ($\theta_{\delta ii} \leq .75$) but statistically significant ($p<.05$);
- Operational hypothesis 4: The latent first-order personality dimensions explain large proportions of the variance in the items that represent them; and lastly
- Operational hypothesis 5: The latent first-order personality dimensions correlate low to moderate with each other ($\phi_{ij}<.90$; $\phi_{kj}^2>AVE_K$; $\phi_{kj}^2>AVE_j$; $\phi_{kj}^2>.50$).

The second overarching substantive research hypothesis (Hypothesis 2) is that the second experimental version of the SAPI provides a reliable and construct valid measure of the 6 second-order personality dimensions that constitute the personality construct as it is constitutionally defined by the instrument. The second overarching substantive research hypothesis translates into the following specific operational hypotheses:

- Operational hypothesis 6: The second-order measurement model implied by the scoring key of the second experimental version of the SAPI as well as the design intention of the developers can closely reproduce the observed 134 x 134 inter-item co-variance matrix;
- Operational hypothesis 7: The factor loadings (λ_{ij}) of the items on their designated latent first-order personality dimensions are large and statistically significant ($p<.05$);
- Operational hypothesis 8: The measurement error variances ($\theta_{\delta ii}$) associated with each item are small but statistically significant ($p<.05$);
- Operational hypothesis 9: The latent first-order personality dimensions explain large proportions of the variance in the items that represent them;
- Operational hypothesis 10: The slope of the regression of the latent first-order personality dimensions on their designated latent second-order personality dimensions (γ_{jq}) are large and statistically significant ($p<.05$); and lastly

[9] The 18 items written for the social desirability scale were not included in the measurement model.

Operational hypothesis 11: The latent second-order personality dimensions correlate low to moderate with each other (ϕ_{ij}<.90; ϕ_{kj}^2>AVE_k; ϕ_{kj}^2>AVE_j; ϕ_{kj}^2>.50).

3.4 RESEARCH DESIGN

The objective of the current research study is to empirically investigate the construct validity of the SAPI through a confirmatory factor analysis of the SAPI's first- and second-order factor structure. The current study thereby aims to add to the SAPI's psychometric credentials related to the instruments ability to measure personality in South Africa, especially in the workplace. More specifically, the research objective is to contribute to the investigation of the extent to which it is permissible to use the SAPI (as a psychological measure of personality) amongst South Africa's multicultural and multi linguistic employees spanning across different industries in the market.

The research objective, as discussed in previous paragraphs, is pursued by testing the operational research hypotheses, whereby the relationships hypothesised between the latent personality dimensions and the observed indicator variables need to be empirically tested to determine its validity. However, it is not suggested that a single study of this nature will allow for the only decisive verdict on the construct validity of the SAPI as a measure of personality within the South African workplace context. Even if the outcome points to satisfactory measurement model fit and satisfactory measurement model parameter estimates, the evidence would still not suffice to be able to conclude with confidence the construct validity of the SAPI. In order to achieve a more comprehensive investigation into the construct validity of the SAPI would necessitate the explication of the nomological network in which the personality construct is embedded and to confront the resultant structural model with empirical data. As a result it is herewith not implied, that if satisfactory model fit is obtained in the study and if satisfactory measurement model parameter estimates are obtained, that the SAPI, can be irrefutably cleared for the use as an assessment measure or be justified as a selection tool in South Africa. Conversely, a lack of measurement model fit would, however seriously erode confidence in the construct validity of the instrument and would potentially raise questions as to whether the instrument can be used confidentially as a predictor in personnel selection in the South African context.

In order to empirically test the merits of the stated operational research hypotheses, a plan or strategy is required that will act as a guide in the gathering of empirical evidence needed to test the validity of the hypothesised relationships. The main function of the research design is to ensure that the systematic empirical enquiry is conducted in such a way, that the results obtained can be interpreted unambiguously for or against the stated operational hypotheses. The research design serves this function through the control of dependent variable variance (Kerlinger, 1973; Theron, 2009a).

An *ex post facto* correlational design was used to test the operational hypotheses associated with the two overarching substantive research hypotheses formulated earlier. The *ex post facto* correlational design that was used to test the operational hypotheses associated with Hypotheses 1and 2 is depicted in Figure 3.1[10].

$[X_{11}]$	$[X_{21}]$	$[X_{1j}]$	$[X_{1,79}]$
$[X_{21}]$	$[X_{22}]$	$[X_{2j}]$	$[X_{2,79}]$
:	:	:	:
$[X_{i1}]$	$[X_{i2}]$	$[X_{ij}]$	$[X_{i,79}]$
:	:	:	:
$[X_{n1}]$	$[X_{n2}]$	$[X_{nj}]$	$[X_{n,79}]$

Figure3.1. Ex post facto correlational design used to test the two overarching substantive research hypotheses.

In an *ex post facto* correlational design, the researcher only has limited control (mostly indirectly) over the latent variables (ξ_k). The levels of the latent variables are inherently not manipulable. The manifestations of the levels of the latent variables in behaviour can only be observed (Kerlinger, 2000). Unlike experimental research designs, in *ex post facto* research, experimental manipulation and randomisation is not possible. The levels of the latent first- and second-order personality dimensions (η_p and ξ_k) that the SAPI targets cannot be experimentally manipulated to differ across individuals. Only the expression of

[10] The original intention was to fit the first-order measurement model with the individual items as indicator variables. Despite the use of the 64-bit version of LISREL 8.8 and running the measurement model syntax file in batch mode via the disk operating system insufficient memory capacity prevented the successful calculation of the asymptotic covariance matrix [see discussion in paragraph 4.9.1

the levels of the latent first- and second-order personality dimensions in the behavioural response of the i^{th} individual to the j^{th} item of the SAPI (X_{ij}) can be observed.

The *ex post facto* correlational design depicted in Figure 3.1 instructs the researcher to obtain measures on the 170 items of the second experimental version of the SAPI from n individuals. The logic underpinning the design depicted in Figure 3.1 then requires the calculation of the observed inter-item covariance matrix. Estimates for the freed measurement model parameters are subsequently obtained in an iterative fashion where the purpose is to accurately reproduce the observed covariance matrix from the parameter estimates (Diamantapoulos & Siguaw, 2000). If the fitted model, despite numerous iterations, consistently fails to accurately reproduce the observed co-variance matrix (Byrne, 1989; Kelloway, 1998), the conclusion that the measurement model (as implied by the SAPI's scoring key) failed to provide an acceptable explanation for the observed covariance matrix, inevitably follows. This would then mean that the SAPI failed to measure the personality construct as constitutively defined and in the manner intended in the South African sample. Should the reproduced covariance matrix that was derived from the estimated model parameters, however, closely correspond to the observed inter-item co-variance matrix, it does not imply that the processes postulated by the measurement model necessarily produced the observed co-variance matrix nor can it be inferred that the SAPI necessarily measured the personality construct as constitutively defined. A high degree of fit, between the observed and estimated covariance matrices, would only imply that the processes depicted in the measurement model provide one plausible explanation for the observed co-variance matrix. A high degree of fit, between the observed and estimated covariance matrices, would only imply that the SAPI's claim that it gives construct valid measures of the different personality dimensions it was developed to measure survived a chance to being refuted (Popper, 1972).

An *ex post facto* research design is more often than not the only appropriate design for testing research hypotheses of social and human importance as is the case in the current study, the *ex post facto* research design nonetheless does have three major inter-related limitations, (Kerlinger and Lee, 2000). The first limitation is its inability to manipulate latent personality dimensions (independent variables) resulting in casual evidence that is not so strong in comparison to evidence derived from an experimental research design. This reflects a design weakness and consequently the results should be treated with caution.

Secondly, the researcher is forced to take effects as they occur naturally and then try and unscramble them. The last limitation points to a risk that exists of improper and incorrect interpretation due to a lack of control. This partly stems from the numerous alternative explanations that exist for observed correlation relationships.

Despite the limitations, when doing research in the social sciences (as is the case in this study), where experimentation is often not possible the *ex post facto* design is valuable because it at least offers the possibility of a certain degree of controlled enquiry (Kerlinger and Lee, 2000).

3.5 STATISTICAL HYPOTHESES

The nature of the envisaged statistical analyses (used to test the operational hypotheses) will inexorably affect the decision as to whether statistical hypotheses should be formulated as well as the format in which the statistical hypotheses were formulated. For instance, if an unrestricted exploratory factor analytic approach would have been used there would not have been any statistical hypotheses formulated, because there would have been no *a priori* stance taken on the number of factors underlying the observed co-variance matrix, their identity or the pattern with which the items load on the factors (Ferrando & Lorenzo-Seva, 2000). The use of an unrestricted exploratory factor analytic approach would, however, not have appropriate in the current study in that it ignores the design intentions and the constitutive definition of personality that the developers of the SAPI worked from.

In the case of the SAPI, with regards to the number of factors underlying the observed co-variance matrix, the manner in which the items load on the personality factors and the identity of the personality factors, very specific stances have been taken. Operational denotations were explicitly and deliberately created to reflect specific dimensions of the personality construct. Specific SAPI items were written to function as stimulus sets to which test takers would respond to with relatively uncontaminated behavioural expressions of a specific latent personality dimension.

It would therefore be more reasonable towards the instrument developers to first evaluate the question as to whether their proposed operational design succeeded in providing an uncontaminated and comparatively comprehensive empirical grasp of the personality construct as defined. Therefore, it was more appropriate to follow a hypothesis testing, restricted, confirmatory factor analytic approach, whereby specific structural assumptions are made with regards to (1) the number of latent variables underlying the SAPI, (2) the relations among the latent variables and, (3) the specific pattern of loadings of indicator variables on these latent variables (Ferrando & Lorenzo-Seva, 2000; Jöreskog & Sörbom, 1993).

In addition, should the measurement model reflecting these assumptions fit the empirical data poorly, then it can be inferred that the measurement intention of the test developers failed. Moreover, if the finding would go against the measurement claims of the test developers (given that they have been given a fair hearing), it would make more sense and seem more justified to then use an unrestricted, exploratory factor analytic approach to (1) estimate the number of factors underlying the observed co-variance matrix, (2) speculate on their identity and (3) the manner in which the items load on the factors. Through utilising LISREL 8.8 (Jöreskog & Sörbom, 1996b) structural equation modelling was done to test the hypothesis stating that the measurement model as was implied by the SAPI scoring key can explicate the observed co-variance matrix.

The first overarching substantive research hypothesis (Hypothesis 1) is that the second experimental version of the SAPI provides a reliable and construct valid measure of the 20 first-order personality dimensions that constitute the personality construct as it is constitutionally defined by the instrument. If the first substantive hypothesis is interpreted to mean that the hypothesised model provides an exact account of the process that produced the covariance matrix in the parameter, it translates into the exact fit statistical hypothesis:

H_{01}: RMSEA=0

H_{a1}: RMSEA>0

This overarching model fit null hypothesis represents the stance that the measurement model accurately reflects the measurement model in the parameter (Browne & Cudeck,

1993) as well as the fairly idealistic stance that the first-order measurement model is able to reproduce the observed sample co-variance matrix to a degree of accuracy that could be explained in terms of sampling error only. It is due to these stances that Brown & Cudeck (1993, p.137) present the following argument:

> In applications of the analysis of co-variance structures in the social sciences it is implausible that any model that we use is anything more than an approximation to reality. Since a null hypothesis that a model fits exactly in some population is known a priori to be false, it seems pointless even to try to test whether it is true.

Assuming that the measurement model (as depicted in Equation 1) only approximates the processes that operated in reality to create the observed co-variance matrix in the parameter, the following close fit null was also be tested (Browne & Cudeck, 1993):

H_{02}: RMSEA≤.05
H_{a2}: RMSEA>.05

Moreover, if (1) exact or close fit would be found, meaning that H_{01} and H_{02} would not be rejected or if (2) reasonable model fit would at least be obtained, as indicated by the basket of fit indices produced by LISREL, the following 79 null hypotheses would be tested on the freed elements in Λ^X[11]:

H_{0i}: λ_{jk}=0; i=3, 4, …, 81; j=1,2, …, 79; k=1, 2, …, 20
H_{ai}: λ_{jk}≠0; i=3, 4, …, 81; j=1,2, …, 79; k=1, 2, …, 20

If either H_{01} and/or H_{02} is not rejected, and exact and/or close fit has been achieved, or alternatively if the measurement model would at least demonstrate reasonable model fit, the following 79 null hypotheses would be tested on the freed elements in $\Theta\delta$[12]:
H_{0i}: $\theta_{\delta jj}$ =0; i=82, 83, …, 160; j=1, 2…; 79
H_{ai}: $\theta_{\delta jj}$ >0; i=82, 83, …, 160; j=1, 2…; 79

[11] Λ^X is a 79 by 20 factor loading matrix describing the slope of the regression of each of the 79 item parcels on the latent first-order personality dimension it was earmarked to reflect.
[12] $\Theta\delta$ is a diagonal 79 by 79 matrix reflecting the measurement error variance of each of the79 item parcels.

If either H_{01} and/or H_{02} is not rejected, and exact and/or close fit has been achieved, or alternatively if the measurement model would at least demonstrate reasonable model fit, the following 190 null hypotheses would be tested concerning the freed elements in Φ:

H_{0i}: $\phi_{jk}=0$; i=161, 162, …, 350; j=1, 2…20; k=1, 2…20; j≠k

H_{ai}: $\phi_{jk}\neq 0$; i=161, 162, …, 350; j=1, 2…20; k=1, 2…20; j≠k[13]

The second overarching substantive research hypothesis (Hypothesis 2) is that the second experimental version of the SAPI provides a reliable and construct valid measure of the 6 second-order personality dimensions the constitute the personality construct as it is constitutionally defined by the instrument. If the second substantive hypothesis is interpreted to mean that the hypothesised model provides an exact account of the measurement model in the parameter, it translates into the following exact fit hypothesis:

H_{0351}: RMSEA = 0

H_{a351}: RMSEA > 0

Assuming that the measurement model underlying the SAPI only approximates the processes that operated in reality to create the observed co-variance matrix, the following close fit null hypothesis was also be tested (Browne & Cudeck, 1993):

H_{0352}: RMSEA ≤ .05

H_{a352}: RMSEA ≥ .05

If either H_{0424} and/or H_{0425} is not rejected and exact and/or close fit has been achieved, or alternatively if the measurement model would at least demonstrate reasonable model fit, the following 79 null hypotheses would be tested concerning the freed elements in Λ^X:

H_{0i}: $\lambda_{jk}=0$; i=353, 354, …, 431; j=1,2, …, 79; k=1, 2, …, 20[14]

H_{ai}: $\lambda_{jk}\neq 0$; i=353, 354, …, 432; j=1,2, …, 79; k=1, 2, …, 20

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[13] Strictly speaking two sets of H_a hypothesis should have been formulated that explicitly indicates which of the 190 ϕ_{ij} estimates are expected to be positive and which are expected to be negative. Due to the number of hypotheses involved this option has not used. The loss of statistical power that resulted an unfortunate consequence of this decision is acknowledged.

[14] H_{0353} to H_{0431} are equivalent to H_{03} to H_{081}.

If either H_{0351} and/or H_{0352} is not rejected and exact or close fit has been achieved, or alternatively if the measurement model would at least demonstrate reasonable model fit, the following 79 null hypotheses would be tested concerning the freed elements in Θ_δ:

H_{0i}: $\theta_{\delta jj}=0$; i=432, 433, …, 510; j=1, 2…; 134[15]

H_{ai}: $\theta_{\delta jj}>0$; i=432, 433, …, 510; j=1, 2…; 134

If either H_{0351} and/or H_{0352} is not rejected and exact or close fit has been achieved, or alternatively if the measurement model would at least demonstrate reasonable model fit, the following 15 null hypotheses would be tested concerning the freed elements in Φ:

H_{0i}: $\phi_{jk}=0$; i=511, 512, …, 525; j=1, 2…6; k=1, 2…6; j≠k

H_{ai}: $\phi_{jk}\neq 0$; i=694, 695, …, 708; j=1, 2…6; k=1, 2…6; j≠k

If either H_{0351} and/or H_{0352} is not rejected and exact or close fit has been achieved, or alternatively if the measurement model would at least demonstrate reasonable model fit, the following 20 null hypotheses would be tested concerning the freed elements in Γ:

H_{0i}: γ_{jk} =; i=526, 527, …, 545; j=1, 2, …, 20; k=1, 2, …6

H_{ai}: γ_{jk} >; i=526, 527, …, 545; j=1, 2, …, 20; k=1, 2, …6

The testing of these 545 null hypotheses formed the basis for examining the merits of the claim made by the developers that the second experimental version of the SAPI successfully measures the 20 primary and the 6 secondary personality dimensions it intends to measure and in the manner that it intends to do so according to the scoring key.

3.6 STATISTICAL ANALYSIS

In order to test the proposed relationships that exist amongst the latent variables (first- and second-order personality dimensions) and between the first-order latent personality dimensions and the item indicator variables as suggested by the SAPI first- and second-

[15] H_{0432} to H_{0510} are equivalent to H_{082} to H_{0160}

order measurement models (see Equations 1 and 2), the statistical analysis technique structural equation modelling (SEM) was utilised via LISREL 8.8.

Structural equation modelling (SEM) is described by Ullman (2006) as ”a collection of statistical techniques that allow a set of relations between one or more independent variables (IVs), either continuous or discrete, and one or more dependent variables (DVs), either continuous or discrete, to be examined” (p. 35). According to Ullman both the IVs as well as the DVs can be measured variables that are directly observed, or latent variables that are unobserved or not directly observed). In simple terms, SEM can be used to determine how effectively the proposed constructs are reflected by these measures (Kelloway, 1998).
Moreover, in support of using SEM, Bollen and Long (1993, p. 1) argue:

> Structural equation models (SEMs) are a well-known component of the methodological arsenal of social sciences. Much of their attractiveness stems from their generality. Like econometric methods, SEMs allow consideration of simultaneous equations with many endogenous variables. Unlike most econometric methods, SEMs allow measurement error in the exogenous and endogenous variables. As with factor analysis developed in psychometrics and related procedures in sociometrics, SEMs permit multiple indicators of latent constructs and estimation of reliability and validity. In addition, SEMs allow more general measurement models than traditional factor-analytic structures and enable the researcher to specify structural relationships among the latent variables. Thus structural equation models are a synthesis of procedures developed in econometrics, sociometrics, and psychometrics (p.1).

In addition it is for the reason‘s provided above as well as the powerful, but also flexible, method SEM uses to boast the quality of the measurement, which is important when evaluating the hypothesised relationships that exists amongst underlying latent variables (Kelloway, 1998), that propelled the current study to select SEM as the analysis technique. In doing so this study followed five distinct, yet inter-related, steps that characterise most applications of SEM (Hair, Black, Babin Anderson & Tatham, 2010; Bollen & Long, 1993; Kelloway, 1998):

- Model specification
- Evaluation of model identification

- Estimation of model parameters;
- Testing of model fit, and
- Model re-specification

The structure and design of the SAPI implies two specific factor structures or measurement models. The strength of structural equation modelling (SEM) derives from the ability of this analytical technique to evaluate the fit of theoretically derived predictions on (1) the nature of the relationships that exists between indicator variables and latent variables, on the (2) nature of the correlation relationships existing between first-order latent variables in the first-order SAPI measurement model and between the second-order latent variables in the second-order SAPI measurement model and on the (3) structural relationship existing between the second-order and first-order latent personality dimensions to the data.

The following section specifies the two SAPI measurement models by providing a description of the nature and number of the model parameters that need to be estimated. Secondly, model identification was evaluated and this step involved examining the comprehensive LISREL model to determine whether or not unique values for the freed parameters of the particular model can be estimated. Subsequently the importance of performing item and dimensionality analyses, and the procedures involved, will be explained. Finally, the method used in the estimation of the freed measurement model parameters, as well as the manner in which model fit will be evaluated, is discussed.

3.6.1 MODEL SPECIFICATION

The first-order SAPI measurement model reflecting the structural assumptions made the first-order latent personality dimensions and between the first-order latent personality dimensions and the 79 SAPI item parcels is defined in Equation 1.

$$\mathbf{X} = \Lambda^{X}\xi + \delta \text{--} [1]$$

Where:

- $\mathbf{X}$ is 79 x 1 column vector of observed itemparcel scores;
- Λ^{x} is a 79 x 20 matrix of factor loadings;

- ξ is a 1 x 20 column vector of latent first-order personality dimensions; and
- δ is a 79 x 1 column vector of unique or measurement error components consisting of the combined effect on X of systematic non-relevant influences and random measurement error (Jöreskog & Sörbom, 1993).

The second-order SAPI measurement model is defined in Equation 2.

$$\mathbf{Y} = \Lambda^{\mathbf{Y}}\boldsymbol{\eta} + \Gamma\xi + \boldsymbol{\varepsilon} \text{ -- [2]}$$

Where:

- $\mathbf{Y}$ is 79 x 1 column vector of observed item parcel scores;
- $\Lambda^{\mathbf{Y}}$ is a 79 x 20 matrix of factor loadings;
- η is a 20 x 1 column vector of first-order latent personality dimensions;
- Γ is a 20 x 6 matrix of regression coefficients describing the slope of the regression of the j^{th} first-order latent personality dimension η_j on the i^{th} second-order latent personality dimension ξ_i;
- ξ is a 6 x 1 column vector of second-order latent personality dimensions; and
- ε is a 79 x 1 column vector of unique or measurement error components consisting of the combined effect on Y of systematic non-relevant influences and random measurement error (Jöreskog & Sörbom, 1993).

Equation 1 and Equation 2 do not fully define the first- and second-order SAPI measurement models. To fully specify the first-order SAPI measurement model two additional matrices need to be defined. First being a symmetric 20 x 20 co-variance or correlation matrix Φ that contains the correlations between the first-order latent personality dimensions. The SAPI measurement model as expressed in Equation 1 assumed that the primary personality dimensions should be correlated. All off-diagonal elements in the 20 x 20 Φ matrix were therefore freed to be estimated. The second matrix Θ_δ is a diagonal 79 x 79 variance-co-variance matrix, that shows the variance in ($\theta_{\delta ii}$ and $\theta_{\delta jj}$) and co-variance ($\theta_{\delta ij}$) between the measurement error terms δ_i and δ_j. The measurement error terms (δ_i;δ_j) are normally in a cross-sectional study assumed to be uncorrelated across the indicator variables and thus the co-variance terms were fixed to zero in Θ_δ (Spangenberg & Theron, 2004) in the current study.

To fully specify the second-order SAPI measurement model three additional matrices need to be defined. The first is a symmetric 6 x 6 co-variance or correlation matrix Φ that contains the correlations between the second-order latent personality dimensions. The SAPI measurement model as expressed in Equation 1 assumed that the second-order personality dimensions should be correlated. All off-diagonal elements in the 6 x 6 Φ matrix were therefore freed to be estimated. The second matrix Θ_ε is equivalent to the Θ_δ matrix defined above and is a diagonal 79 x 79 variance-co-variance matrix, that shows the variance in ($\theta_{\varepsilon ii}$ and $\theta_{\varepsilon jj}$) and co-variance ($\theta_{\varepsilon ij}$) between the measurement error terms ε_i and ε_j as previously defined.

The third matrix Ψ is a 20 x 20 variance covariance matrix representing the variance in and the covariance between the structural error terms ζ_j and ζ_i. Due to the cross-sectional nature of the research design the structural error termsζ_j and ζ_i. were assumed to be uncorrelated. Ψ was therefore defined as a diagonal matrix. In specifying the model, the scales of the measurement of the latent variables were not specified by setting the factor loadings on the first observed variable to unity. Jöreskog and Sörbom (1993; 1998) contend that In the case of a single-group analysis, instead of defining the origin and unit of the latent variable scales in terms of observable reference variables, it is advised that the latent variables should rather be standardised. In terms of this alternative option the unit of measurement becomes the standard deviation $\sigma_{\xi i}$ (Spangenberg & Theron, 2004).

In addition, all the factor loadings of each of the items designated to reflect each of the eighteen first-order personality factors of the SAPI were set free in Λ^X to be estimated. All the remaining elements of Λ^X were fixed at zero loadings to reflect the assumption that each item only reflects a single specific first-order latent personality dimension and thereby the assumed factor simplicity of the SAPI items (Tabachnick & Fidell, 1989).

3.6.2 EVALUATION OF MODEL IDENTIFICATION

In Diamantopoulos and Siguaw (2000, p. 48) it is explained that “identification revolves around the question of whether one has sufficient information to obtain a unique solution for the parameters to be estimated in the model. If a model is not identified, it is not possible to determine unique values for the model coefficients”. Whilst keeping the aforementioned in mind, Diamantopoulos and Siguaw (2000), together with MacCallum (1995), make two recommendations with regards to model identification. The first recommendation pertains to the latent variables and states that for each latent variable a definite scale should be established/assigned. Secondly, the model parameters that will be estimated must not exceed the number of unique variance and co-variance terms in the observed sample co-variance matrix, suggesting that the model should have positive degrees of freedom.

The former requirement has been met in the current study by standardising the latent variables. The following formula was used to determine whether the specified measurement models meet the second requirement for identification:

$$t \leq s/2$$

where

- t = the number of measurement model parameters that were freed to be estimated
- s = the number of variances and co-variances amongst the manifest (observable) variables, calculated as (p)(p +1) where p represents the number of observed variables (i.e., items in this case)[16].

If t>s/2 the model is unidentified. If a model is unidentified “it is the failure of the combined model and data constraints to identify (locate or determine) unique estimates that results in the identification problem” (Diamantopoulos and Siguaw, 2000 p. 48). If t = s/2 the model is just identified. This means that a single unique solution can be obtained for the parameters estimates. A just-identified model, however, has zero degrees of freedom and therefore no variance-co-variance information remains to test the derived model solution (Diamantopoulos and Siguaw, 2000).

[16] s/2 therefore represents the number of unique variances and covariances in the observed inter-item covariance matrix.

If t<s/2 the model is over-identified. In this regard, it means that more than one estimate of each parameter can be obtained. In a model that is over-identified, the equations available outnumber the number of parameters to be estimated (Diamantopoulos and Siguaw, 2000). A just-identified model has positive degrees of freedom and therefore variance-co-variance information remains to test the derived model solution (Diamantopoulos and Siguaw., 2000).

For the both SAPI measurement models, each latent variable will be treated as a (0; 1) standardised variable, which in effect satisfying the first requirement (MacCallum, 1995). In addition, the number of model parameters that are set free to be estimated in the first-order SAPI measurement model (t=348) and in the second-order SAPI measurement model (t=193) are less than the number of non-redundant elements in the observed sample co-variance matrix ([(79)(79+1)]/2=3160[17]) (Diamantopoulos and Siguaw, 2000). Both measurement models are therefore over-identified.

3.6.3 ITEM ANALYSIS

After the evaluation of model identification and before fitting the two measurement models, classical measurement theory item analysis was used to comment on the extent to which the design intention of the SAPI developers succeeded. Item analysis can be described as an analysis of a variety of item-statistics (Kline, 1994; Murphy & Davidshofer, 2005) that reflect the success with which the items assigned to a specific subscale fulfil their designated task of reflecting a common underlying first-order personality factor. Items were considered to poorly reflect the first-order latent personality dimension it was earmarked to reflect if the item was unable to differentiate between relatively small differences in standing on the latent personality dimension and/or if the item did not respond in unison with its subscale colleagues across different observations. For this study item analysis was conducted to examine the assumption that the items comprising of each of the twenty subscales of the SAPI do each reflect a common underlying latent variable. In other words the item analysis procedure assists the researcher to identify whether or not the observed variables are consistent measures of the intended latent variable. High reliability of the measures of the intended latent variable would give

[17] This calculation corresponded to the degrees of freedom reported in the output of the fit indices produced by LISREL and reported in Table 4.46.

credibility to the design intentions of the test developers (which was to construct sets of items to reflect variance in each of the eighteen first-order latent personality dimensions collectively comprising the personality domain). The final item set contained 170 items grouped in 20 facet scales (or first-order personality factors) and an additional 18 social desirability items. In total the second experimental version of the SAPI questionnaire consisted of 188 items. The second-order factor structure consisted of six second-order personality factors (comprising a positive and a Negative Social-Relational Factor, Neuroticism, Extraversion, Conscientiousness, and Openness) (Valchev, Meiring & Van de Vijver 2014). The fact that twenty first-order personality factors measured by the SAPI were not conceptualised as uni-dimensional personality dimensions from the outset lead to the expectation that the subscale item statistics and subscale reliability coefficients would be modest at best.

It should be noted that the objective of the current study was to evaluate the psychometric integrity of the SAPI for a South African sample and not to eliminate poor items. The researcher did not have the mandate to change/adjust the instrument. Thus where poor items were detected, they were tagged and reported on, however still remained in the measurement models that were fitted. The SPSS 24 Reliability Procedure was used to item analyse the SAPI subscale items.

High internal consistency reliability for each subscale, high item-subscale total correlations, high squared multiple correlations when regressing items on linear composites of the remaining items comprising the subscale and other favourable item statistics can, however, not be considered sufficient evidence that the common underlying latent variable is in fact the latent first-order personality dimension the item was developed to reflect. To be able to justifiably claim that the items of each subscale do in fact measure he latent first-order personality dimension the item was developed to reflect the structural model implied by the manner in which the constitutive definition embeds the personality construct in a larger nomological network of latent variables will also have to be shown to fit and the hypothesised paths in the model will have to be shown to be statistically significant ($p<.05$) and the path coefficient estimate in agreement with the values hypothesised under H_a.

High internal consistency reliability for each subscale, high item-subscale total correlations, high squared multiple correlations when regressing items on linear composites of the remaining items comprising the subscale and other favourable item statistics can moreover also not be considered sufficient evidence that the common underlying latent variable is in fact an uni-dimensional latent variable. Nonetheless the SAPI still claims that each first-order personality dimension can be interpreted as a relatively broad facet of personality that expresses itself in a wide array of specific behaviours. Consequently each of the items comprising each of the twenty subscales of the SAPI were expected to load (albeit rather modestly) on a single factor. Ideally these items in the measurement model should function as relatively homogenous stimuli, which will enable/encourage test takers to respond in a manner that is a true expression of their standing on that specific underlying latent variable.

3.6.4 DIMENSIONALITY ANALYSIS

Dimensionality analysis usually allows the researcher to detect and remove items with factor loadings that are inadequate and/or to split heterogeneous subscales into two or more homogeneous subscales if found necessary. As mentioned before, it is important to remember that the researcher does not have the necessary permission to modify the instrument and as such poor items will not be deleted, but tagged and reported on. Poor items will remain in the measurement model that will be fitted. Moreover, when factor fission is found, while the nature of the fission will be examined, the measurement model will also not be modified.

The research's objective is to evaluate the psychometric properties of the second experimental version of the SAPI as a tool in a South African work context. In addition, the researcher does not hold any intellectual property rights on the instrument and therefore are not permitted to re-word or remove any items. The researcher may also not modify the scoring key of the instrument.

The dimensionality analysis was conducted by subjecting each of the twenty personality subscales to an unrestricted principal axis factor analysis with oblique rotation. The reason why oblique rotation was chosen and not varimax rotation is that the former is considered a superior method that, even when underlying factors may be related to each other, provides simple structure (Kerlinger & Lee, 2000; Steward, 2001), albeit somewhat more complex to interpret (Tabachnick & Fidell, 1989). Moreover, oblique rotation was chosen as a rotational technique as opposed to orthogonal rotation because if there were to emerge more than one factor, oblique rotation would allow the extracted factors to correlate in the rotated solution (Tabachnick & Fidell, 1996). In addition, the exploratory factor analyses performed on the subscales shed further light, via the magnitude of the factor loadings, on the success with which each item represents the common core underlying the subscale of items of which it forms part of. The uni-dimensionality assumption (Hair, Black, Babin, Anderson & Tatum, 2006) can be described as the design intention proposing that the items selected to represent each latent variable would in fact measure the intended latent variable exclusively when the scales were originally constructed.

In this study the uni-dimensionality assumption was tested on all twenty subscales through explanatory factor analysis using SPSS 24. The eigenvalue-greater-than-unity rule of thumb along with the scree plot was used to determine the number of factors to be extracted. The uni-dimensionality assumption was considered to be supported if the eigenvalue-greater-than unity rule results in the extraction of a single factor, if the magnitude of the factor loadings are reasonably high ($\lambda ij \geq .30$ were considered large) and a small percentage (less than 30%) of the residual correlations are greater than .05. Principle axis factor analysis was chosen over principle component analysis because the latter does not separate error or specific variance (Kline, 1994) whilst principle axis factor analysis does make allowance for the presence of measurement error.

The fact that twenty first-order personality factors measured by the second experimental version of the SAPI were not conceptualised as uni-dimensional personality dimensions from the outset brings into question whether the dimensionality analysis should have been performed at all. On the one hand it can be argued that the 20 personality facets are regarded by the SAPI developers as analogous to the 37 facets that were derived in the qualitative phase from the 550 sub-facets and 188 narrow-facets. The 20 first-order factors were, on the other hand, identified via exploratory factor analysis on the items included in the final version of the SAPI. This would imply that the items assigned to each of the 20 subscales of the SAPI did load on a common factor. It was therefore decided to retain the dimensionality analysis on each subscale of the SAPI as part of the methodology. Factor fission was, however, not considered an altogether unlikely outcome and nor was it considered to pose a fatal threat to the construct validity of the SAPI.

In the interest of scientific rationality it should also be explicitly acknowledged that the dimensionality analysis procedure used in the current could be criticised. Exploratory factor analysis is, as the name suggests, an exploratory, structure-seeking statistical technique. The developer of the SAPI wrote the items of each of the twenty subscales with the intention that the items of each subscale will reflect test-takers' standing on a relatively broad but nonetheless not further divisible dimension of personality. The scoring key echoes this claim. This implies a specific measurement hypothesis for each subscale in terms of which a single latent first-order personality dimensions is hypothesised and all items are hypothesised to load on this single factor. This would have been more appropriately acknowledged if a series of confirmatory factor analyses would have been performed in which single factor measurement models would have been fitted for each of the 20 subscales. In the interest of logistic expediency this approach was not followed. This decision is acknowledged as a limitation.

3.6.5 ESTIMATION OF MODEL PARAMETERS

3.6.5.1 Variable type

The SAPI utilises a five-point Likert-type response scale. Respondents are required to indicate the degree to which they agree or disagree with each item statement. Data that were produced by this type of response scale should strictly speaking be regarded as ordinal data/discreet variables. However, Muthén and Kaplan (1985) stated that for the purpose of CFA it is permissible to specify data obtained from Likert scales with five or more scale points as continuous data.

Another way to convert ordinal categorical data to continuous data would have been to use item parcels rather than item-level raw data. The intention of item parcelling is to serve as a solution for a number of data problems, for instance, non-normality, small sample sizes as well as parameter estimates that are not stable (Dunbar-Isaacson, 2006) and would have been the ideal methodological option, if the aim of this study was to evaluate the fit of a structural model hypothesising structural relations between the first-order personality dimensions. In such a case the fitting of a measurement model in which the first-order latent personality dimensions have been operationalised by means of two or more item parcels would have been appropriate to answer questions with regards to whether the SAPI can be used to provide valid and reliable item parcel indicator variable measures for latent personality variables in a structural model. Although fitting the measurement model in which the individual items serve as the indicator variables undeniably remains the methodological ideal, memory capacity considerations forced the calculation of item parcels. Either two or three item parcels were calculated per subscale. A total of 79 item parcels were calculated.

The interest in applying parcels within SEM lies largely on its advantages when compared to single items which are:

- The composite score of an item parcel reveals more reliable results compared to single item scores,
- Lower skewness and kurtosis and a higher validity occur for item parcels (Dunbar-Isaacson, 2006),
- Model-fit indices like the Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), as well as the Chi-Square Test, improves as the number of items in a parcel increases.

Nonetheless, item parcels are not without disadvantages. One of the limitations of Item parcels are that they are only effective within unidimensional structures and difficulties in interpretation may occur when item parcels measures a multi-dimensional construct. Moreover, item parcelling may lead to an improved model fit. Reason being those parcel-based models cancel out random and systematic error by combining these errors and thereby improving model fit. When item parceling is used, the probability of identifying miss specified models is reduced, increasing the probability of Type II errors and therefore a failure to correctly reject a wrong model (Little, Cunningham, Shahar & Widaman, 2002).

To fit such a measurement model would require (in the case of the first-order measurement model) the estimation of 530 model parameters comprising of 170 factor loadings, 170 measurement error variances and 190 unique covariance terms. The number of observations should at least exceed the number of parameters to be estimated, but preferably should be 5-10 times the number of freed parameters in the model, which puts great demands on the sample size required (Jöreskog & Sörbom, 1996a;1996b). Although this requirement has been met by the SAPI developers, by providing the researcher with a large archival database consisting of approximately 3912 SAPI protocols allowing the construct validity of the SAPI to be evaluated by fitting the first- and second-order SAPI measurement model, item parcels as indicator variables had to used. Unfortunately, fitting a measurement model with a large number of freed model parameters also holds the disadvantage that it requires large memory capacity for the LISREL software to run successfully even when running the syntax in batch mode from the disk operating system. Paragraph 3.6.6 elaborates further on this aspect.

3.6.5.2 Univariate and multivariate normality

When data is used in SEM to fit a measurement model to continuous data, maximum likelihood estimation is the preferred method used to derive estimates for the freed measurement model parameters. True generalised least squares (GLS) and full information maximum likelihood (FIML) can also be used as alternative estimation methods in SEM, however all three methods described above require that the data follow a multivariate (normal) distribution (Mels, 2003; Holtzkamp, 2013). When working with non-normal data, Mels (2003) deems it necessary that alternative methods of estimation be used. These additional methods are weighted least squares (WLS); robust maximum likelihood (RML); or diagonally weighted least squares (DWLS), with robust maximum likelihood as the preferred approach to use when working with multivariate non-normal data (Mels, 2003).

It should be noted that improper analysis of non-normal continuous data can have the unfortunate consequence of incorrect standard errors as well as chi-square estimations (Du Toit & Du Toit, 2001; Mels, 2003). Therefore, PRELIS was used to evaluate the univariate normality of the individual item indicator variable distributions and the multivariate normality of the multivariate SAPI item distribution (Jöreskog & Sörbom, 1996b). In the event that the null hypothesis of multivariate normality is rejected ($p<.05$), it was decided to normalise the item indicators and to test the multivariate assumption again. In such an event it was expected that normalisation would have the effect of improving the multivariate symmetry and kurtosis of the item distribution but that the multivariate assumption would most likely still not hold, although the deviation of the observed multivariate normal distribution from the theoretical multivariate distribution will be less severe. The normalised data was then used to fit the measurement model.

3.6.6 TESTING OF MODEL FIT

Model fit refer to how well the proposed measurement model (reflecting the design intention of the test developers) is able to account for the observations made on the latent variables comprise the model (Hooper, Coughlan and Mullen, 2008). The overall goal of structural equation modelling is to establish how well the model “fits” the data of the underlying theory, particularly; how well the observed covariance matrix can be accounted for by the estimates obtained for the freed measurement model parameters. The model can only be considered as providing a plausible account of the process that generated the observed covariance matrix, when the estimated model parameters are able to closely replicate the observed covariance matrix, thereby fitting the model well. Nonetheless, even if the model fits the data it can never be concluded that the process portrayed in the model is necessarily the one that underpins the phenomenon of interest.

In this study, the 64 bit version of LISREL 8.8 was used to fit the measurement models as was defined in Equations 1 and 2 and the measurement model syntax will consequently be run from DOS in batch mode rather than interactively. The standard 32 bit version of LISREL 8.8 will not be able to cope in the case of having a large number of indicator variables, observations and latent variables; this is due to the fact that the calculation of the inverse of the estimated asymptotic covariance matrix requires extremely large memory capacity (Holtzkamp, 2013).

As model fit is one of the most important steps in the process of structural equation modelling, is essential that researchers use fit statistic information with caution, especially because numerous fit indices exist to guide the researcher in the process of assessing the absolute and comparative model fit. Moreover, the wide range of cut-off values for these indices and the lack of agreement on which of these indices to report on might lead to information that is conflicting. Whilst, statisticians have ever since been developing new and improved indices in an attempt to improve model fit, it remains crucial that care be taken when interpreting the array of fit statistics available in LISREL 8.8 (Diamantopoulos & Siguaw, 2000; Hooper et al., 2008).

For the reasons described above, it was decided that a conclusive verdict will not be pronounced on the fit of a model, based only on a single statistical statistic, but the full spectrum of fit indices available in LISREL 8.8 will be utilised to determine how well the model fits the underlying data. The following fit indices will be included.

LISREL fit indices

ABSOLUTE FIT INDICES

Absolute fit indices do not only give the best indication of how well the proposed model fits the data, it also explains how well the *a priori* model fits the data, measuring how well the model fits on its own as opposed to comparing its calculations to a baseline model as is the case when using incremental fit indices (Jöreskog & Sörbom, 1993).

Model chi-square

Traditionally, the normal theory chi-square value is used to determine the incongruity between the observed and reproduced sample covariance matrices when the multivariate normality assumption is met. In addition, the chi-square statistic is used to test the exact fit null hypothesis (H_{01}: RMSEA=0). The hypothesis states that the measurement model fits the data in the population perfectly and that the model can perfectly reproduce the observed covariance matrix in the population. Under the exact fit null hypothesis, any inconsistency between the covariance matrices (observed and reproduced) in the sample is due to sampling error. An insignificant p-value ($p>.05$) will therefore indicate a good model fit. While the normal theory chi-square statistic assumes multivariate normality, the Satorra Bentler chi square (resulting from the use of robust maximum likelihood parameter estimation) on the other hand is better suited to multivariate non-normal data (Mels, 2003). Both chi-square statistics are very sensitive to sample size. In the case of using large sample sizes, it might result in model rejections and in the case of small sample sizes, chi-square is likely to lack the power to discriminate between good and poor fit (Hooper et al., 2008).

Root mean square error of approximation (RMSEA)

A popular measure of fit, the RMSEA expresses the discrepancy between the observed and estimated sample covariance matrices in the population; however the population discrepancy function value is expressed in terms of the degrees of freedom of the model (Diamantopoulos & Siguaw, 2000).“The RMSEA tells us how well the model, with unknown but optimally chosen parameter estimates would fit the population covariance matrix. In recent years it has become regarded as one of the most informative fit indices due to its sensitivity to the number of estimated parameters in the model” (Hooper et al., 2008, p. 54). RMSEA will usually favour the model that possesses the least number of model parameters, because of its preference for parsimony.

When the RMSEA value is lower than .05 the inference that good model fit had been achieved in the sample can be made, whereas values lower than.08 indicate reasonable model fit in the sample (Browne & Cudeck, 1993). In addition, LISREL makes provision for a test of the closeness of model fit by formally calculating the probability of the sample RMSEA value being observed in the sample under H_{02}: RMSEA≤.05 (Du Toit & Du Toit, 2001).

Goodness-of-fit statistic (GFI) and the adjusted goodness-of-fit statistic (AGFI)

The GFI statistic was created by Jöreskog and Sorböm (2003) as an alternative to the chi-square test and aims to compute the proportion of variance accounted for by the estimated population covariance matrix whilst, also determining how closely the model comes to reproducing the observed covariance matrix (Hooper et al., 2008). For the GIF fit statistic the recommended cut off value is .90, whereas .95 is recommended in the event of small sample sizes and low factor loadings (Jöreskog and Sorböm, 2003).

The value of the adjusted goodness-of-fit statistic (AGFI) also increases with sample size and adjusts the GFI based on degrees of freedom. Like the GFI, values in the range of 0 and 1 with a generally accepted value of .90 are generally regarded as an indication of good model fit (Hooper et al., 2008).

Root mean square residual (RMR) and standardised root mean square residual (SRMR)

These indices are described by Hooper et al. (2008) as follow "the root mean square residual (RMR) and standardised root mean square residual (SRMR) are the square root of the discrepancy between the sample covariance matrix and the model covariance matrix" (p. 54). To calculate the RMR, the scale of each indicator item is used, which could potentially lead to complications in terms of interpretation of RMR values when a questionnaire contains items with varying scales lengths. This specific problem can be however be counteracted by the standardised RMR (SRMR) that has shown itself to be more useful in interpretation. SRMR statistic values range from 0 to 1.0. Values lower than .05 indicates a good fit, while values of up to.08 still indicating acceptable fit. Hooper et al. (2008) mention that while a SRMR of 0 is an indication of perfect fit, it must be kept in mind that when a high number of parameters are present in the model and when models are based on large sample sizes, the SRMR will be lower.

INCREMENTAL FIT INDICES

These indices are also known as relative or comparative fit indices and compare the chi-square value of a fitted model to a baseline model as opposed to using the chi-square in isolation to determine the goodness of fit of the fitted model (Hooper et al., 2008).

Normed-fit index (NFI)

The NFI statistic evaluates model fit by comparing the X^2 values of the fitted model and the null model. The null (independence) model denotes a model in which all variables are structurally unrelated, representing the worst case scenario. Values range from 0-1, with values higher than .08 indicates good model fit, whereas 1 indicates the best fit possible. A value of 0 represents the worst fit. The NFI is very sensitive to sample size. Moreover, an acceptable cut-off value for the NNFI statistic is a value equal to or larger than.95 (Hooper et al., 2008).

Comparative fit index (CFI)

The CFI is similar to the NFI in that it also assumes a base-line model in which all latent variables are structurally unrelated. The CFI is a revised version of the NFI in that it takes sample size into consideration, making it one of the most popular fit indices in SEM. The values are similar to the NFI, with values ranging between 0 and 1.0, where the closer to 1 the better the model fit. An acceptable cut-off value for the CFI statistic is a value equal to or larger than.95 (Hooper et al., 2008).

PARSIMONY FIT INDICES

The objective of the parsimony fit indices is to overcome the problem that model fit can always be improved by adding additional paths and latent variables to the model. The question is, however whether the increase in model complexity is warranted by the improvement in fit. The parsimony fit indices comprise of the (1) parsimony goodness-of-fit index (PGFI), derived from GFI by adjusting for loss of freedom; and (2), the parsimonious normed fit index (PNFI) that also adjusts for degrees of freedom, derived from the NFI. When compared to other goodness of fit indices, these indices tend to have much lower values which could be due to the way in which they penalise the fitted model for model complexity. Values of .50 show a good model fit (Hooper et al., 2008).

To determine model fit, a second form of the parsimony fit indices, exists. These are known as information criteria indices and consist of the Akaike information criterion (AIC) and the consistent version of the AIC (CAIC). These can be used to compare non-nested or non-hierarchical models (Hooper et al., 2008). In terms of values, the smaller the value the better the model fit is (Diamantopoulos & Siguaw, 2000), however because of an absence of a 0 to 1 scale it is difficult to recommend a cut-off value (Hooper et al., 2008).

3.6.7 INTERPRETING MEASURE STANDARDISED RESIDUALS AND MODIFICATION INDICES

Standardised residuals can be described as the covariance and variance residuals divided by its approximate standard error, which can be interpreted as a z-score. The standardised covariance and variance residuals can therefore be interpreted as the number of standard deviation units the reproduced variance or covariance estimate deviates from the observed variance or covariance value. Kelloway (1998) points out that essential diagnostic information on lack of model fit can be obtained through an inspection of the residuals, especially the standardised residuals. Residuals are representative of the difference that exist between elements of the observed and estimated covariance matrices

(Sobserved – Sfitted), where S represents the sample covariance matrix as an estimate of that represents the population covariance matrix) (Diamantopoulos & Siguaw, 2000; Jöreskog & Sörbom, 1993). On a 1% significance level standardised residuals can be considered large if they exceed +2.58 or -2.58 (Diamantopoulos & Siguaw, 2000). In an ideal world standardised residuals should be distributed symmetrical around zero. Large residual are indicative of covariance relationships between indicators variables that the model failed to explain. Here certain inferences can be made from large positive and negative residuals; with the former indicating that the model underestimated the relationship that exists between two observed variables implying the need for added explanatory paths. On the other hand, the large negative residuals would imply that the model overestimated the relationship between two observed variables, implying the need to prune paths away. LISREL provides a synopsis of the largest and smallest standardised residuals, a stem-and leaf plot that describes how the residuals are distributed around the median and a Q-plot providing an additional graphical display of residuals, by plotting the standardised residuals, on the horisontal axis, against the quantiles of the normal distribution (Diamantopoulos & Siguaw, 2000).

As opposed to standardised residuals, model modification indices specify the degree to which the model's X^2 fit statistic would decline if a currently fixed parameter were set free and the model were re-estimated (Jöreskog & Sörbom, 1993). Model modification indices are intended to answer the question whether any of the currently fixed parameters, if it were to be set free, would significantly (p<.01) improve the parsimonious fit of the model. Large modification index values (>6.6449) present an indication as to which parameters, if set free, would improve the fit of the model at a 1% significant level (Diamantopoulos & Siguaw, 2000). In the current study the modification indices for Λ^X, Θ_δ and Γ were interpreted. The objective was not to explore possibilities of improving the fit of the first- or second-order measurement models. Rather the objective was to obtain a further comment of the fit of the models by expressing for each of these matrices the number of large modification in terms of the total number of fixed elements. A large percentage for any of these matrices would comment negatively on the fit of the model in as far as it suggests numerous ways of improving the fit of the model.

3.6.8 INTERPRETING MEASUREMENT MODEL PARAMETER ESTIMATES

The parameter estimates were interpreted conditional on at least reasonable measurement model fit. . The statistical significance of the estimates obtained for the freed model parameters were evaluated first by testing H_{03} – H_{0350} and H_{0353} – H_{0545}. The formulation of the H_a hypotheses as directional or non-directional hypotheses determined, along with the choice of significance level, the critical value of the test statistic. In the case of directional H_a hypotheses, given a 5% significance level, a critical z-value of |1.6449| was used. In the case if non-directional H_a hypotheses given a 5% significance level, a critical z-value of I1.96I was used.

When interpreting the magnitude of the unstandardised measurement model parameter estimates (λ_{ij}, $\theta_{\delta jj}$, ϕ_{ij}, γ_{ij}), the problem surfaced that these estimates have to be interpreted with reference to the original scales of the indicator variable (items in the case of the current study). Examining the magnitude of the completely standardised solution, in which both latent and manifest variables have been standardised, mitigated or avoided the problem. The reliability of the item indicators was further investigated by means of the squared multiple correlations (R^2)[18] calculated for each of the item indicators.

According to Diamantopoulos and Siguaw (2000) the squared multiple correlations (R^2) reflects the amount of indicator variance, explained by the latent first-order personality dimension it was earmarked to reflect (i.e., ξ_j in the first-order SAPI measurement model and η_j in the second-order SAPI measurement model). Preference was given to a high R^2 value as it would be indicative that the variance for the relevant item indictor, to a large degree, reflected variance in the latent variable to which it has been linked. The rest of the variance that is not explained by the latent variable can then be ascribed to systematic and random measurement error.

Spangenberg and Theron (2005) suggest that to explain the total variance in the i^{th} item (Xi) it could be (1) decomposed into variance as a result of variance in the latent variable the item was designed to reflect (ξ_i), (2) variance due to variance in other systematic latent that effects the item that it was not designed to reflect and (3) random measurement error.

[18] In the current study these squared correlations are in fact the squared zero-order correlations because each item only loads on a single latent variable.

The last two sources of variance in the indicator variable are acknowledged in Equation 1 through the measurement error term (δ_i) and in Equation 2 through the measurement error term (ε_i). The measurement error terms (δ_i and ε_i) therefore do not differentiate between systematic and random sources of error or non-relevant variance. The square of the completely standardised factor loadings λ_{ij} were therefore be interpreted as the proportion systematic relevant item variance given that each item loads on one latent variable only.

3.6.9 DISCRIMINANT VALIDITY

The term discriminant validity was first introduced by Campbell and Fiske (1959) in their discussion on the evaluation of test validity, in which they described discriminant validation as one of the validation procedures that should be used when evaluating the validity of the inferences derived from new measures. For discriminant validity to be successful, a test or measure should not show high correlation with tests designed to measure different underlying theoretical constructs. In the current study discriminant validity refers to the question whether SAPI measures the 20 first-order personality dimensions and the 6 second-order personality factors in a manner that makes it permissible to distinguish between the related but qualitatively distinct personality dimensions. The concern underpinning the evaluation of discriminant validity is that the SAPI items earmarked to reflect the 20 first-order personality dimensions do not succeed in discriminating between related first-order personality dimensions.

Determining if the correlations, contained in the phi matrix, are considerably different from 1.0 is the first but rather lenient way to examine discriminant validity. A critical cut-off value of .90 was used in the current study to flag ϕ_{ij} values of concern. This approach, however, does not focus on the parameter values and do not formally take sampling error into consideration. To determine whether ϕ_{ij} in the parameter might conceivably be 1.0 the 95% confidence interval for each phi estimate was calculated (Bagozzi, Yi, and Phillips, 1991). For each ϕ_{ij} parameter estimate a 95% confidence interval was calculated using the formula expressed as equation 3 below: (phi value) ±1.96 * standard error, is a formula

$$95\%CI = \phi_{ij} \pm 1.96 * S_{\phi ij} \text{ -- [3]}$$

Discriminant validity is achieved when the correlations between the factors are significantly less than 1.0 ($p<.05$. Discriminant validity will therefore exist if the 95% confidence intervals calculated for the 190 phi estimates (for the first-order SAPI measurement model) and for the 15 phi estimates (for the second-order SAPI measurement model) do not contain 1.0.

In addition, the average variance-extracted (AVE) proportions was calculated for all 20 latent personality dimensions and compared to the square of the phi estimates between the latent personality dimensions (Diamantopoulos & Siguaw, 2000; Farrell, 2010; Hair, Black, Babin & Anderson., 2006). The average variance extracted can be defined as the amount of item indicator variance that is explained in the indicator variables representing a specific first-order personality dimension by that latent personality variable as opposed to possible measurement error. The average variance extracted is calculated as (Diamantopoulos & Siguaw, 2000, p. 91):

$$p_v = (\Sigma\lambda^2)/[\Sigma\lambda^2 + \Sigma(\theta_\delta)] \text{ --- [4]}$$

To provide support to discriminant validity, the variance-extracted estimates should be larger than the squared correlation estimate ϕ_{ij}^2. This then indicates that a first-order latent personality dimension can explain its item measures better than it can explain another qualitatively distinct latent personality dimension. A further prerequisite for discriminant validity is that the average variance extracted should surpass at least .50, suggesting that the latent variable measured by the designated item indicators, account for more of the variance in the indicators than measurement error. Subscales that failed the test of discriminant validity were further evaluated to determine whether items exist that may be contributing to poor discriminant validity. This step was necessary because if discriminant validity has not been achieved, confidence in the claim that the SAPI succeeded in distinguishing between the 20 first-order latent personality dimensions as qualitatively distinct constructs would then be compromised. Lack of discriminant validity would mean that the claim that the SAPI, instead of measuring two qualitatively distinct but related latent personality dimensions, measured the common variance shared by the two personality dimensions twice cannot be refuted. The same line of reasoning applies to the 6 second-order personality dimensions although the danger is less acute in the case of the second-order model.

Possible causes for lack of discriminant validity could be items with high lambda-X modification indices and due to their complex nature, they should be considered for removal. Deleting items that lower discriminant validity should also lead to better model fit (Hooper et al., 2008).

3.6.10 MODEL RESPECIFICATION

Structural equation modelling and the complexity that comes with it, may initially result in poor model fit, however some modifications to the model can considerably improve these results (Hooper et al., 2008). These alterations should only be done if they can be substantively justified and when the researcher can ensure that changes make theoretical sense (Diamantopoulos & Siguaw, 2000; Kelloway, 1998). Evaluating the fit of each construct and item to establish whether there are any items that contribute to poor model fit, are good place to start (Hooper et al., 2008)

Firstly, items with a low multiple R^2 normally presents items that are heavily contaminated by very high levels of measurement error and should be considered for removal. A question that should be considered though is whether such items do not load on other factors than those that they were originally earmarked to represent and whether such alternative loading patterns make substantive theoretical sense. Secondly, making provision for correlated error terms by freeing off-diagonals elements in the Θ_δ matrix could also potentially improve model fit. The difficulty of theoretically justifying correlated measurement error terms in a model fitted to data obtained via a cross-sectional research design argues against utilising this option (Hooper et al., 2008).

Nonetheless, since the purpose of this study was not to improve the fit of the measurement model but rather to evaluate the fit of the *a priori* model that was indicated by the test developers, model respecification was not a central focus in the current study. Moreover the current study does not have the mandate to alter the architecture of the SAPI.

3.7 SAMPLE DESIGN

This section describes the nature, details, size as well as the limitations of the sample being used for the study. It further seeks to provide information in support of the decision to undertake a confirmatory factor analysis into the first-and- second-order factor structure of the second experimental version of the SAPI within the target population. The data used for this study was drawn from a relatively large database of psychometric test scores provided by the SAPI Project for numerous positions for research purposes across different industries and occupations or jobs.
In this study the non-probability sampling method of convenience sampling was used. Due to the use of this type of sampling procedure the findings of this study can only be generalised to the target population with great caution. Specifically, the extent to which observations may or may not be generalised to the target population solely depends on the representativeness of the sample. The assessments were completed between 2015 and 2017 online. The data did not contain any missing values as the computerised version of the SAPI does not allow respondents the option to leave questions unanswered. The records of the sample have been provided in an anonymous format to eliminate any possibility to obtain the participants personal information. It should be noted that for a third of the respondent's demographic information, no information with regards to race and home language were provided. This lack of information is rather unfortunate as it prevents the proper characterisation of the sample's racial and linguistic distribution. It makes sense that a more accurate description of the research sample would have been preferred as these characteristics may have affected how participants responded to the items comprising the SAPI. This definitely is an unfortunate limitation in the current study, which will need to be taken cognisance of in future research.

The total sample consists of 3912 respondents of which 2162 (55.3%) were female and 1750 (44.7%) were male. From the total sample, the ethnic make-up consists of 673 (17.2%) Blacks, 1287 (32.9%) Whites, 231(5.9%) Coloureds, 176 (4.5%) Indians, 5 (.1%) Asian, 72 (1.8%) other and 1301 (33.2%) respondents who did not provide clear details of their ethnicity. All respondents have completed the SAPI in South African English. The linguistic make-up consists of 838 (21.4%) Afrikaans, 974 (24.9%) Englih, 10 (.3%) isiNdebele, 135 (3.5%) isiXhosa, 227(5.8%) isiZulu, 104 (2.4%) Sepedi, 79 (2%) Sesotho, 125 (3.2%) Setswana, 19 (.5%) Siswati, 17 (.4%) Tshivenda, 35 (.9%) Tshivenda and

1349 (34.5%) respondents who did not provide clear details of their home language. Due to this study excluding certain demographic data, it would be difficult to gain further insight into the real impact that race and home language, have on the data. As this research aims to determine whether the second experimental version of the SAPI provides a valid and reliable measure of the personality construct in the South African work context, the sample could be considered suitable for the purpose of this study.

3.8 MEASUREMENT INSTRUMENT

The study used the South African Personality Inventory (SAPI), a self-report personality questionnaire developed as an indigenous personality inventory for the multicultural society of South Africa within a work context. The SAPI is currently only available in an English version.

The second experimental version of the SAPI contains a one hundred and eighty eight statement items to which respondents are asked to rate themselves to the extent to which they agree or disagree with each statement on a 5-point scale (1 = strongly disagree with the statement, to 5 = strongly agree with the statement). Eighteen of the items comprise the social desirability scale of the SAPI. The scoring is done by computer as data is captured and no subjective interpretation is involved. The second experimental version of the SAPI measures twenty first-order factors of personality. The first-order factors are: Empathy, Facilitating, Integrity, Social Intellect, Interpersonal Relatedness, Warm-Heartedness, Deceitfulness, Arrogance, Conflict-Seeking, Hostility-Egoism, Emotional Balance, Negative Emotionality, Playfulness, Sociability, Achievement Orientation, Orderliness, Traditionalism-Religiosity, Intellect, Broad-Mindedness, and Epistemic Curiosity. The constitutive definitions of these 20 first-order personality dimensions are provided in Appendix A. The second experimental version of the SAPI in addition measures six broad second-order factors of personality on which the twenty first-order factors load. These factors are: Positive Social-Relational Disposition, Negative Social-Relational Disposition, Neuroticism, Extraversion, Conscientiousness and Openness. The constitutive definitions of these 6 second-order personality dimensions are also provided in Appendix A. Social desirability is also assessed and gives an indication of an overly positive or negative self-description/self-impression.

Moreover, the social desirability scale was not included in the current study's construct validation of the SAPI. The Deacon (2016) study focussed on the construct validation of the first experimental version of the SAPI's social desirability scale. An in-depth discussion of the SAPI's conceptualisation of the personality construct had been provided in Chapter 2.

In undertaking the assessment, the majority of respondents completed the second experimental version of the SAPI on-line. In cases where respondents completed the paper and pencil version of SAPI-N, item responses were immediately captured into the database once they have completed the questionnaire. As the test was administered by qualified administrators (psychometrists and psychologists) who followed standardised procedures and testing conditions in all venues, no missing values were found. Moreover, the assurance was given that results are used for research purposes and that individual information will be kept confidential. Respondent had to complete consent and biographical information forms online before the test commenced. The SAPI has no time limit; however respondents were informed of how long it normally takes to complete the questionnaire. Respondents were also asked not to over-think or try and manipulate the items, but to give their first responses.

3.9 SUMMARY

The purpose of Chapter 3 was to describe the research methodology and hypotheses that were tested. In addition, the statistical procedures that were used to evaluate the hypotheses were discussed. In the following chapter the outcome of the results obtained from the analyses will be shared and discussed.

CHAPTER 4

RESEARCH RESULTS

4.1 INTRODUCTION

The overarching aim of Chapter 4 is to examine the research findings through presenting and discussing the results of the different statistical analyses that were performed. In addition, Chapter 4 further aims to offer evidence on the validity of the operational hypotheses as they were discussed in Chapter 3. In this chapter the results will be presented in a specific sequential order that corresponds to the sequence in which the analyses were performed. Firstly, the descriptive analyses are presented. Secondly, the item and dimensionality analyses that were conducted are discussed. Thereafter, a discussion on the test for multivariate normality on item parcels follows. Finally, the confirmatory factor analysis of the SAPI measurement model with individual items followed by an evaluation of the discriminant validity of the latent variables are presented and discussed.

4.2 MISSING VALUES

Before data analysis could commence, the issue of missing values had to be addressed first. The data was collected via a computer-based questionnaire. Due to the participant having to complete the test electronically, no incomplete responses (missing values) in this dataset were found. This is because the way the online questionnaire was formatted, allowed participants only to proceed if the previous answer was filled out. It should be noted that although there was some reported missing responses with regards to race and language, this did however not have an effect on the empirical testing of the operational research hypotheses although it did negatively impact the current study’s ability to create a demographic profile of the study sample.

4.3 SAMPLE

The sample consisted of 3912 completed questionnaires. Participants consist of a socioeconomically diverse group of people. In Table 4.1 demographic information, gender, racial categories, language, education and English reading ability are displayed. The information was collected from the sample enabling comparisons to be made of the study's results against future replicated studies.

Table 4.1

Demographic characteristics of the final sample of 3912 participants

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	2162	55.3	55.3	55.3
	Male	1750	44.7	44.7	100.0
	Total	3912	100.0	100.0	

Race					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	African	167	4.3	4.3	4.3
	Asian	5	.1	.1	4.4
	Black	673	17.2	17.2	21.6
	Coloured	231	5.9	5.9	27.5
	Indian	176	4.5	4.5	32.0
	Not specified	1301	33.2	33.2	65.2
	Other	72	1.8	1.8	67.1
	White	1287	32.9	32.9	100.0
	Total	3912	100.0	100.0	

Home language					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Afrikaans	838	21.4	21.4	21.4
	English	974	24.9	24.9	46.3
	isiNdebele	10	.3	.3	46.6
	isiXhosa	135	3.5	3.5	50.0
	isiZulu	227	5.8	5.8	55.8
	Not specified	1318	33.7	33.7	89.5

Other	31	.8	.8	90.3
Sepedi	104	2.7	2.7	93.0
Sesotho	79	2.0	2.0	95.0
Setswana	125	3.2	3.2	98.2
Siswati	19	.5	.5	98.7
Tshivenda	17	.4	.4	99.1
Xitsonga	35	.9	.9	100.0
Total	3912	100.0	100.0	

Education level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	113	2.9	2.9	2.9
	Up to Grade 4	2	.1	.1	2.9
	Up to Grade 9	15	.4	.4	3.3
	Grade 9	21	.5	.5	3.9
	Grade 12	853	21.8	21.8	25.7
	Certificate	426	10.9	10.9	36.6
	Diploma	661	16.9	16.9	53.5
	Bachelor's	748	19.1	19.1	72.6
	Honour's	618	15.8	15.8	88.4
	Master's	336	8.6	8.6	97.0
	Doctorate	64	1.6	1.6	98.6
	Other	54	1.4	1.4	100.0
	Total	3912	99.9	100.0	

Provincial distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not specified	107	2.7	2.7	2.7
	Eastern Cape	253	6.5	6.5	9.2
	Free State	183	4.7	4.7	13.9
	Gauteng	1589	40.6	40.6	54.5
	KwaZulu-Natal	506	12.9	12.9	67.4
	Limpopo Province	185	4.7	4.7	72.2
	Mpumalanga	198	5.1	5.1	77.2
	North West Province	162	4.1	4.1	81.4
	Northern Cape	64	1.6	1.6	83.0
	Western Cape	591	15.1	15.1	98.1
	Other	73	1.9	1.9	100.0
	Total	3912	100.0	100.0	

English Reading ability					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Poor	115	2.9	2.9	2.9
	Poor	17	.4	.4	3.4
	Good	733	18.7	18.7	22.1
	Very Good	3046	77.8	77.9	100.0
	Total	3912	99.9	100.0	

4.4 DESCRIPTIVESTATISTICS

Initially screening of the data was done to look for errors with regards to data capturing. The SAPI questionnaire uses a 5-point Likert response scale and as a result the 170 scale items were checked to determine whether there were any scores that were not in the range of possible answers. Values out of this specific (1-5) range may indicate typing errors during the data capturing phase. Due to the fact that the questionnaires were administered and scored electronically the probability of such errors in the current study was extremely small.

In Appendix B, the mean, median, mode, standard deviations, minimum and maximum values, skewness and kurtosis of the 170 items are presented. Inspection of the descriptive statistics for the item data set presented in Appendix B indicate that 22.88% of the item distributions are statistically significantly ($p<.05$) skewed to the right and 73.93% of the item distributions are statistically significantly ($p<.05$) skewed to the left, with 3.19% of the item distributions displaying symmetry (statistically insignificant skewness statistics). No plausible explanation for this finding could be derived. With regards to kurtosis 21.80% of the item distributions are statistically significantly ($p>.05$) platykurtic and 69.14% of the item distributions are statistically significantly ($p>.05$) leptokurtic. Only 9.06% of the item distributions were mesokurtic.

4.5 ITEM ANALYSIS

Classical measurement theory item analysis was performed on each of the 20 SAPI subscales through using the reliability procedure of SPSS 24. The rationale for conducting an item analysis is that item analysis can help identify the items that are not contributing to an internal consistent description of the latent first-order personality dimension being evaluated by the subscale of items. Moreover item analysis can also be informative by explaining why a subscale is unreliable or reliable whilst also suggesting ways to improve the reliability of the subscale. When decisions were made about any item's psychometric credentials, a basket of evidence was considered as opposed to only one single item statistic.

The reliability procedure that was performed consisted of calculating and evaluating the following classical measurement theory item statistics for every one of the SAPI subscales:

- Item means, variances and standard deviations,
- Inter-item correlations, and
- Item-total correlation statistics (which includes the change in the subscale mean, the change in the variance, item-total correlations, squared multiple correlation and the coefficient of internal consistency if each item would be removed).

Moreover, the classical measurement theory item statistics were calculated for each of the SAPI subscales. Normally, such analyses would usually result in elimination of items that do not contribute to the internal consistent description of the various latent variables, however due to the nature of this study no permanent modifications were proposed for any of the subscales. The intention was to only screen and comment on the psychometric suitability of the items representing each of the 20 latent first-order personality dimensions. Any decisions with regards to the modification, culling or replacing of the SAPI items, were seen to be completely the developers of SAPI instrument's prerogative.

4.5.1 ITEM ANALYSIS FINDINGS: SAPI SUBSCALES

A summary of the item analysis results for each of the SAPI subscales are presented in Table 4.2. A detailed output of the item analyses is available electronically on the enclosed CD, under folder name: Item Analysis, in Appendix C. Eleven of the twenty subscales achieved a Cronbach alpha value above .80 (Empathy, Facilitating, Integrity, Warm-Heartedness, Hostile-Egoism, Negative Emotionality, Playfulness, Sociability, Achievement orientation, Orderliness, Intellect), while nine of the remaining SAPI subscales (Interpersonal Relatedness, Social Intelligence, Arrogance, Conflict seeking, Deceitful, Emotional Balance, Traditionalism-Religiosity, Broadmindedness, Epistemic Curiosity) obtained values above the reliability standard of .75. It should be noted that personality measures may have a tendency to some extent show lower coefficients of internal consistency (Smit, 1996). In this regard the internal consistency results reported for the SAPI in Table 4.2 have to be evaluated as very positive and encouraging.

Table 4.2

Reliability results of the SAPI Subscales

Subscale	Sample size	Mean	Variance	Standard deviation	Alpha
Empathy	3913	28.18	11.898	3.449	.812
Facilitating	3913	37.97	30.356	5.510	.898
Integrity	3913	54.09	26.242	5.123	.837
Interpersonal Relatedness	3913	35.50	15.380	3.922	.772
Social Intelligence	3913	15.76	4.945	2.224	.797
Warm-Heartedness	3913	44.34	22.692	4.764	.858
Arrogance	3913	12.14	14.446	3.801	.770
Conflict Seeking	3913	14.74	15.920	3.990	.763
Hostile Egoism	3913	29.86	48.230	6.945	.837
Deceitfulness	3913	15.48	17.541	4.188	.751
Emotional Balance	3913	31.06	18.261	4.273	.797
Negative Emotionality	3913	29.49	43.328	6.582	.820
Playfulness	3913	22.27	15.317	3.914	.821
Sociability	3913	25.08	25.373	5.037	.861
Achievement orientation	3913	44.40	31.371	5.601	.861
Orderliness	3913	51.69	42.574	6.525	.882
Traditionalism-Religiosity	3913	14.50	11.117	3.334	.749
Broadmindedness	3913	24.02	10.732	3.276	.759
Epistemic Curiosity	3913	26.08	6.583	2.566	.754

Intellect	3913	43.46	23.253	4.822	.812

4.5.1.1 Empathy subscale

In Table 4.3 more detailed results of the item analysis for the Empathy-subscale are shown. The Empathy subscale obtained a satisfactory Cronbach alpha of .812 (See Table 4.2). On inspection of the item means and item standard deviations an absence of extreme means and small standard deviations were revealed, suggested the absence of poor items. The item means, according to the item statistic, ranged from 3.81 to 4.24 on a 5-point scale and the standard item deviations ranged from .622 to .798. The absence extreme means and small standard deviations imply that all the items in the subscale were able to detect relatively small differences in test-taker's standing on the latent first-order Empathy dimension.. The inter-item correlation matrix revealed that all the items correlated moderately with each other, with item6 showing the lowest correlations ranging from .264 – .382. More importantly item6 consistently, albeit subtly, correlated lower with all the remaining items suggesting that the variance in the responses to item6 tended to reflect a different source of systematic variance than was the case for the remaining items in the subscale. Moreover, item6 also showed itself as somewhat of an outlier towards the lower end of the distribution of corrected item total correlations. This trend was more pronounced in the distribution of the squared multiple correlations were item6 again showed itself as an outlier (.197) towards the lower end of the distribution. This again suggested that the variance in item6 tended to originate from a somewhat different source of systematic variance than the remaining items. The results however revealed that item6, if deleted, would decrease the current Cronbach alpha from .812 to .806, suggesting that item6 does not present itself as sufficiently problematic to be flagged as a seriously problematic item. Overall, the results of the item analysis of the Empathy scale did not raise any serious concerns.

Table 4.3

Item analysis results for the Empathy subscale

	Mean	Std. Deviation	N
ITEM1	4.06	.686	3912
ITEM2	4.09	.629	3912
ITEM3	4.02	.798	3912
ITEM4	3.92	.786	3912

ITEM5	4.03	.697	3912
ITEM6	4.24	.622	3912
ITEM7	3.81	.792	3912

	ITEM1	ITEM2	ITEM3	ITEM4	ITEM5	ITEM6	ITEM7
ITEM1	1.000	.546	.316	.536	.442	.323	.398
ITEM2	.546	1.000	.264	.388	.365	.299	.303
ITEM3	.316	.264	1.000	.393	.430	.264	.400
ITEM4	.536	.388	.393	1.000	.471	.286	.466
ITEM5	.442	.365	.430	.471	1.000	.382	.468
ITEM6	.323	.299	.264	.286	.382	1.000	.288
ITEM7	.398	.303	.400	.466	.468	.288	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM1	24.12	8.900	.617	.450	.775
ITEM2	24.09	9.528	.509	.332	.794
ITEM3	24.15	8.911	.494	.265	.798
ITEM4	24.26	8.451	.619	.410	.774
ITEM5	24.15	8.825	.624	.395	.774
ITEM6	23.94	9.844	.427	.197	.806
ITEM7	24.37	8.649	.562	.334	.785

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.026	3.811	4.239	.429	1.112	.018	7
Item Variances	.517	.387	.636	.249	1.644	.012	7
Inter-Item Correlations	.382	.264	.546	.283	2.072	.007	7

4.5.1.2 Facilitating subscale

The results for the item analysis for this subscale are depicted in Table 4.4. The Facilitating subscale returned one of the highest alpha coefficients (.898) of al scales (see Table 4.2 above). Approximately 90% of the variance in the Facilitating subscale items therefore originated from a systematic (but not necessarily uni-dimensional) source of variance with only 10% of the variance in the item responses due to random measurement error. When looking at Table 4.4 the item means fell in a range from 3.70 to 4.01 on a 5-point scale and the item standard deviations from .720 to 863. On inspection of the item means and item standard deviations an absence of extreme means and small standard deviations were revealed, suggested the absence of poor items. The absence of extreme means and small standard deviations suggested that all items were able to discriminate between individuals that differ in their standing on the Facilitating latent first-order personality dimension. In the inter-item correlation matrix, none of the items consistently correlated lower with the other items in the subscale. None of the items showed themselves as outliers in the distribution of corrected item total correlations or the distribution of squared multiple correlations. This suggested that the variance in all the items to a sufficient degree originated from a common (but not necessarily uni-dimensional) systematic source of systematic variance. Furthermore the results revealed that none of the items, if deleted, would increase the current Cronbach alpha. The results of the item analysis of the Facilitating scale therefore did not raise any reasons for concern on the psychometric integrity of the facilitating subscale items.

Table 4.4

Item analysis results for the Facilitating subscale

	Mean	Std. Deviation	N
ITEM8	3.75	.801	3912
ITEM9	3.71	.863	3912
ITEM10	3.70	.770	3912
ITEM11	3.74	.726	3912
ITEM12	3.80	.752	3912
ITEM13	4.01	.671	3912
ITEM14	3.81	.747	3912
ITEM15	3.53	.849	3912
ITEM16	3.92	.720	3912
ITEM17	3.99	.699	3912

	ITEM8	ITEM9	ITEM10	ITEM11	ITEM12	ITEM13	ITEM14	ITEM15	ITEM16	ITEM17
ITEM8	1.000	.487	.415	.455	.465	.442	.541	.503	.518	.510
ITEM9	.487	1.000	.311	.401	.389	.355	.424	.382	.423	.394
ITEM10	.415	.311	1.000	.447	.358	.327	.393	.607	.458	.406
ITEM11	.455	.401	.447	1.000	.393	.457	.540	.528	.539	.500
ITEM12	.465	.389	.358	.393	1.000	.379	.458	.451	.453	.433
ITEM13	.442	.355	.327	.457	.379	1.000	.635	.440	.579	.564
ITEM14	.541	.424	.393	.540	.458	.635	1.000	.553	.644	.616
ITEM15	.503	.382	.607	.528	.451	.440	.553	1.000	.584	.534

ITEM16	.518	.423	.458	.539	.453	.579	.644	.584	1.000	.691
ITEM17	.510	.394	.406	.500	.433	.564	.616	.534	.691	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM8	34.21	24.462	.663	.452	.887
ITEM9	34.26	24.998	.534	.313	.897
ITEM10	34.26	25.398	.563	.405	.894
ITEM11	34.23	25.111	.648	.427	.888
ITEM12	34.16	25.458	.571	.333	.893
ITEM13	33.95	25.626	.630	.474	.890
ITEM14	34.16	24.375	.735	.590	.883
ITEM15	34.43	23.823	.701	.547	.885
ITEM16	34.05	24.487	.750	.610	.882
ITEM17	33.98	24.918	.709	.562	.885

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.797	3.531	4.013	.482	1.136	.021	10
Item Variances	.581	.450	.745	.295	1.654	.009	10
Inter-Item Correlations	.475	.311	.691	.380	2.222	.008	10

4.5.1.3 Integrity subscale

Table 4.5 presents the results of the item analysis for the Integrity subscale. This subscale obtained a highly satisfactory alpha coefficient of .837 (see Table 4.2 above). The item means ranged from 3.93 to 4.24 (on a 5-point scale) and the item standard deviations from .619 to .827. No extreme means or small standard deviations therefore existed. The absence of extreme means and small standard deviations suggested that all items were able to successfully discriminate between individuals that differ in their standing on the Integrity latent first-order personality dimension. The inter-item correlation matrix revealed modest correlations ranging between .176 and .494 but importantly none of the items consistently correlated lower with the remaining items. Item24 and item25 could possibly have been flagged in this regard though. The two items did not really show themselves as outliers in the distribution of corrected item total correlations. However in the distribution of squared multiple correlations they did reveal themselves somewhat more prominently as outliers towards the lower end of the distribution. These findings raised the concern that the variance in these items might not originate from the source of systematic variance as the remaining items. The results, however, revealed that none of the items, if deleted, would increase the alpha coefficient of .837, suggesting that these two items do not present themselves as sufficiently problematic to flag them for future attention.

Table 4.5

Item analysis results for the Integrity subscale

	Mean	Std. Deviation	N
ITEM18	4.05	.745	3912
ITEM19	4.14	.691	3912
ITEM20	4.35	.653	3912
ITEM21	3.93	.827	3912
ITEM22	4.17	.620	3912
ITEM23	4.23	.619	3912
ITEM24	4.14	.646	3912
ITEM25	4.18	.732	3912
ITEM26	4.24	.624	3912
ITEM27	4.07	.722	3912
ITEM28	4.22	.643	3912
ITEM29	4.28	.584	3912
ITEM30	4.09	.667	3912

	ITEM18	ITEM19	ITEM20	ITEM21	ITEM22	ITEM23	ITEM24	ITEM25	ITEM26	ITEM27	ITEM28	ITEM29	ITEM30
ITEM18	1.000	.386	.258	.293	.224	.474	.209	.205	.219	.272	.227	.282	.477
ITEM19	.386	1.000	.395	.236	.237	.435	.230	.287	.319	.219	.299	.266	.437
ITEM20	.258	.395	1.000	.179	.246	.324	.219	.245	.400	.157	.494	.224	.260
ITEM21	.293	.236	.179	1.000	.445	.324	.176	.192	.191	.270	.202	.254	.279
ITEM22	.224	.237	.246	.445	1.000	.295	.238	.235	.281	.281	.300	.274	.261
ITEM23	.474	.435	.324	.324	.295	1.000	.325	.285	.339	.311	.331	.381	.516
ITEM24	.209	.230	.219	.176	.238	.325	1.000	.200	.262	.202	.218	.298	.255
ITEM25	.205	.287	.245	.192	.235	.285	.200	1.000	.323	.207	.288	.236	.277
ITEM26	.219	.319	.400	.191	.281	.339	.262	.323	1.000	.191	.421	.245	.279
ITEM27	.272	.219	.157	.270	.281	.311	.202	.207	.191	1.000	.196	.452	.310
ITEM28	.227	.299	.494	.202	.300	.331	.218	.288	.421	.196	1.00	.322	.304
ITEM29	.282	.266	.224	.254	.274	.381	.298	.236	.245	.452	.322	1.000	.360
ITEM30	.477	.437	.260	.279	.261	.516	.255	.277	.279	.310	.304	.360	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM18	50.04	22.172	.501	.331	.824
ITEM19	49.95	22.295	.532	.336	.822
ITEM20	49.74	22.845	.475	.344	.826
ITEM21	50.15	22.238	.426	.265	.831
ITEM22	49.92	23.038	.474	.289	.826
ITEM23	49.86	22.201	.626	.432	.816
ITEM24	49.95	23.376	.392	.175	.831
ITEM25	49.90	22.805	.415	.190	.831
ITEM26	49.84	22.941	.487	.298	.825
ITEM27	50.02	22.765	.429	.264	.830
ITEM28	49.87	22.736	.504	.357	.824
ITEM29	49.81	23.043	.510	.327	.824
ITEM30	50.00	22.183	.575	.399	.819

	Mean	Minimum	Maximum	Range	Maximum/ Minimum	Variance	N of Items
Item Means	4.161	3.935	4.352	.417	1.106	.012	13
Item Variances	.460	.341	.684	.343	2.007	.009	13
Inter-Item Correlations	.288	.157	.516	.359	3.282	.007	13

4.5.1.4 Interpersonal Relatedness subscale

The results for the item analysis for this subscale are depicted in Table 4.6 below. The Interpersonal Relatedness subscale obtained an acceptable value for Cronbach's alpha of .772 (see Table 4.2). Therefore approximately 77% of the variance in the Interpersonal Relatedness subscale items originated from a systematic (but not necessarily uni-dimensional) source of variance with 23% of the variance in the item responses due to random measurement error. When looking at the item statistics the item means fell in a range from 3.65 to 4.29 (on a 5-point scale) and the item standard deviations from .614 to .858. The absence of extreme means and small standard deviations suggested that all items were able to successfully discriminate between individuals that differ in their standing on the Integrity latent first-order personality dimension. The inter-item correlation matrix revealed correlations ranging between .148 and .641. Of all the items, item31 correlated somewhat lower with the other items. Moreover, item31 also revealed itself as somewhat of an outlier in the distribution of inter-item correlations and especially in the distribution of squared multiple correlations. The removal of item31 would in addition also affect a marginal increase in the internal consistency reliability (from .772 to .780). These findings suggested that test-takers responded somewhat out of step to item31 in comparison to the manner in which they responded to the remaining items. This in turn can be attributed to the fact that the variance in item31 did not originate from the same source as systematic variance as that which underpinned the remaining items. This basket of evidence was, however, not considered sufficient to flag item31 as seriously problematic.

Table 4.6

Item analysis results for the Interpersonal Relatedness subscale

	Mean	Std. Deviation	N
ITEM31	4.02	.858	3912
ITEM32	3.87	.844	3912
ITEM33	4.29	.572	3912
ITEM34	4.13	.620	3912
ITEM35	3.85	.766	3912
ITEM36	4.00	.653	3912
ITEM37	3.65	.783	3912
ITEM38	3.65	.815	3912
ITEM39	4.03	.614	3912

	ITEM31	ITEM32	ITEM33	ITEM34	ITEM35	ITEM36	ITEM37	ITEM38	ITEM39
ITEM31	1.000	.161	.157	.218	.166	.148	.184	.225	.198
ITEM32	.161	1.000	.213	.293	.210	.252	.196	.260	.228
ITEM33	.157	.213	1.000	.359	.245	.298	.242	.252	.341
ITEM34	.218	.293	.359	1.000	.299	.478	.260	.315	.367
ITEM35	.166	.210	.245	.299	1.000	.270	.392	.390	.344
ITEM36	.148	.252	.298	.478	.270	1.000	.276	.299	.272
ITEM37	.184	.196	.242	.260	.392	.276	1.000	.641	.371
ITEM38	.225	.260	.252	.315	.390	.299	.641	1.000	.418
ITEM39	.198	.228	.341	.367	.344	.272	.371	.418	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM31	31.48	12.871	.288	.088	.780

ITEM32	31.62	12.519	.360	.142	.767
ITEM33	31.21	13.308	.418	.206	.757
ITEM34	31.36	12.681	.524	.346	.743
ITEM35	31.65	12.254	.474	.244	.747
ITEM36	31.50	12.813	.458	.280	.750
ITEM37	31.85	11.865	.538	.446	.737
ITEM38	31.84	11.452	.592	.479	.727
ITEM39	31.47	12.725	.520	.294	.743

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.944	3.651	4.287	.636	1.174	.044	9
Item Variances	.536	.328	.736	.408	2.245	.025	9
Inter-Item Correlations	.284	.148	.641	.493	4.321	.010	9

4.5.1.5 Social Intelligence subscale

Table 4.7 presents the results of the item analysis for the Social Intelligence subscale. This subscale obtained an acceptable alpha coefficient of .797 (Table 4.2). Further inspection showed that the item means ranged from 3.87 to 4.00 on a 5-point scale and the item standard deviations from .687 to .719. On inspection of the item means and item standard deviations an absence of extreme means and small standard deviations were revealed, suggested the absence of poor items. All the items were able to successfully discriminate between individuals that differ in their standing on the Social Intelligence latent first-order personality dimension. The inter-item correlation matrix revealed correlations ranging between .434 and .671. None of the items consistently correlated lower with the remaining items in the subscale. The items therefore tended to respond in relative unison to individuals that differed in their standing on the Social Intelligence latent first-order personality dimension. None of the items showed themselves as outliers in either the distribution of corrected item total correlations or the distribution of squared multiple correlations. Moreover, the results revealed that none of the items, if deleted, would increase the current Cronbach alpha. This suggested that the variance in all the items to a sufficient degree had a common source of systematic variance. The results of the item analysis of the Social Intelligence subscale did thus not raise any reasons for concern.

Table 4.7

Item analysis results for the Social Intelligence subscale

	Mean	Std. Deviation	N
ITEM40	3.87	.717	3912
ITEM41	4.00	.696	3912
ITEM42	3.99	.687	3912
ITEM43	3.89	.719	3912

	ITEM40	ITEM41	ITEM42	ITEM43
ITEM40	1.000	.500	.439	.434
ITEM41	.500	1.000	.491	.444
ITEM42	.439	.491	1.000	.671
ITEM43	.434	.444	.671	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM40	11.89	3.051	.551	.317	.776
ITEM41	11.76	3.047	.581	.349	.760
ITEM42	11.77	2.907	.668	.505	.718
ITEM43	11.87	2.874	.638	.481	.732

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.940	3.873	4.000	.127	1.033	.004	4
Item Variances	.497	.472	.516	.044	1.094	.000	4
Inter-Item Correlations	.497	.434	.671	.237	1.547	.007	4

4.5.1.6 Warm-Heartedness subscale

Table 4.8 presents the detailed results of the item analysis for the Warm-Heartedness subscale. This subscale items returned a highly satisfactory alpha coefficient of .858 (see Table 4.2). Therefore approximately 86% of the variance in the Warm-Heartedness subscale items originated from a systematic (but not necessarily uni-dimensional) source of variance with 14% of the variance in the item responses due to random measurement error. Visual inspection of the item means and item standard deviations revealed the absence of extreme means and small standard deviations and therefore suggest the absence of poor items. The mean ranged from 3.84 to 4.28 on a 5-point scale and the standard deviation from .590 to .746. All the items were able to successfully discriminate between individuals that differ in their standing on the Warm-Heartedness latent first-order personality dimension. Table 4.8 further reveals a relatively coherent set of items which tends to respond in relative unison to systematic differences in the underlying latent variable(s). This can be concluded from the consistently moderate correlations in the inter-item correlation matrix, the higher item-total correlations in Table 4.8 and the absence of outliers in the distribution of corrected item-total correlations or in the distribution of squared multiple correlations. The results moreover revealed that none of the subscale items, if deleted, would further increase the alpha coefficient of .858. None of the Warm-Heartedness subscale items presented themselves as problematic items.

Table 4.8

Item analysis results for the Warm-Heartedness subscale

	Mean	Std. Deviation	N
ITEM44	4.26	.698	3912
ITEM45	4.17	.698	3912
ITEM46	4.06	.655	3912
ITEM47	4.28	.590	3912
ITEM48	3.90	.697	3912
ITEM49	3.90	.746	3912
ITEM50	4.03	.642	3912
ITEM51	3.84	.718	3912
ITEM52	4.03	.616	3912
ITEM53	3.89	.714	3912
ITEM54	3.97	.620	3912

	ITEM44	ITEM45	ITEM46	ITEM47	ITEM48	ITEM49	ITEM50	ITEM51	ITEM52	ITEM53	ITEM54
ITEM44	1.000	.423	.385	.322	.327	.381	.363	.353	.407	.328	.334
ITEM45	.423	1.000	.396	.306	.291	.266	.274	.332	.417	.329	.354
ITEM46	.385	.396	1.000	.342	.314	.305	.323	.316	.402	.321	.363
ITEM47	.322	.306	.342	1.000	.267	.291	.278	.274	.369	.328	.344
ITEM48	.327	.291	.314	.267	1.000	.337	.329	.371	.394	.341	.330
ITEM49	.381	.266	.305	.291	.337	1.000	.361	.340	.402	.346	.339
ITEM50	.363	.274	.323	.278	.329	.361	1.000	.491	.430	.357	.361
ITEM51	.353	.332	.316	.274	.371	.340	.491	1.000	.491	.365	.403
ITEM52	.407	.417	.402	.369	.394	.402	.430	.491	1.000	.451	.457

ITEM53	.328	.329	.321	.328	.341	.346	.357	.365	.451	1.000	.520
ITEM54	.334	.354	.363	.344	.330	.339	.361	.403	.457	.520	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM44	40.08	18.817	.560	.333	.845
ITEM45	40.17	19.046	.518	.305	.848
ITEM46	40.28	19.215	.531	.299	.847
ITEM47	40.05	19.852	.474	.236	.851
ITEM48	40.43	19.120	.506	.261	.849
ITEM49	40.44	18.799	.516	.280	.849
ITEM50	40.30	19.182	.551	.341	.846
ITEM51	40.50	18.607	.576	.379	.844
ITEM52	40.30	18.784	.661	.443	.838
ITEM53	40.45	18.688	.566	.367	.845
ITEM54	40.36	19.111	.590	.386	.843

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.031	3.839	4.284	.445	1.116	.023	11
Item Variances	.454	.348	.556	.209	1.600	.004	11
Inter-Item Correlations	.357	.266	.520	.255	1.958	.003	11

4.5.1.7 Arrogance subscale

The results for the item analysis for the Arrogance subscale are depicted in Table 4.9. The reliability statistics indicated a reasonably satisfactory alpha coefficient of .770 (Table 4.2). The item statistics showed the item means range from 1.88 to 2.31 (on a 5-point scale) for the 6 items included in this subscale. Standard deviations ranged from .848 and 1.066. The absence of extreme means and small standard deviations suggested that all items were able to successfully discriminate between individuals that differ in their standing on the Arrogance latent first-order personality dimension. The inter-item correlation matrix revealed correlations ranging between .290 and .522. More importantly none of the items consistently correlated lower with the remaining items. None of the items have shown themselves to be outliers towards the lower end of the distribution of corrected item total correlations or the distribution of squared multiple correlations. None of the items (if deleted) would increase the alpha coefficient of .770. All the items therefore responded in relative unison to a common source of systematic variance. None of the items in the Arrogance subscale were found to be problematic.

Table 4.9

Item analysis results for the Arrogance subscale

	Mean	Std. Deviation	N
ITEM55	2.19	.931	3912
ITEM56	1.88	.884	3912
ITEM57	1.90	.848	3912
ITEM58	2.31	1.066	3912
ITEM59	1.87	.892	3912
ITEM60	1.98	.934	3912

	ITEM55	ITEM56	ITEM57	ITEM58	ITEM59	ITEM60
ITEM55	1.000	.411	.372	.319	.522	.401
ITEM56	.411	1.000	.383	.228	.355	.393
ITEM57	.372	.383	1.000	.217	.346	.342
ITEM58	.319	.228	.217	1.000	.439	.290
ITEM59	.522	.355	.346	.439	1.000	.435
ITEM60	.401	.393	.342	.290	.435	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM55	9.95	10.115	.585	.366	.718
ITEM56	10.26	10.775	.498	.275	.741
ITEM57	10.24	11.107	.463	.234	.749
ITEM58	9.83	10.439	.417	.213	.767
ITEM59	10.27	10.137	.618	.405	.710
ITEM60	10.16	10.384	.530	.291	.732

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.024	1.870	2.309	.439	1.235	.034	6
Item Variances	.862	.719	1.137	.417	1.580	.021	6
Inter-Item Correlations	.364	.217	.522	.305	2.403	.006	6

4.5.1.8 Conflict-seeking subscale

Table 4.10 presents the results of the item analysis for the subscale. The Conflict-seeking subscale obtained a reasonably acceptable alpha coefficient of .763 (see Table 4.2). Approximately 76% of the variance in the Conflict-seeking subscale items therefore originated from a systematic (but not necessarily uni-dimensional) source of variance with 24% of the variance in the item responses due to random measurement error. The mean ranged from 1.60 to 2.69 on a 5-point scale and the standard deviation ranged from .706 to 1.029. The absence of extreme means and small standard deviations suggested that all items were able to successfully discriminate between individuals that differ in their standing on the Conflict-seeking latent first-order personality dimension. In the inter-item correlation matrix item64 consistently correlate lower with the remainder of the items in the subscale. Item64 also showed itself as an outlier in the distributions of corrected item-total and squared multiple correlations. Moreover the item-total statistics revealed that if item64 were to be deleted, the Cronbach alpha would increase slightly from .763 to .767. The variance in item64 therefore did not to a sufficient degree originate from the same source of systematic variance that underpinned the remainder of the items. Nevertheless, this basket of evidence was not considered sufficient to flag item64 as seriously problematic.

Table 4.10

Item analysis results for the Conflict Seeking subscale

	Mean	Std. Deviation	N
ITEM61	2.69	1.029	3912
ITEM62	1.60	.706	3912
ITEM63	1.79	.764	3912
ITEM64	2.50	.988	3912
ITEM65	1.84	.854	3912
ITEM66	1.89	.812	3912
ITEM67	2.44	1.000	3912

	ITEM61	ITEM62	ITEM63	ITEM64	ITEM65	ITEM66	ITEM67
ITEM61	1.000	.347	.252	.260	.372	.301	.414
ITEM62	.347	1.000	.364	.171	.481	.325	.408
ITEM63	.252	.364	1.000	.255	.391	.361	.292
ITEM64	.260	.171	.255	1.000	.214	.356	.159

ITEM65	.372	.481	.391	.214	1.000	.334	.488
ITEM66	.301	.325	.361	.356	.334	1.000	.297
ITEM67	.414	.408	.292	.159	.488	.297	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM61	12.06	11.422	.495	.260	.733
ITEM62	13.15	12.759	.528	.320	.729
ITEM63	12.96	12.758	.472	.249	.737
ITEM64	12.24	12.545	.343	.167	.767
ITEM65	12.90	11.788	.580	.383	.714
ITEM66	12.86	12.418	.497	.266	.732
ITEM67	12.30	11.415	.519	.330	.726

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.106	1.596	2.687	1.091	1.683	.182	7
Item Variances	.787	.498	1.059	.561	2.126	.050	7
Inter-Item Correlations	.326	.159	.488	.329	3.070	.008	7

4.5.1.9 Hostile Egoism subscale

The results for the item analysis for the Hostile Egoism subscale are depicted in Table 4.11. This subscale returned a highly satisfactory alpha coefficient of .837 (see Table 4.2). Further investigation showed that the item means ranged from 1.74 to 2.86 on a 5-point scale and the item standard deviations ranged from .727 to 1.046. The absence of extreme means and small standard deviations suggested that all items were able to successfully discriminate between individuals that differ in their standing on the Conflict-seeking latent first-order personality dimension. In the inter-item correlation matrix correlations ranged between .090 and .549. None of the items, however, consistently correlated lower with the remaining items. No items convincingly showed themselves as outliers in the distributions of corrected item-total correlations. However in the distribution of squared multiple correlations Item68 (.182) and item80 (.177) showed themselves as outliers. The remaining items of the subscale were therefore somewhat less able to explain variance in these two items then they were able to explain in each other. The results nonetheless revealed that none of the items, if deleted, would further increase the alpha coefficient of .837 but would rather decrease the alpha coefficient if deleted, suggesting that item68 and item80 did not present themselves as seriously problematic.

Table 4.11

Item analysis results for the Hostile Egoism subscale

	Mean	Std. Deviation	N
ITEM68	2.86	.948	3912
ITEM69	1.80	.832	3912
ITEM70	1.69	.766	3912
ITEM71	2.07	.849	3912
ITEM72	1.74	.727	3912
ITEM73	3.37	.980	3912
ITEM74	2.07	1.046	3912
ITEM75	1.96	.912	3912
ITEM76	2.02	.836	3912
ITEM77	1.76	.801	3912
ITEM78	1.86	.803	3912
ITEM79	1.75	.762	3912
ITEM80	2.70	.962	3912
ITEM81	2.21	.964	3912

	ITEM68	ITEM69	ITEM70	ITEM71	ITEM72	ITEM73	ITEM74	ITEM75	ITEM76	ITEM77	ITEM78	ITEM79	ITEM80	ITEM81
ITEM68	1.000	.289	.283	.169	.228	.269	.155	.233	.150	.317	.195	.220	.215	.261
ITEM69	.289	1.000	.461	.196	.349	.257	.151	.305	.189	.340	.217	.263	.231	.325
ITEM70	.283	.461	1.000	.193	.359	.302	.182	.342	.197	.376	.247	.286	.224	.345
ITEM71	.169	.196	.193	1.000	.279	.107	.124	.186	.288	.300	.297	.337	.097	.218
ITEM72	.228	.349	.359	.279	1.000	.227	.238	.346	.296	.408	.341	.324	.294	.378
ITEM73	.269	.257	.302	.107	.227	1.000	.271	.413	.090	.271	.128	.134	.207	.410
ITEM74	.155	.151	.182	.124	.238	.271	1.000	.453	.185	.257	.211	.176	.226	.362
ITEM75	.233	.305	.342	.186	.346	.413	.453	1.000	.255	.391	.311	.298	.213	.461
ITEM76	.150	.189	.197	.288	.296	.090	.185	.255	1.000	.342	.549	.394	.198	.221
ITEM77	.317	.340	.376	.300	.408	.271	.257	.391	.342	1.000	.413	.401	.274	.463
ITEM78	.195	.217	.247	.297	.341	.128	.211	.311	.549	.413	1.000	.439	.228	.298
ITEM79	.220	.263	.286	.337	.324	.134	.176	.298	.394	.401	.439	1.000	.161	.287
ITEM80	.215	.231	.224	.097	.294	.207	.226	.213	.198	.274	.228	.161	1.000	.317
ITEM81	.261	.325	.345	.218	.378	.410	.362	.461	.221	.463	.298	.287	.317	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM68	27.00	42.464	.394	.182	.832
ITEM69	28.06	42.420	.472	.297	.827
ITEM70	28.17	42.574	.507	.323	.825
ITEM71	27.79	43.506	.357	.185	.834
ITEM72	28.13	42.542	.544	.315	.823
ITEM73	26.49	41.962	.418	.273	.831
ITEM74	27.79	41.697	.403	.250	.833
ITEM75	27.90	40.692	.576	.403	.820
ITEM76	27.84	42.779	.435	.352	.829
ITEM77	28.10	41.258	.615	.402	.818
ITEM78	28.01	42.263	.510	.409	.825
ITEM79	28.11	42.786	.488	.319	.826
ITEM80	27.17	42.507	.382	.177	.833
ITEM81	27.65	40.051	.594	.399	.818

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.133	1.689	3.375	1.685	1.998	.252	14
Item Variances	.767	.529	1.094	.566	2.070	.030	14
Inter-Item Correlations	.276	.090	.549	.460	6.131	.009	14

4.5.1.10 Deceitfulness subscale

Table 4.12 presents the results of the item analysis for the Deceitfulness subscale. The subscale obtained a reasonably acceptable alpha coefficient of .751 (see Table 4.2). Approximately 75% of the variance in the Deceitfulness subscale items therefore originated from a systematic (but not necessarily uni-dimensional) source of variance with 25% of the variance in the item responses due to random measurement error. The results showed the item means ranged from 1.67 to 2.81 on a 5-point scale and the standard deviation ranged from .796 to 1.140. The absence of extreme means and small standard deviations suggested that all items were able to successfully discriminate between individuals that differ in their standing on the Deceitfulness latent first-order personality dimension. In the inter-item correlation matrix correlations ranged between .098 and .603. Item83 consistently correlated lower with the remaining items. Item83 therefore tended not to respond in unison to a common source of systematic variance along with the remaining items. Furthermore in the distribution of corrected item-total correlations and even more so in the distribution of squared multiple correlations item83 (.298 and .111) showed itself as an outlier. In addition the deletion of item83 would result in a marginal increase in the internal consistency reliability from .751 to .759. Variance in item83 therefore to a sufficient degree originated from a different source of variance than the remaining items of the subscale to flag it as psychometrically suspect. However, the basket of psychometric evidence is not considered sufficiently grave to flag item83 as seriously problematic.

Table 4.12

Item analysis results for the Deceitfulness subscale

	Mean	Std. Deviation	N
ITEM82	1.67	.796	3912
ITEM83	2.81	1.004	3912
ITEM84	2.65	1.140	3912
ITEM85	2.31	.975	3912
ITEM86	1.81	.827	3912
ITEM87	1.84	.929	3912
ITEM88	2.38	.903	3912

	ITEM82	ITEM83	ITEM84	ITEM85	ITEM86	ITEM87	ITEM88
ITEM82	1.000	.183	.268	.299	.468	.391	.320
ITEM83	.183	1.000	.294	.266	.202	.098	.143
ITEM84	.268	.294	1.000	.603	.310	.211	.327
ITEM85	.299	.266	.603	1.000	.386	.237	.374
ITEM86	.468	.202	.310	.386	1.000	.369	.335
ITEM87	.391	.098	.211	.237	.369	1.000	.350
ITEM88	.320	.143	.327	.374	.335	.350	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM82	13.80	14.007	.486	.299	.718
ITEM83	12.67	14.270	.298	.111	.759
ITEM84	12.83	12.034	.532	.397	.706
ITEM85	13.17	12.552	.584	.432	.693
ITEM86	13.66	13.628	.529	.326	.709
ITEM87	13.64	13.886	.403	.237	.734

ITEM88	13.09	13.583	.472	.246	.719

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.211	1.673	2.811	1.138	1.680	.196	7
Item Variances	.894	.634	1.301	.666	2.050	.050	7
Inter-Item Correlations	.306	.098	.603	.506	6.185	.012	7

4.5.1.11 Emotional Balance subscale

The results of the item analysis for Emotional Balance subscale are depicted in Table 4.13. The reliability statistics indicated an acceptable alpha coefficient of .797 (see Table 4.2). Visual inspection of the item means and item standard deviations revealed the absence of extreme means and small standard deviations and therefore suggested the absence of poor items. The item statistics showed the means to range from 3.61 to 4.30 (on a 5-point scale) and the standard deviations from .697 to .961. Table 4.13 further reveals a relatively coherent set of items which tends to respond in unison to systematic differences in the underlying latent variable(s). This can be concluded from the moderate correlations in the inter-item correlation matrix, the fact that none of the items correlated consistently lower with the remaining items and the absence of outliers in the distribution of item-total correlations in Table 4.13. All the corrected item total correlations were larger than .30. Furthermore in the item total statistics, the majority of the squared multiple correlations were larger than .30 and even though some items (item90, item91, and item95) have somewhat lower squared multiple correlations no items showed themselves as distinct outliers in the distribution of squared multiple correlations. The alpha coefficient would also not be positively affected by the removal of any of these items. The basket of item statistics therefore all suggest that variance in all the items sufficiently originate from a common source of systematic variance. As a result, no items were flagged as problematic.

Table 4.13

Item analysis results for the Emotional Balance subscale

	Mean	Std. Deviation	N
ITEM89	4.30	.769	3912
ITEM90	3.82	.829	3912

ITEM91	3.61	.961	3912
ITEM92	4.04	.697	3912
ITEM93	3.66	.890	3912
ITEM94	3.99	.761	3912
ITEM95	3.66	.858	3912
ITEM96	3.99	.854	3912

	ITEM89	ITEM90	ITEM91	ITEM92	ITEM93	ITEM94	ITEM95	ITEM96
ITEM89	1.000	.219	.217	.278	.283	.316	.208	.556
ITEM90	.219	1.000	.408	.311	.441	.316	.287	.262
ITEM91	.217	.408	1.000	.276	.407	.291	.326	.289
ITEM92	.278	.311	.276	1.000	.307	.498	.305	.343
ITEM93	.283	.441	.407	.307	1.000	.377	.312	.376
ITEM94	.316	.316	.291	.498	.377	1.000	.344	.423
ITEM95	.208	.287	.326	.305	.312	.344	1.000	.341
ITEM96	.556	.262	.289	.343	.376	.423	.341	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM89	26.76	15.009	.446	.325	.783
ITEM90	27.24	14.459	.494	.287	.776
ITEM91	27.44	13.867	.485	.269	.780
ITEM92	27.02	15.069	.501	.304	.777
ITEM93	27.40	13.796	.555	.331	.767
ITEM94	27.07	14.453	.558	.364	.767
ITEM95	27.39	14.514	.460	.225	.782
ITEM96	27.07	13.925	.566	.422	.765

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.882	3.611	4.300	.689	1.191	.057	8
Item Variances	.691	.485	.923	.438	1.902	.019	8
Inter-Item Correlations	.333	.208	.556	.348	2.671	.006	8

4.5.1.12 Negative Emotionality subscale

Table 4.14 presents the results of the item analysis for the Negative Emotionality subscale. This subscale obtained a satisfactory alpha coefficient of .820. Approximately

82% of the variance in the Negative Emotionality subscale items therefore originated from a systematic (but not necessarily uni-dimensional) source of variance with 18% of the variance in the item responses due to random measurement error. The results showed the item means to range from 2.11 to 3.75 on a 5-point scale and the item standard deviation to range from .869 to 1.233. The absence of extreme means and small standard deviations suggested that all items were able to successfully discriminate between individuals that differ in their standing on the Negative Emotionality latent first-order personality dimension. In the inter-item correlation matrix correlations ranged between .167 and .636. None of the items consistently correlated lower with the remaining items in the subscale. None of the items showed themselves as outliers in the distribution of corrected item total correlations. Furthermore in the item total statistics, the majority of the squared multiple correlations were larger than .30, except item97 (.239), item101 (.271), item103 (.218), and item105 (.243). None of these items could, however really be classified as distinct outliers in the distribution of squared multiple correlations. The results moreover revealed that none of the items, if deleted, would increase the alpha coefficient of .820. The basket of item suggested that the variance in all the items to a sufficient degree originated from a common source of variance. None of the items in the Negative Emotionality subscale therefore presented themselves as problematic.

Table 4.14

Item analysis results for the Negative Emotionality subscale

	Mean	Std. Deviation	N
ITEM97	2.74	1.233	3912
ITEM98	3.16	1.160	3912
ITEM99	3.41	1.092	3912
ITEM100	3.31	1.069	3912
ITEM101	2.11	.869	3912
ITEM102	2.38	1.061	3912
ITEM103	3.75	1.003	3912
ITEM104	3.11	1.083	3912
ITEM105	2.85	.965	3912
ITEM106	2.66	1.071	3912

	ITEM97	ITEM98	ITEM99	ITEM100	ITEM101	ITEM102	ITEM103	ITEM104	ITEM105	ITEM106

ITEM97	1.000	.291	.285	.241	.196	.215	.404	.330	.158	.231
ITEM98	.291	1.000	.440	.431	.274	.270	.235	.412	.280	.232
ITEM99	.285	.440	1.000	.539	.328	.312	.310	.500	.298	.320
ITEM100	.241	.431	.539	1.000	.323	.307	.238	.439	.339	.314
ITEM101	.196	.274	.328	.323	1.000	.415	.129	.308	.353	.381
ITEM102	.215	.270	.312	.307	.415	1.000	.177	.316	.366	.636
ITEM103	.404	.235	.310	.238	.129	.177	1.000	.297	.167	.192
ITEM104	.330	.412	.500	.439	.308	.316	.297	1.000	.308	.309
ITEM105	.158	.280	.298	.339	.353	.366	.167	.308	1.000	.349
ITEM106	.231	.232	.320	.314	.381	.636	.192	.309	.349	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM97	26.75	35.727	.413	.239	.816
ITEM98	26.32	34.959	.512	.301	.803
ITEM99	26.08	34.409	.603	.426	.793
ITEM100	26.17	34.979	.570	.385	.797
ITEM101	27.38	37.509	.476	.271	.808
ITEM102	27.10	35.487	.531	.460	.801
ITEM103	25.74	37.607	.383	.218	.816
ITEM104	26.38	34.726	.582	.364	.796
ITEM105	26.64	37.039	.456	.243	.809
ITEM106	26.82	35.520	.522	.445	.802

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.949	2.110	3.748	1.638	1.776	.246	10
Item Variances	1.134	.755	1.519	.765	2.013	.044	10
Inter-Item Correlations	.315	.129	.636	.507	4.943	.010	10

4.5.1.13 Playfulness subscale

The results for the item analysis for the Playfulness subscale are depicted in Table 4.15. This subscale obtained a satisfactory alpha coefficient of .821. The item means ranged from 3.26 to 4.01 (on a 5-point scale) and the item standard deviations from .704 to .997. The absence of extreme means and small standard deviations suggested that all items were able to successfully discriminate between individuals that differ in their standing on the Playfulness latent first-order personality dimension. Table 4.15 further reveals a relatively coherent set of items which tends to respond in relative unison to systematic differences in the underlying latent variable(s). This can be concluded from the moderate correlations in the inter-item correlation matrix, the fact that no item consistently correlated lower with the remaining items and the absence of outliers in the distribution of item-total correlations in Table 4.15. The majority of the squared multiple correlations were larger than .30, except for item107 (.279) and item112 (.260). Neither of these two items, however, showed themselves as clear outliers in the distribution of squared multiple correlations. The alpha coefficient would moreover not be positively affected by the removal of any of these items. As a result, no items were flagged as problematic.

Table 4.15

Item analysis results for the Playfulness subscale

	Mean	Std. Deviation	N
ITEM107	4.01	.879	3912
ITEM108	3.67	.964	3912
ITEM109	3.53	.997	3912
ITEM110	3.81	.816	3912
ITEM111	3.99	.704	3912
ITEM112	3.26	.990	3912

	ITEM107	ITEM108	ITEM109	ITEM110	ITEM111	ITEM112
ITEM107	1.000	.351	.405	.467	.430	.267
ITEM108	.351	1.000	.570	.573	.360	.456
ITEM109	.405	.570	1.000	.652	.430	.376
ITEM110	.467	.573	.652	1.000	.527	.434
ITEM111	.430	.360	.430	.527	1.000	.312
ITEM112	.267	.456	.376	.434	.312	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM107	18.26	11.573	.497	.279	.811
ITEM108	18.60	10.433	.635	.436	.782
ITEM109	18.73	10.110	.664	.495	.775
ITEM110	18.46	10.712	.738	.566	.763
ITEM111	18.28	12.156	.543	.332	.803
ITEM112	19.01	11.124	.487	.260	.816

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.711	3.256	4.010	.754	1.232	.083	6
Item Variances	.806	.496	.994	.498	2.004	.040	6
Inter-Item Correlations	.441	.267	.652	.385	2.439	.011	6

4.5.1.14 Sociability subscale

Table 4.16 presents the results of the item analysis for the Sociability subscale. The Sociability subscale obtained a highly satisfactory alpha coefficient of .861. Approximately 86% of the variance in the Sociability subscale items therefore originated from a systematic (but not necessarily uni-dimensional) source of variance with 14% of the variance in the item responses due to random measurement error. Visual inspection of the item means and item standard deviations revealed the absence of extreme means and small standard deviations and therefore suggested the absence of poor items. The item statistics showed the means to range from 3.11 to 4.09 on a 5-point scale and the standard deviations from .733 to 1.116. The results further showed a relatively coherent set of items which tended to respond in relative unison to systematic differences in a underlying latent variable(s). This was evident from the moderate to high inter-item correlations, the absence of items that consistently correlated lower with the remaining items and the somewhat higher item-total correlations and squared multiple correlations. Item113 had a lower than moderate squared multiple correlation, however, it could not be convincingly labelled as a distinct outlier. Eliminating item113 moreover would lead to a slight decrease in the alpha coefficient from .861 to .859. As a result the item was not flagged as problematic and the Sociability subscale overall did not raise any further concerns.

Table 4.16

Item analysis results for the Sociability subscale

	Mean	Std. Deviation	N
ITEM113	3.21	1.077	3912
ITEM114	3.80	.874	3912
ITEM115	3.58	1.011	3912
ITEM116	3.11	1.116	3912
ITEM117	3.54	1.036	3912
ITEM118	4.09	.733	3912
ITEM119	3.75	.915	3912

	ITEM113	ITEM114	ITEM115	ITEM116	ITEM117	ITEM118	ITEM119
ITEM113	1.000	.421	.466	.334	.427	.319	.427
ITEM114	.421	1.000	.474	.444	.590	.482	.613
ITEM115	.466	.474	1.000	.376	.544	.453	.560
ITEM116	.334	.444	.376	1.000	.580	.342	.477
ITEM117	.427	.590	.544	.580	1.000	.496	.717
ITEM118	.319	.482	.453	.342	.496	1.000	.576
ITEM119	.427	.613	.560	.477	.717	.576	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM113	21.86	19.302	.519	.289	.859
ITEM114	21.28	19.444	.670	.464	.837
ITEM115	21.50	18.801	.633	.419	.842
ITEM116	21.97	18.736	.558	.359	.855
ITEM117	21.54	17.686	.759	.620	.822
ITEM118	20.98	20.958	.578	.378	.851
ITEM119	21.33	18.575	.756	.624	.825

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.583	3.112	4.093	.981	1.315	.115	7
Item Variances	.948	.537	1.245	.709	2.320	.062	7
Inter-Item Correlations	.482	.319	.717	.397	2.244	.010	7

4.5.1.15 Achievement-orientation subscale

The results for the item analysis for the Achievement-orientation subscale are depicted in Table 4.17. This subscale obtained a highly satisfactory alpha coefficient (.861) (see Table 4.2). Further inspection showed that the item means ranged from 3.52 to 4.34 on a 5-point scale and the item standard deviations from .642 to 1.025. The absence of extreme means and small standard deviations suggested that all items were able to successfully discriminate between individuals that differ in their standing on the Achievement-orientation latent first-order personality dimension. In the inter-item correlation matrix correlations ranged between .225 and .558. None of the items consistently correlated lower with the remaining items of subscale. All the corrected item-total correlations were larger than .30. Item125 showed itself as a possible outlier in the distribution of corrected item-total correlations. As is evident from Table 4.17, item125 and item130 were the only items where the squared multiple correlation was smaller than .30. Item125 more convincingly showed itself as an outlier in the distribution of squared multiple correlations. Furthermore it was indicated that the deletion of item125 would increase the alpha slightly from .861 to .864 whilst none of the other items, if deleted, would result in an increase in the alpha value. The basket of item statistics this suggested that to some degree the variance in item125 did not sufficiently originate from then common source of systematic variance that underpinned the remaining items. Nevertheless, this basket of evidence was not considered sufficiently grave to flag item125 as seriously problematic.

Table 4.17

Item analysis results for the Achievement orientation subscale

	Mean	**Std. Deviation**	**N**
ITEM120	4.05	.866	3912
ITEM121	3.93	.899	3912
ITEM122	3.80	.971	3912
ITEM123	4.18	.655	3912
ITEM124	4.03	.787	3912
ITEM125	3.52	1.025	3912
ITEM126	4.18	.660	3912
ITEM127	4.34	.642	3912
ITEM128	4.05	.710	3912
ITEM129	4.18	.658	3912
ITEM130	4.13	.648	3912

	ITEM120	ITEM121	ITEM122	ITEM123	ITEM124	ITEM125	ITEM126	ITEM127	ITEM128	ITEM129	ITEM130
ITEM120	1.000	.528	.402	.299	.496	.306	.404	.321	.289	.333	.301
ITEM121	.528	1.000	.485	.297	.558	.297	.428	.306	.255	.383	.308
ITEM122	.402	.485	1.000	.294	.526	.277	.399	.345	.287	.498	.271
ITEM123	.299	.297	.294	1.000	.396	.225	.447	.405	.452	.379	.311
ITEM124	.496	.558	.526	.396	1.000	.414	.550	.464	.394	.494	.395
ITEM125	.306	.297	.277	.225	.414	1.000	.327	.253	.280	.275	.242
ITEM126	.404	.428	.399	.447	.550	.327	1.000	.480	.441	.489	.396
ITEM127	.321	.306	.345	.405	.464	.253	.480	1.000	.447	.476	.327

ITEM128	.289	.255	.287	.452	.394	.280	.441	.447	1.000	.411	.295
ITEM129	.333	.383	.498	.379	.494	.275	.489	.476	.411	1.000	.402
ITEM130	.301	.308	.271	.311	.395	.242	.396	.327	.295	.402	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM120	40.35	25.676	.564	.366	.849
ITEM121	40.46	25.211	.593	.434	.847
ITEM122	40.60	24.865	.575	.395	.849
ITEM123	40.22	27.428	.512	.319	.853
ITEM124	40.37	25.012	.729	.545	.836
ITEM125	40.87	25.835	.430	.206	.864
ITEM126	40.21	26.470	.657	.457	.844
ITEM127	40.05	27.189	.563	.376	.850
ITEM128	40.35	27.042	.517	.343	.852
ITEM129	40.21	26.709	.622	.437	.846
ITEM130	40.27	27.701	.477	.252	.855

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.036	3.524	4.343	.820	1.233	.050	11
Item Variances	.618	.412	1.051	.639	2.550	.054	11
Inter-Item Correlations	.377	.225	.558	.333	2.483	.008	11

4.5.1.16 Orderliness subscale

Table 4.18 presents the results of the item analysis for the Orderliness subscale. The scale returned a highly satisfactory alpha coefficient of .882. This was the second highest alpha coefficient of all the subscales. Approximately 88% of the variance in the Orderliness subscale items therefore originated from a systematic (but not necessarily uni-dimensional) source of variance with 12% of the variance in the item responses due to random measurement error. The results showed the item means to range from 3.84 to 4.14 and the item standard deviation to range from .656 to .887. The absence of extreme means and small standard deviations suggested that all items were able to successfully discriminate between individuals that differ in their standing on the Orderliness latent first-order personality dimension. In the inter-item correlation matrix correlations ranged between .205 and .610. None of the items consistently correlate lower with the remaining items. All the corrected item total correlations were larger than .30. As is evident from Table 4.17, item133 showed itself as a possible outlier in the distribution of corrected item-total correlations with item143 a slightly less convincing contender. In the distribution of squared multiple correlation these two items again stood out as possible outliers. None of the items, however, if deleted, would result in an increase in the alpha value. As a result, no items were flagged as problematic.

Table 4.18

Item analysis results for the Orderliness subscale

	Mean	Std. Deviation	N
ITEM131	4.04	.859	3912
ITEM132	4.14	.700	3912
ITEM133	3.86	.827	3912
ITEM134	4.01	.780	3912
ITEM135	3.84	.887	3912
ITEM136	3.97	.836	3912
ITEM137	3.89	.827	3912
ITEM138	4.06	.656	3912
ITEM139	4.00	.726	3912
ITEM140	4.01	.790	3912
ITEM141	4.00	.690	3912
ITEM142	3.93	.757	3912
ITEM143	3.93	.775	3912

	ITEM131	ITEM132	ITEM133	ITEM134	ITEM135	ITEM136	ITEM137	ITEM138	ITEM139	ITEM140	ITEM141	ITEM142	ITEM143
ITEM131	1.000	.373	.205	.287	.610	.511	.538	.307	.382	.238	.344	.264	.277
ITEM132	.373	1.000	.397	.356	.311	.446	.306	.563	.508	.347	.409	.343	.243
ITEM133	.205	.397	1.000	.255	.215	.277	.221	.407	.404	.214	.274	.228	.222
ITEM134	.287	.356	.255	1.000	.323	.414	.305	.381	.350	.424	.526	.422	.283
ITEM135	.610	.311	.215	.323	1.000	.474	.561	.286	.377	.227	.345	.263	.271
ITEM136	.511	.446	.277	.414	.474	1.000	.474	.455	.491	.441	.511	.449	.330
ITEM137	.538	.306	.221	.305	.561	.474	1.000	.338	.394	.288	.345	.317	.306
ITEM138	.307	.563	.407	.381	.286	.455	.338	1.000	.567	.387	.446	.402	.325
ITEM139	.382	.508	.404	.350	.377	.491	.394	.567	1.000	.339	.426	.363	.325
ITEM140	.238	.347	.214	.424	.227	.441	.288	.387	.339	1.000	.485	.640	.340
ITEM141	.344	.409	.274	.526	.345	.511	.345	.446	.426	.485	1.000	.483	.343
ITEM142	.264	.343	.228	.422	.263	.449	.317	.402	.363	.640	.483	1.000	.347
ITEM143	.277	.243	.222	.283	.271	.330	.306	.325	.325	.340	.343	.347	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM131	47.65	36.023	.564	.478	.873
ITEM132	47.55	37.083	.586	.429	.872
ITEM133	47.83	37.721	.410	.238	.882
ITEM134	47.68	36.763	.550	.357	.874
ITEM135	47.85	35.898	.554	.473	.874
ITEM136	47.72	35.076	.687	.495	.866
ITEM137	47.80	36.200	.572	.425	.873
ITEM138	47.63	37.178	.621	.480	.871
ITEM139	47.69	36.499	.632	.458	.870
ITEM140	47.68	36.664	.553	.478	.874
ITEM141	47.69	36.783	.635	.456	.870
ITEM142	47.76	36.713	.576	.481	.873
ITEM143	47.76	37.638	.456	.223	.879

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.976	3.842	4.144	.302	1.079	.007	13
Item Variances	.609	.430	.787	.357	1.830	.012	13
Inter-Item Correlations	.370	.205	.640	.436	3.126	.010	13

4.5.1.17 Traditionalism-religiosity subscale

The results for the item analysis for the Traditionalism-religiosity subscale are depicted in Table 4.19. This subscale indicated a reasonably acceptable alpha coefficient of .749. The item means ranged from 3.53 to 4.00 and the standard deviations from .810 to 1.288. The absence of extreme means and small standard deviations suggested that all items were able to successfully discriminate between individuals that differ in their standing on the Traditionalism-religiosity latent first-order personality dimension. In the inter-item correlation matrix all the items correlated moderately (r_{ij}>.30) to high (r_{ij}>.50) with each other. None of the items consistently correlated lower with the remaining items of the subscale. All the corrected item total correlations were larger than .30 Item144 stood out as a possible outlier in the corrected-item-total and squared multiple correlation distributions. The origin of the variance in item144 therefore differed to some degree from the origen of the variance in the remaining items of the subscale. Deleting item144 from the subscale would, however, lead to a slight decrease in the alpha coefficient from .749 to .743. As a result the item was not flagged as problematic and the Traditionalism-religiosity scale overall did not raise any concerns.

Table 4.19

Item analysis results for the Traditionalism-Religiosity subscale

	Mean	Std. Deviation	N
ITEM144	3.37	.992	3912
ITEM145	3.59	1.255	3912
ITEM146	4.00	.810	3912
ITEM147	3.53	1.288	3912

	ITEM144	ITEM145	ITEM146	ITEM147
ITEM144	1.000	.306	.517	.325
ITEM145	.306	1.000	.344	.722
ITEM146	.517	.344	1.000	.376
ITEM147	.325	.722	.376	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM144	11.12	7.709	.440	.290	.743
ITEM145	10.91	5.744	.631	.530	.638
ITEM146	10.49	8.146	.500	.319	.723
ITEM147	10.96	5.510	.653	.543	.624

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.624	3.373	4.005	.632	1.187	.073	4
Item Variances	1.219	.657	1.658	1.002	2.525	.231	4
Inter-Item Correlations	.432	.306	.722	.416	2.357	.024	4

4.5.1.18 Broadmindedness subscale

Table 4.20 presents the results of the item analysis for the Broadmindedness subscale. The subscale returned an acceptable alpha coefficient of .759. Therefore only approximately 76% of the variance in the Broadmindedness subscale items originated from a systematic (but not necessarily uni-dimensional) source of variance with 24% of the variance in the item responses due to random measurement error. The item means ranged from 3.68 to 4.37 and the item standard deviations from .661 to 909. The absence of extreme means and small standard deviations suggested that all items were able to successfully discriminate between individuals that differ in their standing on the Broadmindedness latent first-order personality dimension. In the inter-item correlation matrix correlations ranged between .195 and .516. None of the items consistently correlated lower with the remaining items of the subscale. All the corrected item total correlations were larger than .30. None of the items showed themselves as distinct, convincing outliers in either the distribution of corrected item-total correlations or the distribution of squared multiple correlations. Item151 could possibly have been flagged as an outlier in the latter distribution. None of the items however, if deleted, would result in an increase in the alpha value. As a result, no items were flagged as problematic.

Table 4.20

Item analysis results for the Broadmindedness subscale

	Mean	Std. Deviation	N
ITEM152	3.68	.835	3912
ITEM153	4.37	.703	3912
ITEM148	3.94	.902	3912
ITEM149	3.88	.909	3912
ITEM150	4.20	.661	3912
ITEM151	3.96	.820	3912

	ITEM152	ITEM153	ITEM148	ITEM149	ITEM150	ITEM151
ITEM152	1.000	.201	.516	.336	.382	.382
ITEM153	.201	1.000	.195	.448	.425	.277
ITEM148	.516	.195	1.000	.298	.317	.306
ITEM149	.336	.448	.298	1.000	.493	.336
ITEM150	.382	.425	.317	.493	1.000	.350
ITEM151	.382	.277	.306	.336	.350	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM152	20.35	7.568	.537	.357	.714

ITEM153	19.65	8.467	.433	.264	.741
ITEM148	20.08	7.577	.472	.296	.734
ITEM149	20.15	7.242	.545	.348	.713
ITEM150	19.83	8.130	.575	.357	.711
ITEM151	20.06	7.883	.472	.229	.732

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.004	3.678	4.370	.692	1.188	.060	6
Item Variances	.657	.437	.826	.390	1.893	.026	6
Inter-Item Correlations	.351	.195	.516	.321	2.641	.008	6

4.5.1.19 Epistemic Curiosity subscale

The results for the item analysis for the Epistemic Curiosity subscale are depicted in Table 4.21. The subscale obtained an acceptable alpha coefficient of .754. Further inspection of the results showed that the item means ranged from 4.18 to 4.40 on a 5 point Likert scale. The item standard deviations ranged from .568 to .715. In the inter-item correlation matrix correlations ranged between .233 and .517. The absence of extreme means and small standard deviations suggested that all items were able to successfully discriminate between individuals that differ in their standing on the Epistemic Curiosity latent first-order personality dimension. None of the items consistently correlated lower with the remaining items of the subscale. All the corrected item total correlations were larger than .30. No clear outliers stood out in the distribution of corrected item-total correlation. As is evident from Table 4.21, item159 presented itself as a possible outlier in the distribution of squared multiple correlations. This gave rise to some concern that the variance in item159 might be to a too large degree originating from a different source than that producing the variance in the other items of the subscale. None of the items however, if deleted, would result in an increase in the alpha value. As a result, no items were flagged as seriously problematic.

Table 4.21

Item analysis results for the Epistemic Curiosity subscale

	Mean	Std. Deviation	N
ITEM154	4.40	.708	3912
ITEM155	4.28	.715	3912

ITEM156	4.18	.609	3912
ITEM157	4.38	.582	3912
ITEM158	4.32	.568	3912
ITEM159	4.51	.635	3912

	ITEM154	ITEM155	ITEM156	ITEM157	ITEM158	ITEM159
ITEM154	1.000	.238	.288	.411	.321	.325
ITEM155	.238	1.000	.316	.410	.380	.233
ITEM156	.288	.316	1.000	.395	.428	.265
ITEM157	.411	.410	.395	1.000	.517	.369
ITEM158	.321	.380	.428	.517	1.000	.313
ITEM159	.325	.233	.265	.369	.313	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM154	21.68	4.704	.449	.222	.733
ITEM155	21.80	4.695	.445	.223	.734
ITEM156	21.90	4.908	.483	.251	.721
ITEM157	21.69	4.669	.626	.404	.686
ITEM158	21.75	4.831	.573	.358	.700
ITEM159	21.57	4.972	.426	.193	.736

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.346	4.181	4.507	.326	1.078	.012	6
Item Variances	.408	.322	.511	.188	1.585	.007	6
Inter-Item Correlations	.347	.233	.517	.284	2.218	.006	6

4.5.1.20 Intellect subscale

Table 4.22 presents the results of the item analysis for the Intellect subscale. The subscale obtained a satisfactory alpha coefficient of .812 as depicted in Table 4.2. Therefore only approximately 76% of the variance in the Broadmindedness subscale items originated from a systematic (but not necessarily uni-dimensional) source of variance with 24% of the variance in the item responses due to random measurement error. Further investigation showed that the item means ranged from 3.74 to 4.31 and the item standard deviations from .615 to 1.029. The absence of extreme means and small standard deviations suggested that all items were able to successfully discriminate between individuals that differ in their standing on the Epistemic Curiosity latent first-order personality dimension. None of the items consistently correlated lower with the remaining items of the subscale.. In addition, all the corrected item total correlations were larger than .30. None of the items showed themselves to be outliers in the distribution of corrected item-total correlations. Item169 presented itself as an outlier in the distribution of squared multiple correlations. This gave rise to some concern that the variance in item169 might be to a too large degree originating from a different source than that producing the variance in the other items of the subscale. None of the items however, if deleted, would result in an increase in the alpha value. As a result, no items in the Intellect subscale were flagged as seriously problematic.

Table 4.22

Item analysis results for the Intellect subscale

	Mean	Std. Deviation	N
ITEM160	4.31	.678	3912
ITEM161	3.96	.750	3912
ITEM162	3.93	.788	3912
ITEM163	4.02	.693	3912
ITEM164	3.48	1.029	3912
ITEM165	4.21	.677	3912
ITEM166	3.76	.657	3912
ITEM167	3.89	.727	3912
ITEM168	3.74	.748	3912
ITEM169	4.20	.615	3912
ITEM170	3.96	.738	3912

	ITEM160	ITEM161	ITEM162	ITEM163	ITEM164	ITEM165	ITEM166	ITEM167	ITEM168	ITEM169	ITEM170
ITEM160	1.000	.329	.268	.534	.226	.228	.238	.292	.314	.202	.274
ITEM161	.329	1.000	.311	.413	.219	.182	.264	.254	.316	.167	.216
ITEM162	.268	.311	1.000	.325	.292	.224	.258	.329	.492	.248	.244
ITEM163	.534	.413	.325	1.000	.257	.250	.341	.355	.386	.214	.311
ITEM164	.226	.219	.292	.257	1.000	.211	.276	.376	.294	.158	.262
ITEM165	.228	.182	.224	.250	.211	1.000	.361	.288	.286	.304	.214
ITEM166	.238	.264	.258	.341	.276	.361	1.000	.329	.351	.292	.269
ITEM167	.292	.254	.329	.355	.376	.288	.329	1.000	.375	.280	.293

ITEM168	.314	.316	.492	.386	.294	.286	.351	.375	1.000	.292	.375
ITEM169	.202	.167	.248	.214	.158	.304	.292	.280	.292	1.000	.253
ITEM170	.274	.216	.244	.311	.262	.214	.269	.293	.375	.253	1.000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM160	39.15	19.883	.481	.324	.797
ITEM161	39.49	19.755	.441	.234	.801
ITEM162	39.53	19.165	.503	.306	.795
ITEM163	39.44	19.319	.567	.412	.789
ITEM164	39.98	18.423	.427	.211	.808
ITEM165	39.25	20.270	.414	.211	.803
ITEM166	39.69	19.923	.494	.272	.796
ITEM167	39.56	19.294	.537	.299	.791
ITEM168	39.71	18.867	.589	.387	.786
ITEM169	39.26	20.692	.390	.187	.805
ITEM170	39.50	19.765	.449	.219	.800

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.951	3.476	4.310	.834	1.240	.057	11
Item Variances	.553	.378	1.058	.680	2.799	.033	11
Inter-Item Correlations	.289	.158	.534	.376	3.377	.005	11

4.6 SUMMARY OF THE ITEM ANALYSIS RESULTS

Item analysis was done on each of the SAPI subscales to determine the extent to which they represent the different latent first-order personality dimensions they were written to reflect. Various item statistics were calculated for the items of these subscales. These statistics included the item-total correlations, the squared multiple correlations, the inter item correlations and the Cronbach alpha coefficients. To the extent that the intention succeeded the item-total correlations, the squared multiple correlations, the inter item correlations should be moderately high and the Cronbach alpha coefficients should exceed .80. Eleven of the twenty subscales returned good internal consistency reliability coefficients, whilst the other nine subscales returned acceptable coefficients in terms of the interpretative taxonomy[19]. When considering the basket of evidence provided by these

[19] General rule of thumb for describing reliability coefficients (George and Mallery, 2003)

item statistics it had to be concluded that for the SAPI subscales the items of the various subscales did by and large respond in unison to systematic differences in a common underlying latent variable/variables. In the case of a few items some concern arose that the variance in the items might be to a too large degree originating from a different source than that producing the variance in the other items of the subscale. In all cases the basket of evidence available on these items were not strong enough to convincingly label these items psychometrically problematic items that clearly failed the task they were assigned. It was, however, not possible to infer from the results of the item analysis firstly whether the common source of variance underpinning the items of each subscale is a uni-dimensional latent variable, and secondly, whether the common source of variance is in fact the intended latent first-order personality dimension the subscale items were developed to reflect. What can be claimed though is that the SAPI items survived the opportunity to be discredited and to be shown not to measure the underlying latent first-order personality dimensions that they were developed to reflect satisfactorily. The internal consistency reliability of all twenty of the subscales was satisfactory.

4.7 DIMENSIONALITY ANALYSIS

As was discussed in Chapter 2 and 3 a specific design intention informed the process of constructing the various scales that were used to operationalise the latent first-order personality dimensions comprising the personality construct as conceptualised by the SAPI developers. Thus, items that encompass the subscales were designed to function as stimulus sets to which individuals taking the test respond with behaviour that is mostly an expression of a particular uni-dimensional underlying latent variable it was designed to reflect. Unrestricted principal axis factor analysis with oblique rotation was performed on each of the twenty SAPI subscales. The purpose of this analysis were to confirm the uni-dimensionality of each of the twenty subscale and also to evaluate the success with which each item (along with the rest in that particular item set) measures the specific latent first-order personality dimension it claims and was designed to reflect. The purpose of such

Cronbach's alpha		Reliability coefficient
α ≥ .90	=	Excellent .
90 > α ≥ .80	=	Good.
80 > α ≥ .70	=	Acceptable
.70 > α ≥ .60	=	Questionable.
60 > α ≥ .50	=	Poor
.50 > α	=	Unacceptable

analyses would in other circumstances also be to recommend item removal or rewriting, where such items have factor loadings that are insufficient, however, as was explained previously the nature of the study was intended at gaining a better grasp of how the items function per scale and not to re-word or to delete any of the items in questions within questionnaire.

There does however exist certain dangers with regards to factor analysis being performed on a correlation/covariance matrix. This is because a potential risk exists that artefact factors reflecting differences in item difficulty value, kurtosis or variance may be extracted (Hulin, Drasgrow and Parsons, 1983), not recognised as such and misinterpreted as theoretically substantive factors. Nevertheless, to counter this limitation, Schepers (1992) argued that to examine the possibility of multiple factors appearing as an artefact of differential item characteristics like skewness or kurtosis, the descriptive statistics need to be calculated for the items of each subscale. This suggestion was incorporated in the dimensionality analysis procedure used in the current study for each of the SAPI subscales:

- Calculation of descriptive statistics for the items of each subscale,
- Calculation of the inter-item correlation matrix, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's measure of sphericity for the items of each subscale to evaluate the factor analysability of each matrix,
- Calculation of scree plots and the eigenvalues associated with all the possible factors that could be extracted to explain the observed correlations between the items of each subscale,
- Calculation of the reproduced and residual correlation matrices for the items of each subscale given the extracted factor structure to evaluate the adequacy of the structure,
- Calculation of the factor loadings in the factor structure for the items of each subscale to evaluate the adequacy of the loadings, and
- Calculation of the rotated factor structure if more than one factor had to be extracted.

Moreover, the eigenvalue-greater-than-unity rule of thumb (Tabachnick & Fidell, 2001) was used to determine the number of factors to extract. SPSS 24 for Windows (2017) was used to perform a series of 20 exploratory factor analyses on the items comprising the

SAPI subscales. Table 4.23 provides a summary of the results of the factor analyses. The detailed output of the dimensionality analyses is electronically available on the enclosed CD, folder: Dimensionality Analysis, in Appendix C. In addition, factor loadings of items on the factor they were intended to measure were considered acceptable if they were greater than .30 (Laher, 2010). The adequacy of the extracted solution as an explanation of the observed inter-item correlation matrix was evaluated by calculating the percentage large (>.05) residual correlations.

The dimensionality analysis results are presented in the following order: (i) assessing the factor analysability of the inter-item correlation matrices, (ii) overview of the principal axis factor analyses results, and (iii) a discussion of the individual SAPI scale uni-dimensionality results.

4.7.1 EVALUATING THE FACTOR ANALYSABILITY OF THE INTER-ITEM CORRELATION MATRIX

To assess the 20 inter-item correlation matrices' factor analysability, various criteria were used. It should be noted that because presenting the results of the analysis of the factor analysability of the 20 inter item correlation matrices separately for each of the twenty subscales tends to make for rather tedious and repetitive reading, the findings of all twenty analyses are interpreted and summarised central in Table 43 (See next section).

One of the criteria to establish factor analysability was that the correlation matrix should contain several moderately large ($_{rij}$>.30) and statistically significant (p<.05) inter-item correlations to be factor analysable. On visual inspection of the inter-item correlation matrix it was revealed that several sizable ($_{rij}$>.30) and significant (p<.05) correlations (see Appendix C on the enclosed CD) for all the 20 SAPI subscales existed. This confirmed the factor analysability of the subscale correlation matrices. It should however be noted that some of the correlation matrices did, contain inter-item correlations lower than .30, however, because their relative infrequent occurrence these did not present significant problems. Please refer to the discussion of the item analysis results in paragraph 4.5.

To further examine the factor analysability of the observed inter-item correlation matrices, the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test were used. The KMO measure of sampling adequacy is an index that represents the ratio of the sum of the squared inter-item correlations and the squared inter-item correlations plus the sum of the squared partial inter-item correlation coefficients (Sricharoena & Buchenrieder, 2005). The Kaiser-Meyer-Olkin (KMO) measure should be more than .60 for the observed correlation matrix to be factor analysable, with values closer to 1.00 considered to be better. This measure approaches unity for matrices with high degree of off-diagonal correlations, with values greater than .80 indicating that the data set is likely to factor analyse well. The KMO values were all above .60 (see Table 4.23 below), varying between .645 and .933, which suggested that all the correlation matrices were factor analysable.

In addition, the Bartlett's test of sphericity was used to test the null hypothesis that the correlation matrix is an identity matrix. An identity matrix is matrix in which all the diagonal elements are 1 and all off-diagonal elements are 0. An identity matrix therefore implies that each item measures a unique underlying factor and that it therefore would be fruitless to search for common underlying factors. With the SAPI, the stated null hypothesis could be rejected for all of the 20 subscales. This implies that the correlation matrices are all factor analysable. The finding implies that, factor analysis on all 20 inter-item correlation matrices would be meaningful.

The finding that all the observed inter-item correlations are factor analysable cannot be regarded as a surprise given the design intention of the SAPI. Any negative comments on the factor analysability of any correlation matrix were regarded as a negative comment on the success with which the design intentions of the SAPI developers succeeded to develop.

4.7.2 OVERVIEW OF THE PRINCIPAL AXIS FACTOR ANALYSES RESULTS

The summarised principal axis factor analyses' results are presented in Table 4.23. Nine out of the twenty subscales failed the uni-dimensionality test. The affected scales were: (i) Integrity, (ii) Interpersonal Relatedness, (iii) Social Intelligence, (iv) Conflict Seeking, (v) Hostile Egoism, (vi) Deceitfulness, (vii) Emotional Balance, (viii) Negative Emotionality, (ix) Achievement orientation, (x) Orderliness, (xi) Traditionalism-Religiosity, (xii) Broadmindedness and (xiii) Intellect. The possibility of meaningful factor fission was investigated for these scales. This will be discussed in more detail in the next section.

Together with the investigation, attempts were made to establish extracted factors identities based on an inspection of the common theme shared by the items loadings on each of these factors. Moreover, descriptive statistics were also re-examine to determine whether the specific factor structure may have emerged as an artefact of differential skewness of the items or as an artefact of systematic differences in some other descriptive statistic across items. Irrespective of whether meaningful factor fission occurred, a single factor's ability to account for the observed inter-item correlation matrix was still investigated. The reason this was done was to examine the magnitude of the factor loadings when a single factor is forced and to inspect the credibility of such a solution based on the magnitude of the residual correlations.

In addition, a summary of the item factor loadings for each subscale are provided in Table 4.23 as well. The criteria that were used to interpret the magnitude of the factor loadings were done according to Hair et al. (2006) were loadings above .70 are indicative of a well-defined structure, .50 or higher are considered significant, .30 to .40 are considered satisfactory, and In the case of personality research (Laher, 2010) the common accepted cut-off value of .30 was used as a benchmark for these analyses. Item factor loadings from the different subscales were all satisfactory. Twenty two of the 170 items (12.94%) obtained loadings higher than .70, 120 of the items (70.58%) obtained loadings higher than .50, and the remaining 28 of the items (16.47%) obtained loadings between .30 and .49. There were no items that obtained absolute loadings lower than the benchmark cut-off value of .30 on their designated factors. A more detailed discussion of the results of the dimensionality analyses will subsequently be presented.

Table 4.23

Summary of the results of the principal axis factor analyses

Sub scale	Determinant	KMO	Variance explained	Min factor loading	Max factor loading	% Residual r > .05	No. of factors extracted
Empathy	.144	.857	39.032	.476	.706	28	1
Facilitating	.009	.932	48.239	.560	.806	20	1
Integrity	.038	.888	**Factor 1: 30.076**	.488	.674		3
			Factor 2: 4.940	.566	.701		
			Factor 3: 3.537	.414	.627	6	
			Single Factor: 29.353	.433	.694	43	
Interpersonal Relatedness	.140	.833	**Factor1: 30.871**	.365	.830		2
			Factor 2: 6.551	-.350	-.814	2	
			Single Factor: 29.727	.323	.689	33	

Social Intelligence	.276	.745	**Factor 1: 52.321**	.814	.821		2
			Factor2: 6.269	.699	.712	0	
			Single Factor: 50.351	.615	.804	66	
Warm-Heartedness	.043	.923	36.017	.514	.721	12	1
Arrogance	.256	.828	37.193	.482	.718	26	1
Conflict Seeking	.224	.833	**Factor 1: 34.245**	.345	.737		2
			Factor2: 5.519	.534	.612	4	
			Single Factor:33.503	.382	.699	42	
Hostile Egoism	.029	.897	**Factor 1: 29.158**	.319	.653		3
			Factor 2: 6.178	-.399	-.745		
			Factor 3: 3.432	-.486	-.652	3	
			Single Factor: 28.441	.405	.682	38	
Deceitfulness	.217	.791	**Factor 1: 33.498**	.397	.680		2
			Factor2: 7.958	-.757	-.757	4	
			Single Factor: 31.918	.341	.678	57	
Emotional Balance	.141	.834	**Factor 1: 34.585**	.412	.703		2
			Factor2: 6.450	.-.641	-.805	7	
			Single Factor: 33.584	.515	.648	42	
Negative Emotionality	.066	.858	**Factor 1: 33.219**	.473	.717		2
			Factor2: 7.285	-.359	-.862	15	
			Single Factor: 32.301	.405	.677	48	
Playfulness	.131	.852	45.533	.534	.843	20	1
Sociability	.051	.892	49.405	.552	.839	9	1
Achievement orientation	.024	.920	**Factor 1: 39.047**	.378	.736		2
			Factor2: 4.948	-.310	-.848	1	
			Single Factor: 38.557	.461	.782	34	
Orderliness	.006	.914	**Factor 1:** 38.601	.447	.857		3
			Factor 2: 7.059	.395	.828		
			Factor 3: 4.746	.596	.755	1	
			Single Factor: 37.632	.446	.736	48	
Traditionalism-Religiosity	.288	.645	**Factor 1: 48.655**	.845	.853		2
			Factor2: 13.353	.716	.719	0	
			Single Factor: 44.924	.509	.803	100	
Broadmindedness	.254	.793	**Factor 1: 37.358**	.596	.704		2
			Factor2: 8.760	-.318	-.854	0	
			Single Factor: 35.558	.517	.685	53	
Epistemic curiosity	.287	.830	35.809	.490	.751	6	1
Intellect	.087	.880	**Factor 1:** 29.974	.420	.594		2
			Factor2: 4.260	-.413	-.826	10	
			Single Factor: 29.459	.437	.661	21	

4.7.3 DISCUSSION OF THE DIMENSIONALITY OF THE INDIVIDUAL SAPI SUBSCALES

4.7.3.1 Dimensionality Analysis: Empathy

The design intention of the SAPI was that the 7 items that were written for the Empathy scale should all reflect a single underlying personality dimension. The SPSS exploratory factor analysis results suggested that a single factor is required to satisfactorily explain the observed correlations between the items of the subscale. Only one factor obtained an eigenvalue bigger than one. The scree plot suggested the extraction of a single factor (see

Appendix C) and the factor matrix indicated that all the items, loaded more than acceptable (.476 < λ < .706) on one factor. Table 4.24 presents the extracted factor structure. Furthermore, there were 6 (28%) non-redundant residuals with absolute values greater than .05 suggesting that the rotated solution provided a credible explanation for the observed correlation matrix. The uni-dimensionality assumption was thus corroborated for the Empathy-subscale.

Table 4.24

Factor matrix for the Empathy subscale

	Factor 1
ITEM1	.706
ITEM4	.703
ITEM5	.697
ITEM7	.627
ITEM2	.580
ITEM3	.546
ITEM6	.476

4.7.3.2 Dimensionality Analysis: Facilitating

The uni-dimensionality assumption that the 10 items comprising the Facilitating subscale all reflect a single underlying personality factor was tested. The results indicated that only one factor should be extracted since only a single factor obtained an eigenvalue greater than one. The scree plot, in-line with the Kaiser-rule, also suggested the extraction of a single factor (see Appendix C).

The extracted factor structure is shown in Table 4.25. item14 – item17 have excellent loadings on the single factor (λ_{i1} > .70). The factor matrix further indicated that for the other items (item8 – item13) acceptable loadings (λ_{i1} > .50) were obtained. Furthermore, in the residual correlation matrix nine (20%) of the residual correlations was greater than .05 (see Appendix C) suggesting that the factor solution provides a reasonably credible explanation for the observed inter-item correlation matrix. The uni-dimensionality assumption was therefore corroborated for this subscale.

Table 4.25

Factor matrix for the Facilitating subscale

	Factor 1
ITEM16	.806
ITEM14	.789
ITEM17	.762
ITEM15	.739
ITEM8	.693
ITEM11	.684
ITEM13	.678
ITEM12	.597
ITEM10	.590
ITEM9	.560

4.7.3.3 Dimensionality Analysis: Integrity

The design intention was that the 13 items written for the Integrity subscale should all reflect a single underlying personality dimension. The results suggested that three factors were required to satisfactorily explain the observed correlations between the items of the Integrity-subscale. Three factors obtained eigenvalues greater than one. The scree plot also suggested the extraction of three factors (see Appendix C).

The three factors that that were extracted for the Integrity subscale could be meaningfully interpreted. From the rotated factor matrix (Table 4.26a), a pattern of loadings emerged that only allowed a somewhat tenuous stance on the identity of the two extracted factors. Factor 1 had four items (item30, item18, item23 and item19) with factor loadings greater than .30. Three items (item20, item28 and item26) loaded on Factor 2. Four items (item22, item27, item29 and item21) loaded on factor 3. Two items (ITEM25 and ITEM24) did not load on any of the three extracted factors. Factor 1 could somewhat tentatively be described as *an individual's inclination to be honest and truthful* while Factor 2 could somewhat cautiously be interpreted as *an individual's tendency to be loyal towards others*. Factor 3 could cautiously be interpreted as an *individual's tendency to take responsibility for their mistakes and being fair*. All three factors represent meaningful Integrity sub-factors. Descriptive statistics were reviewed to determine if the three-factor structure may be an artefact of differential skewness or kurtosis of the item distributions (Table 4.26b). The differential statistics suggested that it was highly unlikely that the three factors emerged as an artefact of differential item characteristics of the items. The item descriptive statistics revealed that all items were consistently significantly negatively skew ($p<.05$) and consistently significantly ($p<.05$) leptokurtic (except for item 24 that was platykurtic). Differential item statistics therefore do not provide a plausible explanation for the extracted factor matrix. Table 4.26a moreover suggested that neither could the emergence of a second or third factor be explained in terms of the item analysis as none of the items were flagged as problematic.

Table 4.26a

Factor loadings for the Integrity subscale (rotated pattern matrix)

	Factor		
	1	**2**	**3**
ITEM30	**.674**	.014	.064
ITEM18	**.644**	-.037	.046
ITEM23	**.585**	.106	.123
ITEM19	**.488**	.280	-.072
ITEM20	.071	**.701**	-.098
ITEM28	-.037	**.659**	.090
ITEM26	.023	**.566**	.078
ITEM25	.115	.290	.143
ITEM22	-.141	.163	**.627**
ITEM21	.060	-.021	**.539**
ITEM27	.172	-.081	**.484**
ITEM29	.201	.053	**.414**
ITEM24	.149	.162	.206

a. Rotation converged in 9 iterations.

Table 4.26b

Descriptive statistics for the Integrity subscale

		ITEM18	ITEM19	ITEM20	ITEM21	ITEM22	ITEM23	ITEM24	ITEM25	ITEM26	ITEM27	ITEM28	ITEM29	ITEM30
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
	Mean	4.05	4.14	4.35	3.93	4.17	4.23	4.14	4.18	4.24	4.07	4.22	4.28	4.09
	Std. Deviation	.745	.691	.653	.827	.620	.619	.646	.732	.624	.722	.643	.589	.667
	Variance	.556	.477	.427	.684	.592	.384	.418	.536	.390	.522	.486	.341	.445
	Skewness	-1.498*	-.525*	-.934*	-.641*	-.424*	-.399*	-.666*	-.840*	-607*	-.738*	-.730*	-.375*	-.429*
	Std. Error of Skewness	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
	Kurtosis	.177*	.512*	1.879*	.315*	.848*	.471	1.677*	1.348	1.424	1.231*	.313*	.892*	.651*
	Std. Error of Kurtosis	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078

To examine how well the 13 items represent a single underlying factor the items are meant to represent, a single factor was forced on the data. When forcing a single factor reasonably acceptable factor loadings ($.433 < \lambda_{i1} < .694$) for all items in this subscale were obtained. The results are shown in Table 4.26c below.

Table 4.26c

Factor matrix when forcing the extraction of a single factor (Integrity subscale)

	Factor 1
ITEM23	.694
ITEM30	.640
ITEM19	.592
ITEM18	.559
ITEM28	.557
ITEM29	.553
ITEM26	.534
ITEM20	.528
ITEM22	.501
ITEM27	.469
ITEM21	.464
ITEM25	.455
ITEM24	.433

The residuals correlations (the discrepancy between the observed and reproduced inter-item correlations) were examined for both the three-factor and the one-factor solutions. For the three factor solution, 6% of non-redundant residuals had absolute values greater than 0.05, thus suggesting that the rotated factor solution provides a fairly convincing explanation for the observed inter-item correlation matrix. This solution explained 52.078% of the total subscale variance in the initial solution but only 38.553% of the observed variance in the extracted solution (see Appendix C). For the one-factor solution a larger percentage (43%) of non-redundant residuals had absolute values greater than .05 thus suggesting that the forced single--factor solution does not, as expected, provide a convincing explanation for the observed inter-item correlation matrix. The single extracted factor accounted for 34.631% of the total subscale variance.

The foregoing basket of evidence would suggest that the initial factor solution provided a more credible explanation of the observed inter-item correlation matrix. There was little evidence to support the design assumption that all items comprising the Integrity-subscale reflect a single inseparable underlying theme. The current results did, however, suggest that all the items satisfactory reflected Integrity as a second-order factor. Formally fitting a second-order measurement model in a confirmatory factor analysis could provide further credence to this position.

4.7.3.4 Dimensionality Analysis: Interpersonal Relatedness

The design intention was that the 9 items written for the Interpersonal Relatedness subscale should all reflect a single underlying personality dimension. The results suggested that two factors were required to satisfactorily explain the observed correlations between the items of the Interpersonal Relatedness subscale. Two factors obtained eigenvalues greater than one and the scree plot (see Appendix C) also suggested the extraction of two factors.

Table 4.27a shows the items that load on the respective factors. For factor 1, five items (item34, item36, item33 and item39) with loadings greater than .30. Three items loaded negatively (λ_{i2} > |.30|) on factor 2 (item35, item37 and item38). One item (item31) did not load on any of the extracted factors. Factor 1 seemed to focus *on a person's willingness to accept, forgive and help others with ideas*, whereas factor 2 talks more about *helping others sort out their differences and trying to keep the peace*. The results shown in Table 4.27a can therefore be considered meaningful factor fission as both these two themes represent logical facets of the interpersonal relatedness theme that the subscale was designed to measure.

Furthermore, the descriptive statistics calculated for the items of the Interpersonal Relatedness subscale (Table 4.27b) suggested that it was highly unlikely that the two factors emerged as an artefact of differential item characteristics of the items. The item descriptive statistics revealed that the items were predominantly significantly negatively skewed (p<.05) and consistently significantly (p<.05) leptokurtic (except for item32 that was platykurtic and positively skewed). Differential item statistics therefore do not provide a plausible explanation for the extracted factor matrix. Table 4.27a moreover suggested that neither could the emergence of a second factor be explained in terms of the item analysis as none of the items were flagged as problematic.

Table 4.27a

Factor loadings for the Interpersonal Relatedness subscale (rotated pattern matrix)

	Factor	
	1	2
ITEM34	**.830**	.142
ITEM36	**.610**	.021
ITEM33	**.493**	-.032
ITEM32	**.376**	-.065
ITEM39	**.365**	-.289
ITEM31	.228	-.124
ITEM37	-.050	**-.814**
ITEM38	.030	**-.790**
ITEM35	.250	**-.350**

a. Rotation converged in 7 iterations.

Table 4.27b

Descriptive statistics for the Interpersonal Relatedness subscale

		ITEM31	ITEM32	ITEM33	ITEM34	ITEM35	ITEM36	ITEM37	ITEM38	ITEM39
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912
	Mean	4.02	3.87	4.29	4.13	3.85	4.00	3.65	3.65	4.03
	Std. Deviation	.858	.844	.527	.620	.766	.653	.783	.815	.614
	Variance	.736	.712	.328	.385	.587	.426	.613	.663	.377
	Skewness	-1.129*	-.696*	-.386*	-.445*	-.776*	-.652*	-.526*	-.492*	-646*
	Std. Error of Skewness	.039	.039	.039	.039	.039	.039	.039	.039	.039
	Kurtosis	1.915*	.617*	1.254*	1.114 *	1.177*	1.786*	.325*	.160*	2.123*
	Std. Error of Kurtosis	.078	.078	.078	.078	.078	.078	.078	.078	.078

To examine how well the 9 items represent a single underlying factor the items are meant to represent, a single factor was forced on the data. When forcing a single factor reasonably acceptable factor loadings ($.323 < \lambda_{i1} < .689$) for all items in this subscale were obtained. The results are shown in Table 4.27c below.

Table 4.27c

Factor matrix when forcing the extraction of a single factor (Interpersonal Relatedness subscale)

	Factor 1
ITEM38	.689
ITEM37	.631
ITEM39	.603
ITEM34	.596
ITEM35	.548
ITEM36	.531
ITEM33	.481
ITEM32	.406
ITEM31	.323

The residuals correlations (the discrepancy between the observed and reproduced inter-item correlations) were examined for both the two-factor and the one-factor solutions. For the two factor solution, 2% of non-redundant residuals had absolute values greater than 0.05, thus suggesting that the rotated factor solution provides a very convincing explanation for the observed inter-item correlation matrix (see Appendix C).

This solution explained 49.009% of the total subscale variance in the initial solution but only 37.422% of the observed variance in the extracted solution. For the one-factor solution a larger percentage (33%) of non-redundant residuals had absolute values greater than .05 thus suggesting that the forced single-factor solution did provide a fairly convincing explanation for the observed inter-item correlation matrix. The single extracted factor accounted for 37.125% of the total subscale variance. This outcome suggests that the one factor solution does provide a credible explanation as to why the subscale items correlate the way they do in the observed correlation matrix (see Appendix C).

4.7.3.5 Dimensionality Analysis: Social Intelligence

The correlation matrix indicated that the correlation matrix was factor analysable as all the correlations were bigger than .30 and all were statistically significant ($p<.05$) providing further support that the matrix was factor analysable. The scale obtained a KMO of .745 and the Bartlett"s Test of Spherically allowed for the identity matrix null hypothesis to be rejected, thus there was strong evidence that the correlation matrix was factor analysable.

The eigenvalue-greater-than-one rule suggested the extraction of one factor; whereas the scree plot suggested extracting 2 factors (see Appendix C). The factor matrix indicated that all of the items loaded satisfactorily on the single extracted factor (λ_{i1} >.50). The resultant factor structure is shown in Table 4.28a.

Table 4.28a

Single factor matrix for the Social Intelligence subscale

	Factor 1
ITEM42	.797
ITEM43	.759
ITEM41	.652
ITEM40	.615

An unacceptably large percentage of 66% of the non-redundant residual correlations obtained absolute values greater than .05 (see Appendix C). The high percentage large residual correlations suggest the presence of a second factor. When requesting SPSS to extract a second factor the rotated pattern matrix shown in Table 4.28b emerged.

Table 4.28b

Rotated two-factor structure for the Social Intelligence subscale

	Factor	
	1	**2**
ITEM43	**.821**	-.019
ITEM42	**.814**	.024
ITEM41	.015	**.712**
ITEM40	-.012	**.699**

Table 4.27b indicates that item43 and item42 load on factor 1 while the remaining two items load on factor 2. The factor fission seems to be rather subtle. Factor 1 seems to refer to *relating to others*, whereas factor 2 talks more about *understanding others*. The two meanings are very similar in definition. The results shown in Table 4.28b can therefore be considered meaningful factor fission as both these two themes represent logical facets of the social intelligence theme that the subscale was designed to measure. For the forced two-factor solution a more satisfactory percentage (0%) of the non-redundant residual correlations had absolute values greater than .05 (see Appendix C). This indicated that the forced 2-factor solution provided a more credible account of the process that brought

about the observed inter-item correlation matrix. Both these factors could be interpreted as logical facets of a second-order social Intelligence factor.

4.7.3.6 Dimensionality Analysis: Warm-Heartedness

The uni-dimensionality assumption that the 11 items comprising the Warm-Heartedness subscale all reflect a single underlying personality factor was tested. The results indicated that only one factor should be extracted since only a single factor obtained an eigenvalue greater than one.

The extracted factor structure is shown in Table 4.29. The scree plot, in-line with the above, also suggested the extraction of a single factor. Item52 showed an excellent loading on the single factor (λ_{i1} > .70). The factor matrix further indicated that for all the other items acceptable loadings (λ_{i1} > .50 were obtained. Furthermore, in the residual correlation matrix only four (12%) of the residual correlations was greater than .05 suggesting that the one-factor solution provides a credible explanation for the observed inter-item correlation matrix. The uni-dimensionality assumption was therefore corroborated for this subscale.

Table 4.29

Factor matrix for the Warm-Heartedness subscale

	Factor 1
ITEM52	.721
ITEM54	.642
ITEM51	.631
ITEM53	.620
ITEM44	.603
ITEM50	.599
ITEM46	.575
ITEM45	.563
ITEM49	.559
ITEM48	.548
ITEM47	.514

4.7.3.7 Dimensionality Analysis: Arrogance

The uni-dimensionality assumption that the 6 items comprising the Arrogance subscale all reflect a single underlying personality factor was tested. The results indicated that only one factor should be extracted since only a single factor obtained an eigenvalue greater than one.

The extracted factor structure is shown in Table 4.30. The scree plot, in-line with the above, also suggested the extraction of a single factor (see Appendix C). Item59 had an excellent loading on the single factor (λ_{i1} > .70). The factor matrix further indicated that for four items (item55, item56, item57 and item60) acceptable loadings (λ_{i1} > .50) were obtained .ITEM58 obtained a satisfactory loading (λ_{i1} > .30) approaching .50. Furthermore, in the residual correlation matrix only four (26%) of the residual correlations was greater than .05 suggesting that the factor solution provides a credible explanation for the observed inter-item correlation matrix. The uni-dimensionality assumption was therefore corroborated for this subscale.

Table 4.30

Factor matrix for the Arrogance subscale

	Factor 1
ITEM59	.718
ITEM55	.692
ITEM60	.616
ITEM56	.579
ITEM57	.537
ITEM58	.482

4.7.3.8 Dimensionality Analysis: Conflict Seeking

The correlation matrix indicated that the matrix was factor analysable as all the correlations were bigger than .30 and all were statistically significant ($p<.05$) providing further support that the matrix was factor analysable. The scale obtained a KMO of .833 and the Bartlett"s Test of Spherically allowed for the identity matrix null hypothesis to be rejected, thus there was strong evidence that the correlation matrix was factor analysable.

The eigenvalue-greater-than-one rule suggested the extraction of one factor, whereas the scree plot suggested extracting 2 factors. The factor matrix indicated that most of the items loaded satisfactorily on the single extracted factor (λ_{i1} >.50) with one item (item64) loading .382 on the single factor extracted. The resultant factor structure is shown in Table 4.31a.

Table 4.31a

Factor structures for the Conflict Seeking subscale

	Factor1
ITEM65	.699
ITEM62	.632
ITEM67	.622
ITEM61	.563
ITEM66	.553
ITEM63	.550
ITEM64	.382

An unacceptably large percentage of 42% of the non-redundant residual correlations obtained absolute values greater than .05. The high percentage large residual correlations suggested the presence of a second factor (see Appendix C). When requesting SPSS to extract a second factor the pattern matric shown in Table 4.31b emerged.

Table 4.31b

Rotated two-factor structure for the Conflict-seeking subscale

	Factor	
	1	2
ITEM65	**.737**	-.014
ITEM67	**.719**	-.086
ITEM62	**.642**	.011
ITEM61	**.461**	.143
ITEM63	**.345**	.278
ITEM64	-.056	**.612**
ITEM66	.176	**.534**

Table 4.31b indicates that items item64 and item66 loaded on factor 2 while the remaining five items loaded on factor 1. The factor fission seems to be rather subtle. Factor 1 can tentatively be interpreted as *being disloyal towards others through talking behind their*

backs and spreading rumours, whereas Factor 2 talks more about *provoking or confronting others*. The results shown in Table 4.31b can therefore be considered meaningful factor fission as both these two themes represent logical facets of the conflict seeking theme that the subscale was designed to measure. For the forced two-factor solution a more satisfactory percentage (4%) of the non-redundant residual correlations had absolute values greater than .05 (see Appendix C). This indicated that the forced 2-factor solution provided a more credible account of the process that brought about the observed inter-item correlation matrix. The results depicted in Table 4.31b moreover provided a credible explanation of the observed inter-item correlation matrix.

4.7.3.9 Dimensionality Analysis: Hostile Egoism

The design intention was that the 14 items written for the Hostile Egoism subscale should all reflect a single underlying personality dimension. The results suggested that three factors were required to satisfactorily explain the observed correlations between the items of the Hostile Egoism subscale. Three factors obtained eigenvalues greater than one and the scree plot also suggested the extraction of two factors (see appendix C). Table 4.32a shows the items that load on the respective factors. For factor 1, there are four items (item68, item69, item70 and item72) with loadings greater than 0,30. There were five items (item71, item76, item77, item78 and item79) that loaded negatively ($\lambda_{i2} > |.30|$) on Factor 2 and can be interpreted as *being selfish and negative towards others.* Factor 3 with four items (item73, item74, item75 and item81) loading negatively on it can be understood as being *inconsiderate and rude towards others.* The three meanings are very similar in definition. The results shown in Table 4.32a can therefore be considered meaningful factor fission as all three themes represent logical facets of the hostile egoism theme that the subscale was designed to measure.

The item descriptive statistics revealed that the items were mostly significantly positively skewed (p<.05) and significantly (p<.05) platykurtic (except for item73 that was leptokurtic and negatively skewed). Item75' kurtosis was mesokurtic and the distribution of item68 was symmetrical. Differential item statistics therefore did not provide a plausible explanation for the extracted factor matrix. Table 4.32a moreover suggested that neither could the emergence of a second and third factor be explained in terms of the item analysis as none of the items were flagged as problematic.

Table 4.32a

Factor loadings for the Hostile Egoism subscale (rotated pattern matrix)

	Factor		
	1	2	3
ITEM69	**.653**	-.033	.029
ITEM70	**.617**	-.043	-.038
ITEM68	**.370**	-.057	-.098
ITEM72	**.319**	-.276	-.139
ITEM78	-.065	**-.745**	-.068
ITEM76	-.099	**-.726**	-.021
ITEM79	.153	**-.545**	.009
ITEM71	.141	**-.399**	.035
ITEM77	.301	**-.347**	-.187
ITEM74	-.147	-.059	**-.652**
ITEM75	.058	-.091	**-.640**
ITEM81	.223	-.073	**-.506**
ITEM73	.252	.170	**-.486**
ITEM80	.187	-.104	-.219

Table 4.32b

Descriptive statistics for the Hostile Egoism subscale

		ITEM68	ITEM69	ITEM70	ITEM71	ITEM72	ITEM73	ITEM74	ITEM75	ITEM76
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912
	Mean	2.86	1.80	1.69	2.07	1.74	3.37	2.00	1.96	2.02
	Std. Deviation	.948	.832	.766	.849	.727	.980	1.046	.912	.836
	Variance	.899	.692	.587	.721	.529	.960	1.094	.832	.698
	Skewness	.014	.993*	1.049*	.813*	1.025*	-.503*	-.751*	.745*	.868*
	Std. Error of Skewness	.039	.039	.039	.039	.039	.039	.039	.039	.039
	Kurtosis	- .474*	.894*	1.060*	.816*	1.800*	-.292*	-.298*	-.016	1.020*
	Std. Error of Kurtosis	.078	.078	.078	.078	.078	.078	.078	.078	.078

		ITEM77	ITEM78	ITEM79	ITEM80	ITEM81
N	Valid	3912	3912	3912	3912	3912
	Mean	1.76	1.86	1.75	3.00	2.00
	Std. Deviation	.801	.803	.762	.962	.964
	Variance	.642	.644	.581	.926	.929
	Skewness	1.145*	.975*	1.095*	-.189*	.619*
	Std. Error of Skewness	.039	.039	.039	.039	.039

Kurtosis	1.663*	1.370*	1.901*	-.530 *	-.175*
Std. Error of Kurtosis	.078	.078	.078	.078	.078

To examine how well the 14 items represent a single underlying factor the items are meant to represent, a single factor was forced on the data. When forcing a single factor reasonably acceptable factor loadings (.405 < λ_{i1} < .682) for all items in this subscale were obtained. The results are shown in Table 4.32c below.

Table 4.32c

Factor matrix when forcing the extraction of a single factor (Hostile Egoism subscale)

	Factor 1
ITEM77	.682
ITEM81	.644
ITEM75	.620
ITEM72	.600
ITEM78	.568
ITEM70	.558
ITEM79	.546
ITEM69	.522
ITEM76	.490
ITEM73	.449
ITEM74	.436
ITEM68	.428
ITEM80	.415
ITEM71	.405

The residuals correlations (the discrepancy between the observed and reproduced inter-item correlations) were examined for both the three-factor and the one-factor solutions (see Appendix C). For the three factor solution, 3% of non-redundant residuals had absolute values greater than .05, thus suggesting that the rotated 3-factor solution provided a very convincing explanation for the observed inter-item correlation matrix. This solution explained 51.250 % of the total subscale variance in the initial solution but only 38.768% of the observed variance in the extracted solution. For the one-factor solution a larger percentage (38%) of non-redundant residuals had absolute values greater than .05 thus suggesting that the forced factor solution did provide a fairly convincing explanation for the observed inter-item correlation matrix. The single extracted factor accounted for

33.347% of the total subscale variance. This outcome suggests that the one factor solution does provide a credible, although not the most convincing, explanation as to why the subscale items correlate the way they do in the observed correlation matrix.

4.7.3.10 Dimensionality Analysis: Deceitfulness

The design intention was that the 7 items written for the Deceitfulness subscale should all reflect a single underlying personality dimension. The results suggested that two factors were required to satisfactorily explain the observed correlations between the items of the Deceitfulness-subscale. Two factors obtained eigenvalues greater than one and the scree plot also suggested the extraction of two factors.

The two factors that that were extracted for the Deceitfulness subscale could be meaningfully interpreted. Table 4.33a shows the items that load on the respective factors. One of the two factors that that were extracted for the Deceitfulness subscale could not be meaningfully interpreted. Factor 1, have four items (item82, item86, item87 and item88) with loadings greater than .30. Based on an inspection of the items, factor 1 seems to represent *deceiving others*. Three items (item83, item84 and item85) loaded negatively ($\lambda_{i2} > |.30|$) on Factor 2 and based on these items factor 2 can be tentatively interpreted as *not being authentic.*

Moreover, the descriptive statistics calculated for the items of the Deceitfulness subscale (Table 4.33b) suggested that it was highly unlikely that the two factors emerged as an artefact of differential item characteristics of the items. The item descriptive statistics revealed that the items were at different ends of the continuum. Item85, item82, item86, item87, item84 and item88 were significantly positively skewed (p<.05) and item82, item86, item87 were significantly (p<.05) leptokurtic. Item83, item84 and item88 were platykurtic, whilst item83 had a normal kurtosis and item83 a normal skewness. Differential item statistics therefore do not provide a plausible explanation for the extracted factor matrix. Table 4.33a moreover suggested that neither could the emergence of a second factor be explained in terms of the item analysis as none of the items were flagged as problematic.

Table 4.33a

Factor loadings for the Deceitfulness subscale (rotated pattern matrix)

	Factor	
	1	2
ITEM82	**.680**	.017
ITEM87	**.641**	.077
ITEM86	**.597**	-.108
ITEM88	**.397**	-.211
ITEM84	-.070	**-.819**
ITEM85	.039	**-.757**
ITEM83	.045	-**.333**

Table 4.33b

Descriptive statistics for the Deceitfulness subscale

		ITEM82	ITEM83	ITEM84	ITEM85	ITEM86	ITEM87	ITEM88
N	Valid	3912	3912	3912	3912	3912	3912	3912
	Mean	1.67	2.81	2.65	2.31	1.81	1.84	2.38
	Std. Deviation	.796	1.004	1.140	.975	.827	.929	.903
	Variance	.634	1.008	1.301	.951	.684	.862	.816
	Skewness	1.270*	-.067	-.311*	.560*	1.121*	1.120*	.399*
	Std. Error of Skewness	.039	.039	.039	.039	.039	.039	.039
	Kurtosis	1.792*	-.670*	1.254*	-.142	1.530*	.943*	-.198*
	Std. Error of Kurtosis	.078	.078	-.761*	.078	.078	.078	.078

To examine how well the 7 items represent a single underlying factor the items are meant to represent, a single factor was forced on the data. When forcing a single factor reasonably acceptable factor loadings ($.341 < \lambda_{i1} < .678$) for all items in this subscale were obtained. The results are shown in Table 4.33c below.

Table 4.33c

Factor matrix when forcing the extraction of a single factor (Deceitfulness subscale)

	Factor 1
ITEM85	.678
ITEM86	.630
ITEM84	.617
ITEM82	.575
ITEM88	.556

ITEM87	.490
ITEM83	.341

The residuals correlations (the discrepancy between the observed and reproduced inter-item correlations) were examined for both the two-factor and the one-factor solutions (see Appendix C). For the two factor solution, 4% of non-redundant residuals had absolute values greater than 0.05, thus suggesting that the rotated factor solution provided a very convincing explanation for the observed inter-item correlation matrix. This solution explained 56.822% of the total subscale variance in the initial solution but only 41.456% of the observed variance in the extracted solution.

For the one-factor solution a larger percentage (57%) of non-redundant residuals had absolute values greater than .05 thus suggesting that the forced single-factor solution did not provide a credible explanation for the observed inter-item correlation matrix. The one extracted factor accounted for 41,200% of the total subscale variance. This outcome suggested that the one factor solution is not credible as an explanation of the observed correlation matrix. The foregoing basket of evidence forces one to conclude that there is little support for the design assumption that all items comprising the Deceitfulness subscale reflect one indivisible underlying theme.

4.7.3.11 Dimensionality Analysis: Emotional Balance

For the Emotional Balance subscale two factors emerged. The results indicated that two factors should be extracted since two factors obtained an eigenvalue greater than one. The inflection point in the scree plot however suggested that only one factor be extracted (see Appendix C).

As can be seen (Table 4.34a), for factor 1, six of the eight items (item90, item91, item93, item94 and item95) had loadings greater than .30. The rest of the two items loaded negatively ($\lambda_{i2} > |.30|$) on factor 2 (item89 and item96). Based on an inspection of the wording of the items, factor 1 seems to represent a *calmness and resilience* facet of the domain emotional balance, whereas factor 2 talks about *accepting and respecting oneself.*

Descriptive statistics were reviewed to determine if the two-factor structure may be an artefact of differential skewness or kurtosis of the item distributions. The item descriptive statistics for the Emotional Balance subscale is reported in Table 4.34b. All of the items showed significant negative skewness and 5 items showed leptokutic kurtoses. Item91, item93 and item95 had a normal (significant) kurtosis. Differential skewness or kurtosis therefore did not offer a credible explanation for the extracted solution. Table 4.34a moreover suggested that the emergence of a second factor could also not be explained in terms of the item analysis as none of the items were flagged as problematic.

Table 4.34a

Factor loadings for the Emotional Balance subscale (rotated pattern matrix)

	Factor	
	1	**2**
ITEM90	**.703**	.114
ITEM91	**.636**	.058
ITEM93	**.614**	-.058
ITEM95	**.434**	-.126
ITEM94	**.419**	-.287
ITEM92	**.412**	-.214
ITEM96	.036	**-.805**
ITEM89	.005	**-.641**

Table 4.34b

Descriptive statistics for the Emotional Balance subscale

		ITEM89	ITEM90	ITEM91	ITEM92	ITEM93	ITEM94	ITEM95	ITEM96
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912
	Mean	4.30	3.82	3.61	4.04	3.66	3.99	3.66	3.99
	Std. Deviation	.769	.829	.961	.697	.890	.761	.858	.854
	Variance	.592	.687	.923	.485	.792	.579	.737	.730
	Skewness	-1.100*	-.552*	-.530*	-.700*	-.459*	-.788*	-.515*	-.844*
	Std. Error of Skewness	.039	.039	.039	.039	.039	.039	.039	.039
	Kurtosis	1.494*	.254*	-.143	1.510*	.082	1.334*	.152	.908*
	Std. Error of Kurtosis	.078	.078	.078	.078	.078	.078	.078	.078

When forcing the extraction of a single factor reasonably acceptable factor loadings (.515 < λ_{i1} < .648) for all items were obtained. The results for the single forced extracted factor are shown in Table 4.34c below.

Table 4.34c

Factor matrix when forcing the extraction of a single factor (Emotional Balance subscale)

	Factor 1
ITEM96	.648
ITEM94	.647
ITEM93	.624
ITEM92	.576
ITEM90	.549
ITEM91	.540
ITEM95	.519
ITEM89	.515

The residual correlations were examined for both the two-factor and the one-factor solution (see appendix C). For the two-factor solution a small percentage (7%) of non-redundant residuals had absolute values greater than .05 thus suggesting that the rotated two-factor solution provided a reasonably credible explanation for the observed correlation matrix. The two-factor solution explained 54.732% of the total subscale variance in the initial solution, but only 41.036% of the observed variance in the extracted solution. For the one-factor solution, a larger percentage (42%) of non-redundant residuals had absolute values greater than .05, thus suggesting that the forced factor solution did not provide a credible explanation for the observed correlation matrix. The one-factor solution accounted for 41.768% of the total subscale variance. The foregoing basket of evidence would suggest that the initial factor solution provided a more credible explanation of the observed inter-item correlation matrix. There was little evidence to support the design assumption that all items comprising the Emotional Balanced subscale reflect a single inseparable underlying theme.

4.7.3.12 Dimensionality Analysis: Negative Emotionality

The Negative Emotionality scale also presented a two-factor oblique factor structure as illustrated in Table 4.35a below. For factor 1, six out of the ten items (item97, item98, item99, item100, item103 and item104) had loadings greater than .30. The remaining four items (item101, item102, item105 and item106) loaded negatively on factor 2(λ_{i2} < |.30|). Based on an inspection of the wording of the items that loaded on factor 1, the theme that emerges for factor 1 seemed to refer to *propensity for being apprehension and experiencing deep emotion*, whereas factor 2 talks more about *getting angry quite easily and having a tendency to complain.*

The descriptive statistics (Table 4.37b) further revealed that 4 out of 10 items were distributed significantly negatively skewed (p<.05), 5 were distributed significantly positively skewed (p<.05) and 1 was distributed symmetrically. In terms of kurtosis, all the item distributions were platykurtic (p>.05) except for one that was leptokurtic, suggesting that the emergence of the two factors cannot be attributed to differential skewness or kurtosis in the items.

Table 4.35a

Factor loadings for the Negative Emotionality subscale (rotated pattern matrix)

	Factor	
	1	**2**
ITEM99	**.717**	-.016
ITEM104	**.649**	-.048
ITEM100	**.615**	-.079
ITEM98	**.610**	-.001
ITEM103	**.480**	.052
ITEM97	**.473**	.002
ITEM102	-.084	**-.862**
ITEM106	-.035	**-.777**
ITEM101	.184	**-.429**
ITEM105	.222	**-.359**

Table 4.35b

Descriptive statistics for the Negative Emotionality subscale

		ITEM97	ITEM98	ITEM99	ITEM100	ITEM101	ITEM102	ITEM103	ITEM104	ITEM105	ITEM106
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
	Mean	2.74	3.16	3.41	3.31	2.11	2.38	3.75	3.11	2.85	2.66
	Std. Deviation	1.233	1.160	1.092	1.069	.869	1.061	1.003	1.083	.965	1.071
	Variance	1.519	1.346	1.193	1.144	.755	1.126	1.005	1.173	.931	1.148
	Skewness	.297*	-.138*	-.238*	-.273*	.688*	.450*	-.576*	-.008	.102*	.346*
	Std. Error of Skewness	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
	Kurtosis	-.909*	-.927*	-.792*	-.694*	.475*	-.523*	-.262*	-.829*	-.513*	-.608*
	Std. Error of Kurtosis	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078

Upon forcing the extraction of a single-factor solution, all of items loaded satisfactorily on the single factor (.405 < λ_{i1} < .677). The results for the single forced extraction factor are shown in Table 4.35c below**.**

Table 4.35c

Factor matrix when forcing the extraction of a single factor (Negative Emotionality subscale)

	Factor 1
ITEM99	.677
ITEM104	.646
ITEM100	.644
ITEM102	.599
ITEM106	.588
ITEM98	.570
ITEM101	.536
ITEM105	.516
ITEM97	.442
ITEM103	.405

The residuals correlations were examined for both the two-factor and the one-factor solution. For the two-factor solution 15% of the non-redundant residuals had absolute values less than .05 thus suggesting that the rotated factor solution provided a convincing explanation for the observed inter-item correlation matrix. The two-factor solution explained 51.379% of the total subscale variance in the initial solution but only 40.504% of the observed variance in the extracted solution. For the one-factor solution a large percentage (48%) of non-redundant residuals had absolute values greater than .05 thus suggesting that the forced factor solution did not provide a credible explanation for the observed correlation matrix. The one extracted factor accounted for 38.836% of the total subscale variance (see Appendix C). This would suggest that the initial factor fissure solution would provide a more credible explanation of the observed correlation matrix, and that there was little support for the design assumption that all items comprising the Negative Emotionality -subscale reflect one inseparable underlying theme.

4.7.3.13 Dimensionality Analysis: Playfulness

The results indicated that only one factor should be extracted since only a single factor obtained an eigenvalue greater than one. The extracted factor structure is shown in Table 4.36. The scree plot also suggested the extraction of a single factor. The results indicated excellent loadings for items108 – item109 ($\lambda_{i1} > .70$) and acceptable loadings ($\lambda_{i1} > .30$) for item107, item111 and item112. Furthermore, in the residual correlation matrix only three (20%) of the residual correlations were greater than .05 suggesting that the factor solution provides a credible explanation for the observed inter-item correlation matrix. The uni-dimensionality assumption was thus corroborated for the Playfulness-subscale.

Table 4.36

Factor loadings for the Playfulness subscale

	Factor 1
ITEM110	.843
ITEM109	.757
ITEM108	.701
ITEM111	.603
ITEM107	.556
ITEM112	.534

4.7.3.14 Dimensionality Analysis: Sociability

The results indicated that only one factor should be extracted since only a single factor obtained an eigenvalue greater than one. The extracted factor structure is shown in Table 4.37. The scree plot also suggested the extraction of a single factor (see Appendix C). The results indicated excellent loadings for item114, item117 and item119 (λ_{i1} > .70) and acceptable loadings for item113, item115, item116 and item118 (λ_{i1} > .50). Furthermore, in the residual correlation matrix only two (9%) of the residual correlations were greater than .05 suggesting that the factor solution provides a highly credible explanation for the observed inter-item correlation matrix. The uni-dimensionality assumption was thus corroborated for the Sociability-subscale.

Table 4.37

Factor matrix for the Sociability subscale

	Factor 1
ITEM119	.839
ITEM117	.831
ITEM114	.728
ITEM115	.681
ITEM118	.634
ITEM116	.602
ITEM113	.552

4.7.3.15 Dimensionality Analysis: Achievement orientation

The Achievement orientation scale also presented a two-factor oblique factor structure as illustrated in Table 4.38a below. For factor 1, six (item123, item126, item127, item128, item129 and item130) out of the eleven items had loadings greater than .30. The remaining five items (item120, item121, item122, item124 and item125) loaded negatively on factor 2 (λ_{i2} > |.30|). Based on an inspection of the wording of the items loading on factor 1, the theme that emerges for factor 1 seemed to refer to *being hardworking, proactive and determined in completing task*s, whereas factor 2 talks more about *being motivated, goal driven and focused*. The two meanings are very similar in definition. The results shown in Table 4.38a can therefore be considered meaningful factor fission as both these two themes represent logical facets of the achievement orientation theme that the subscale was designed to measure.

The descriptive statistics calculated for the items of the Achievement orientation subscale (Table 4.38b) indicated that the two factors could not have emerged as a result of the differential kurtosis of the item distributions. The item distributions were all statistically significantly (p<.05) leptokurtic, except for item125 displayed significant (p<.05) negative skewness.

Table 4.38a

Factor loadings for the Achievement orientation subscale (rotated pattern matrix)

	Factor	
	1	**2**
ITEM128	**.736**	.107
ITEM127	**.662**	-.019
ITEM123	**.627**	.011
ITEM126	**.549**	-.231
ITEM129	**.515**	-.220
ITEM130	**.378**	-.185
ITEM121	-.126	**-.848**
ITEM120	.028	**-.635**
ITEM124	.254	**-.601**
ITEM122	.122	**-.561**
ITEM125	.191	**-.310**

Table 4.38b

Descriptive statistics for the Achievement orientation subscale

		ITEM120	ITEM121	ITEM122	ITEM123	ITEM124	ITEM125	ITEM126	ITEM127	ITEM128	ITEM129	ITEM130
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
	Mean	4.05	3.93	3.80	4.18	4.03	3.52	4.18	4.34	4.05	4.18	4.13
	Std. Deviation	.866	.899	3.80	.655	.787	1.025	.660	.642	.710	.658	.648
	Variance	.749	.808	3.80	.430	.619	1.051	.436	.412	.505	.432	.420
	Skewness	-.850*	-.772*	3.80	-.654*	-.701*	-.351*	-.602*	-.692*	-.639*	-.680*	-.449*
	Std. Error of Skewness	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
	Kurtosis	.702*	.502*	.400*	1.465*	.660*	-.532*	1.097*	.599*	1.028*	1.504*	.696*
	Std. Error of Kurtosis	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078

Upon forcing the extraction of a single-factor solution, all the items loaded satisfactorily on the single factor (.461 < λ_{i1} < .782). The results for the single forced extraction factor are shown in Table 4.38c below.

Table 4.38c

Factor matrix when forcing the extraction of a single factor (Achievement orientation subscale)

	Factor 1
ITEM124	.782
ITEM126	.719
ITEM129	.679
ITEM121	.630
ITEM127	.622
ITEM122	.621
ITEM120	.597
ITEM128	.570
ITEM123	.564
ITEM130	.521
ITEM125	.461

The residuals correlations were examined for both the two-factor and the one-factor solution (see Appendix C). For the two-factor solution 1% of the non-redundant residuals had absolute values less than .05 thus suggesting that the rotated factor solution provided an extremely convincing explanation for the observed inter-item correlation matrix. The two-factor solution explained 53.618% of the total subscale variance in the initial solution but only 43.995% of the observed variance in the extracted solution. For the one-factor solution a reasonably large percentage (34%) of non-redundant residuals had absolute values greater than .05 thus suggesting that the forced factor solution provided a somewhat tenuous explanation for the observed correlation matrix. The one extracted factor accounted for 43.898% of the total subscale variance. This would suggest that the two-factor solution would provide a more credible explanation of the observed correlation matrix.

4.7.3.16 Dimensionality Analysis: Orderliness

The assumption that the 13 items comprising the Orderliness subscale all reflect a single underlying personality factor was tested. Dimensionality analysis for the Orderliness subscale revealed a three factor structure. The first three factors had eigenvalues greater than 1. The scree plot also suggested the extraction of a three factor (see Appendix C).

The three factors that that were extracted for the Orderliness subscale could be meaningfully interpreted. From the rotated factor matrix (Table 4.39a), a pattern of loadings emerged that only allowed a somewhat tenuous stance on the identity of the three extracted factors. Factor 1 had four items (item134, item140, item141 and item142) with factor loadings greater than .30. Four items (item131, item135, item136 and item137) loaded on Factor 2. Four items (item132, item133, item138 and item139) loaded on factor 3. Item143 did not load on any of the three extracted factors. Factor 1 could somewhat tentatively be described as an *individual's inclination to be persistent and timely*. Factor 2 could somewhat cautiously be interpreted as *an individual's tendency to be organised*. Factor 3 could cautiously be interpreted as *an individual's tendency to be detail orientated and accurate.*

The descriptive statistics were reviewed (Table 4.39a) and revealed that all thirteen item distributions indicated statistically significant ($p<.05$) negative skewness. The distribution of all items, except for item140 (mesokurtic) were significantly leptokurtic ($p<.05$). Neither the differential skewness nor kurtosis corresponded to the factor loading pattern in Table 4.39a. The extracted factor structure can therefore not be ascribed to differential skewness or kurtosis in the item distributions.

Table 4.39a

Factor loadings for the Orderliness subscale (rotated pattern matrix)

	Factor		
	1	**2**	**3**
ITEM140	**.857**	-.071	-.055
ITEM142	**.805**	-.018	-.037
ITEM141	**.505**	.115	.176
ITEM134	**.447**	.103	.140
ITEM143	.301	.154	.112
ITEM135	-.028	**.828**	-.046
ITEM131	-.048	**.787**	.021
ITEM137	.077	**.660**	.009
ITEM136	.294	**.395**	.179
ITEM138	.096	-.070	**.755**
ITEM132	.020	.035	**.681**
ITEM139	.013	.136	**.643**
ITEM133	-.048	-.036	**.596**

Table 4.39b

Descriptive statistics for the Orderliness subscale

		ITEM131	ITEM132	ITEM133	ITEM134	ITEM135	ITEM136	ITEM137	ITEM138	ITEM139
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912
	Mean	4.04	4.14	3.86	4.01	3.84	3.97	3.89	4.06	4.00
	Std. Deviation	.859	.700	.827	.780	.887	.836	.827	.656	.726
	Variance	.738	.490	.684	.609	.787	.699	.684	.430	.527
	Skewness	-.705*	-.653*	-.614*	-.577*	-.586*	-.716*	-.587*	-.435*	-.593*
	Std. Error of Skewness	.039	.039	.039	.039	.039	.039	.039	.039	.039
	Kurtosis	.194*	.941*	.293*	.334*	.099	.486*	.307*	.797*	.730*
	Std. Error of Kurtosis	.078	.078	.078	.078	.078	.078	.078	.078	.078

		ITEM140	ITEM141	ITEM142	ITEM143
N	Valid	3912	3912	3912	3912
	Mean	4.01	4.00	3.93	3.93
	Std. Deviation	.790	.690	.757	.775
	Variance	.624	.476	.574	.600
	Skewness	-.701*	-.566*	-.601*	-.620*
	Std. Error of Skewness	.039	.039	.039	.039
	Kurtosis	.670*	.992*	.701*	.765*
	Std. Error of Kurtosis	.078	.078	.078	.078

When forcing the extraction of a single factor, the loadings of the 13 items were generally high ($\lambda_{i1} > .30$). The results for the single forced extraction factor are shown in Table 4.39c below.

Table 4.39c

Factor matrix when forcing the extraction of a single factor (Orderliness subscale)

	Factor 1
ITEM136	.736
ITEM141	.683
ITEM139	.678
ITEM138	.670
ITEM132	.632
ITEM142	.620
ITEM140	.600
ITEM137	.598

ITEM134	.592
ITEM131	.592
ITEM135	.580
ITEM143	.485
ITEM133	.446

The residuals correlations were examined for both the three-factor and the one-factor solution (see Appendix C). For the three-factor solution 1% of non-redundant residuals had absolute values less than .05 thus suggesting that the rotated factor solution provided an extremely convincing explanation for the observed inter-item correlation matrix. This solution explained 61.119% of the total subscale variance in the initial solution but only 50.405% of the observed variance in the extracted solution. For the one-factor solution 48% of non-redundant residuals had absolute values greater than .05 thus suggesting that the forced single factor solution did not provide a convincing explanation for the observed inter-item correlation matrix. The one extracted factor accounted for 42.279% of the total subscale variance. This would suggest that the initial factor fissure solution would statistically provide a more plausible explanation of the observed correlation matrix, and that there is questionable support for the design assumption that all items comprising the Orderliness subscale reflect one indivisible underlying theme.

4.7.3.17 Dimensionality Analysis: Traditionalism-Religiosity

The correlation matrix indicated that the matrix was factor analysable as all the correlations were bigger than .30 and all were statistically significant ($p<.05$) providing further support that the matrix was factor analysable. The scale obtained a KMO of .645 and the Bartlett"s Test of Spherically allowed for the identity matrix null hypothesis to be rejected, thus there was evidence that the correlation matrix was factor analysable.

The eigenvalue-greater-than-one rule suggested the extraction of one factor whereas the scree plot, suggests extracting 2 factors (see Appendix C). The factor matrix indicated that all the items loaded satisfactorily on the single extracted factor ($\lambda_{i1} >.50$). The resultant factor structure is shown in Table 4.40a.

Table 4.40a

Factor structures for the Traditionalism-Religiosity subscale

	Factor 1
ITEM147	.803
ITEM145	.764
ITEM146	.556
ITEM144	.509

A disappointingly large percentage (100%) of the non-redundant residual correlations obtained absolute values greater than .05. The credibility of the extracted factor solution was therefore aggressively challenged. The high percentage large residual correlations suggested the presence of a second factor. When requesting SPSS to extract a second factor the pattern matric shown in Table 4.40b emerged.

Table 4.40b

Rotated two-factor structure for the Traditionalism-Religiosity subscale

	Factor	
	1	**2**
ITEM145	**.853**	-.018
ITEM147	**.845**	.021
ITEM144	-.024	**.719**
ITEM146	.030	**.716**

Table 4.40b indicates that item145 and item147 load on factor 1 while the remaining two items load on factor 2. The factor fission seems to be rather subtle. Factor 1 seems to *refer to religion*, whereas factor 2 talks *more about culture and tradition*. For the forced two-factor solution 0% of the non-redundant residual correlations had absolute values greater than .05, this suggests a highly satisfactory percentage. This indicated that the forced 2-factor solution provided a far more credible account of the process that brought about the observed inter-item correlation matrix. The results shown in Table 4.40a can therefore be considered meaningful factor fission as both these two themes represent logical facets of the Traditionalism-Religiosity theme that the subscale was designed to measure.

4.7.3.18 Dimensionality Analysis: Broadmindedness

The Broadmindedness scale also presented a two-factor oblique factor structure as illustrated in Table 4.41a below. For factor 1, only three items (item149, item150, and item153) had loadings greater than .30. Factor 1 seemed to focus on *a person's propensity to seek out adventure and variety*. Three items loaded negatively (λ_{i2} > |.30|) on factor 2 (item148, item151 and item152). Factor 2 seemed to talk more about *a person's tendency to be ideas orientated and imaginative.*

The descriptive statistics calculated for the items of the Broadmindedness-subscale (Table 4.41b) indicated that the two factors could not have emerged as a result of the differential kurtosis of the item distributions. The item descriptive statistics revealed that the items were all significantly negatively skewed (p<.05) and that all items except for item152 were significantly (p<.05) leptokurtic. Differential item statistics therefore do not provide a plausible explanation for the extracted factor matrix.

Table 4.41a

Factor loadings for the Broadmindedness subscale (rotated pattern matrix)

	Factor	
	1	2
ITEM153	**.704**	.110
ITEM149	**.666**	-.072
ITEM150	**.596**	-.159
ITEM152	-.054	**-.854**

ITEM148	.040	**-.605**
ITEM151	.285	**-.318**

Table 4.41b

Descriptive statistics for the Broadmindedness subscale

		ITEM148	ITEM149	ITEM150	ITEM151	ITEM152	ITEM153
N	Valid	3912	3912	3912	3912	3912	3912
	Mean	3.94	3.88	4.20	3.96	3.68	. 4.37
	Std. Deviation	.902	.826	.437	.820	.697	.703
	Variance	.813	.909	.661	.673	.835	.495
	Skewness	-.715*	-.686*	-.646*	-.679*	-.324*	-1.137*
	Std. Error of Skewness	.039	.039	.039	.039	.039	.039
	Kurtosis	.193*	.197*	1.223*	.384*	-.114	1.898*
	Std. Error of Kurtosis	.078	.078	.078	.078	.078	.078

Upon forcing the extraction of a single-factor solution, all of items loaded satisfactorily on the single factor ($.517 < \lambda_{i1} < .685$). The results for the forced single-factor solution are shown in Table 4.41c below.

Table 4.41c

Factor matrix when forcing the extraction of a single factor (Broadmindedness - subscale)

	Factor 1
ITEM150	.685
ITEM149	.658
ITEM152	.610
ITEM151	.546
ITEM148	.541
ITEM153	.517

The residuals correlations were examined for both the two-factor and the one-factor solution (see Appendix C). For the two-factor solution all non-redundant residuals had absolute values less than .05 thus suggesting that the rotated factor solution provided an extremely convincing explanation for the observed inter-item correlation matrix. The two-factor solution explained 63.017% of the total subscale variance in the initial solution but only 46.118% of the observed variance in the extracted solution. For the one-factor solution a large percentage (53%) of non-redundant residuals had absolute values greater than .05 thus suggesting that the forced single-factor solution did not provide a credible explanation for the observed correlation matrix. The one extracted factor accounted for 46.078% of the total subscale variance. This would suggest that the initial factor fissure solution would provide a more credible explanation of the observed correlation matrix, and that there was little support for the design assumption that all items comprising the Broadmindedness -subscale reflect one inseparable underlying theme.

4.7.3.19 Dimensionality Analysis: Epistemic Curiosity

The uni-dimensionality assumption that the 6 items comprising the Epistemic Curiosity subscale all reflect a single underlying personality factor was tested. The results indicated that only one factor should be extracted since only a single factor obtained an eigenvalue greater than one.

The extracted factor structure is shown in Table 4.42. The scree plot, in-line with the above, also suggested the extraction of a single factor (see appendix C). Item157 had an excellent loading on the single factor ($\lambda_{i1} > .70$). The factor matrix further indicated that for the other items (item154, item155, item156 and item158) acceptable loadings were obtained ($\lambda_{i1} > .70$). Item159 obtained a satisfactory loading approaching .50. Furthermore, in the residual correlation matrix only one (6%) of the residual correlations was greater than .05 suggesting that the factor solution provided a credible explanation for the observed inter-item correlation matrix. The uni-dimensionality assumption was therefore corroborated for this subscale.

Table 4.42

Factor matrix for the Epistemic Curiosity subscale

	Factor 1
ITEM157	.751
ITEM158	.687
ITEM156	.568
ITEM155	.527
ITEM154	.520
ITEM159	.490

4.7.3.20 Dimensionality Analysis: Intellect

The design intention was that the 11 items written for the Intellect subscale should all reflect a single underlying personality dimension. The results suggested that two factors were required to satisfactorily explain the observed correlations between the items of the Intellect -subscale. Two factors obtained eigenvalues greater than one and the scree plot suggested the extraction of two factors (see Appendix C). The two-factor oblique factor structure is illustrated in Table 4.43a below.

Table 4.43a

Factor loadings for the Intellect subscale (rotated pattern matrix)

	Factor	
	1	**2**
ITEM168	**.594**	-.102
ITEM167	**.557**	-.063
ITEM166	**.556**	-.018
ITEM169	**.542**	.094
ITEM165	**.536**	.058
ITEM162	**.481**	-.112
ITEM164	**.454**	-.040
ITEM170	**.420**	-.109
ITEM163	-.024	**-.826**
ITEM160	.018	**-.635**
ITEM161	.150	**-.413**

Eight out of eleven items (item162, item164, item165, item166, item167, item168, item169 and item170) loaded on factor 1 with loadings greater than .30. Factor 1 seemed to focus on a *person's ability to problem solve, adapt and innovate*. The rest of the items (item160, item161 and item163) loaded on factor 2 ($\lambda_{i2} > |.30|$). Factor 2 can tentatively be interpreted as *being knowledgeable and quick to learn*.

The descriptive statistics calculated for the items of the Intellect subscale (Table 4.43b) indicated that the two factors unlikely could have emerged as a result of the differential kurtosis or skewness of the item distributions. The item descriptive statistics revealed that the items were all significantly negatively skewed (p<.05) and that all items except for item164 were significantly (p<.05) leptokurtic. Table 4.43a moreover suggested that the emergence of a second factor could also not be explained in terms of the item analysis as none of the items were flagged as problematic.

Table 4.43b

Descriptive statistics for the Intellect subscale

		ITEM160	ITEM161	ITEM162	ITEM163	ITEM164	ITEM165	ITEM166	ITEM167	ITEM168	ITEM169	ITEM170
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
	Mean	4.31	3.96	3.93	4.02	3.48	4.21	3.76	3.89	3.74	4.20	3.96
	Std. Deviation	.678	.750	.788	.693	1.029	.677	.657	.727	.748	.615	.738
	Variance	.460	.562	.621	.480	1.058	.459	.431	.528	.559	.378	.544
	Skewness	-.970*	-.496*	-.557*	-.491*	-.456*	-.782*	-.398*	-.612*	-.371*	-.612*	-.558*
	Std. Error of Skewness	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
	Kurtosis	2.009*	.315*	.335*	.620*	-.327*	1.572*	.779*	.851*	.240*	1.971*	.601*
	Std. Error of Kurtosis	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078

To examine how well the 11 items represent a single underlying factor the items are meant to represent, a single factor was forced on the data. When forcing a single factor reasonably acceptable factor loadings ($.437 < \lambda_{i1} < .661$) for all items in this subscale were obtained. The results are shown in Table 4.43c below.

Table 4.43c

Factor matrix when forcing the extraction of a single factor (Intellect -subscale)

	Factor 1
ITEM168	.661
ITEM163	.643
ITEM167	.590
ITEM162	.562
ITEM166	.548
ITEM160	.546
ITEM170	.500
ITEM161	.499
ITEM164	.473
ITEM165	.462
ITEM169	.437

The residuals correlations (the discrepancy between the observed and reproduced inter-item correlations) were examined for both the two-factor and the one-factor solutions. For the three factor solution, 10% of non-redundant residuals had absolute values greater than 0.05, thus suggesting that the rotated factor solution provided a convincing explanation for the observed inter-item correlation matrix.

This solution explained 45.355% of the total subscale variance in the initial solution but only 34.234% of the observed variance in the extracted solution. For the one-factor solution a larger percentage 21%) of non-redundant residuals had absolute values greater than .05 thus suggesting that the forced factor solution provided a fairly convincing explanation for the observed inter-item correlation matrix. The single extracted factor accounted for 35.709% of the total subscale variance. This outcome suggests that the one factor solution does provide a credible, albeit not the most plausible, explanation as to why the subscale items correlate the way they do in the observed correlation matrix.

4.8 SUMMARY OF THE DIMENSIONALITY RESULTS

The architecture of the SAPI reflects a specific design intention and this intention is also reflected in the scoring key of the SAPI. The design of the SAPI questionnaire reflects the developer's intention to construct twenty fundamentally one-dimensional sets of items that are designed to reflect variance in each of the twenty latent personality dimensions collectively comprising the personality construct. Each of the twenty latent personality dimensions carry a specific connotative meaning. The SAPI items were designed to function as relatively uniform stimulus sets to which prospective applicants respond with behaviour that is a relatively uncontaminated expression of these particular underlying latent personality dimensions. Specific items were designed (written) for each subscale in the belief that the manner in which testees respond to them will reflect their standing on one of these twenty specific latent first order personality dimensions. The SAPI items are believed to express behavioural manifestations of these twenty specific first-order personality dimensions. The SAPI does not formally make provision for the additional subdivision of the personality construct into finer facets of personality.

The results of the dimensionality analyses indicated that the assumption that the twenty latent personality dimensions are inseparable dimensions of the personality construct was not supported for thirteen of the twenty subscales. In three out of the thirteen subscales an obliquely rotated three-factor solution had to be assumed and in the remaining subscales an obliquely rotated two-factor solution had to be assumed to obtain an adequate explanation of the observed correlation matrix. In five of these subscales, the rotated factor solution could be meaningfully theoretically interpreted. Conversely in eight of these cases the identity of the underlying factors (apart from their one/first factor) proved to be somewhat elusive. Moreover, in ten of the cases the factor solution was suggested by the eigenvalue-greater-than-unity rule. In three of the cases the extraction of a second factor was suggested by an unacceptably large percentage of large residual correlations.

The results of the dimensionality analyses seem to suggest that the majority of the items generally do systematically reflect their designated latent variables with reasonable success. In the case of the thirteen subscales that failed the uni-dimensionality assumption, the researcher forced SPSS to extract a single factor in ten of the cases that presented more than one factor due to the eigenvalue-greater-than-unity rule. Differential skewness and kurtosis was examined to determine whether the extracted factor structure could be explained in terms of systematic differences in item statistics. For all the subscales, neither differential skewness nor differential kurtosis was found to offer a plausible account for the extracted factors.

For ten of the thirteen subscales, the residuals correlations were examined for the three-factor, two-factor and the one-factor solutions. Of major importance is that for 9 of the 13 subscales, the residuals calculated from the inter-item correlation matrix and the reproduced matrix indicated that the initial solutions, prior to forcing a single factor, provided a substantially more convincing explanation for the observed inter-item correlation matrix than the single-factor solution. This is suggestive that the personality dimensions measured by nine out of the thirteen subscales should rather be interpreted as second-order personality factors on which two first-order factors load. For the remaining 4 of the 13 subscales, the residuals calculated from the inter-item correlation matrix and the reproduced matrix indicated that the solutions after forcing a single factor provided a substantially more convincing explanation for the observed inter-item correlation matrix than the initial multi-factor solution.

In the thirteen cases where factor fission occurred, the identity of the extracted factors could be determined by distilling common themes from the wording of the items that loaded on each of the extracted factors. In all cases the extracted factors had shown themselves to be meaningful facets of the latent first-order personality dimension they were developed to reflect. Although these facets were not upfront acknowledged in the constitutive definition of the latent first-order personality dimensions the qualitative development history of the SAPI nonetheless implicitly acknowledged that the twenty latent first-order personality dimensions arose out of narrower, more-specific behavioural personality descriptors. The question that should be asked is whether the responses to the items currently comprising each of the twenty SAPI subscales may permissibly be interpreted as reflecting testees' standing on the specific latent first-order personality dimension it was earmarked to reflect. As was acknowledged earlier, fitting first- and second-order measurement models via confirmatory factor analyses, in addition to the exploratory factor analyses performed in the current study would have assisted in arriving at a more definite stance on the matter than the current study was able to achieve. This is acknowledged as a limitation.

The idea behind the dimensionality analyses was to provide insight into the functioning of the SAPI scales. In addition to this, the analyses aided in gaining an understanding of the psychometric integrity of the indicator variables that were tasked to represent each of the latent personality variables. In this regard, although no conclusive evidence can be derived from the current data set, the evidence that emerged from the dimensionality analysis is fairly consistent with the position that the subscales do reflect the intended latent variables. Confronting the respective subscale measurement models with the current data set via a series of confirmatory factor analyses utilising LISREL would, however, have shed further light on the credibility of this assumption. To really substantiate such a claim would however require firstly fitting the comprehensive SAPI measurement model and (assuming acceptable model fit) subsequently expanding the measurement model implied by the scoring key into a structural model implied by the constitutive definition of personality as seen by the SAPI.

The following section will discuss the analyses performed on the data to test the statistical null hypotheses formulated in Chapter 3.

4.9 EVALUATION OF THE FIRST-ORDER SAPI MEASUREMENT MODEL

In general the main goal of the SAPI is to measure a personality construct that is multifaceted and that has a specific connotative meaning attached to it. The operational denotations designed are used to intentionally and clearly reflect a test taker's stance on the latent personality dimensions. As was explained in previous chapters, the items in the SAPI questionnaire are assumed to serve as stimulus sets which would encourage test takers to respond with behaviour which would be behavioural expressions of specific personality dimensions. The overarching question that needs to be answered therefore is to what extent this premeditated operational design succeeds in providing a valid measure of the personality construct as was constitutively defined by the developers.

4.9.1 VARIABLE TYPE

The process used to develop the SAPI purposefully generated items to reflect each of the 20 latent personality dimensions comprising the personality construct. The overall aim of this study is to evaluate whether this specific design intention of the SAPI succeeded. The ideal approach therefore would have been to fit a measurement model in which the individual items served as indicator variables of the latent personality dimensions.

The number of observations in the data set and the number of freed parameters in the measurement model in which the individual items served as indicators was far too large to allow the measurement model syntax to be run interactively via the standard 32-bit version of LISREL 8.8 (Du Toit & Du Toit, 2001). A temporary license for a 64-bit version of LISREL 8.8 was consequently obtained. The measurement model syntax file in addition was run in batch mode via the disk operating system. Despite these measures the measurement model syntax file failed to execute successfully due to lack of sufficient memory to calculate the asymptotic covariance matrix (Gerhard Mels, personal communication, 11 May 2017). The only practical option was to combine items into parcels to reduce the order of the asymptotic covariance matrix. It is acknowledged that methodologically it would have been preferable to have fitted the measurement model with the individual items as indicators.

In this study item parcels were consequently created as the only practicable solution to perform a confirmatory factor analysis on the sample available. Thus, item parcels, containing between 2 and 3 items in each sub-scale, were formed. The composite indicator variables were subsequently imported into PRELIS. When item parcels are utilised it (1) simplifies the logistics when attempting to fit the measurement model; (2) it makes fitting the model on the current data set a feasible exercise and (3) as linear composites of items, also results in more reliable indicator variables (Nunnally; 1978). In this study, the item parcels were interpreted as continuous variables and as such the analysis of the covariance matrix via maximum likelihood (or robust maximum likelihood), instead of the polychoric correlation matrix estimation was consequently considered permissible (Jöreskog & Sörbom 1996a; 1996b; Mels, 2003).

4.9.2 UNIVARIATE AND MULTIVARIATE NORMALITY

When a measurement model is fitted using continuous data, maximum likelihood estimation is used as the default method to derive estimates for the freed measurement model parameters. This method of estimation, assumes that the data follow a multivariate normal distribution (Kaplan, 2000). The analysis of continuous non-normal variables in measurement and structural equation models that was not done properly can result in incorrect standard errors and chi-square estimates (Du Toit & Du Toit, 2001; Mels, 2003). Consequently the univariate and multivariate normality of the composite indicator variables were evaluated via PRELIS (Jöreskog & Sörbom, 1996b) before fitting the first-order measurement model (see Appendix C). The results of the test of multivariate are shown in Table 4.44.

Table 4.44

Test of multivariate normality for item parcels

Skewness			Kurtosis			Skewness and Kurtosis	
Value	Z-Score	P-Value	Value	Z-Score	P-Value	Chi-Square	P-Value
288.869	187.170	0.000	7634.592	103.283	0.000	45699.944	0.000

The null hypothesis of univariate normality had to be rejected for all indicator items (p<.05) (see Appendix C). The results presented in Table 4.44 indicated that the null hypothesis of multivariate normality also had to be rejected (p<.05). The possibility of remedying the situation by normalising the SAPI indicator variables via PRELIS was examined first. The results of the test for multivariate normality for the normalised indicator variable distribution are summarised in Table 4.45.

Table 4.45

Test of multivariate normality for item parcels (after normalisation)

Skewness			Kurtosis			Skewness and Kurtosis	
Value	Z-Score	P-Value	Value	Z-Score	P-Value	Chi-Square	P-Value
244.071	143.100	0.000	7395.373	95.093	0.000	29520.500	0.000

Table 4.45 indicates that even though the skewness and kurtosis of the multivariate item indicator variable distribution improved due to the normalisation, the null hypothesis of multivariate normality still had to be rejected ($p<.05$). Generalised least squares (GLS) and full information maximum likelihood (FIML) could be used as possible alternative estimation methods for structural equation modelling when the data fail to meet the multivariate normality assumption (Mels, 2003). In the current study robust maximum likelihood estimation (Mels, 2003) was used to estimate the freed measurement model parameters. Since the attempt at normalisation improved the deviation of the observed multivariate distribution from the theoretical multivariate normal distribution as reflected in the chi-square statistics (even if only marginally), the normalised data was used to fit the first- and second-order measurement models. In addition, co-variance matrices and asymptotic covariance matrices were calculated from the transformed/normalised data set to act as input for the LISREL analyses.

4.9.3 ASSESSING THE OVERALL GOODNESS-OF-FIT OF THE FIRST-ORDER SAPI MEASUREMENT MODEL

LISREL 8.8 (Du Toit & Du Toit, 2001) was used to perform a confirmatory factor analysis on the first-order SAPI measurement model to determine the fit of the first-order measurement mode and to evaluate the statistical significance and magnitude of the freed measurement model parameter estimates. The exact fit null hypothesis was tested that the measurement model is able to reproduce the observed covariance matrix to an extent of accuracy that could be explained in terms of sampling error only:

H_{01}: RMSEA=0

H_{a1}: RMSEA>0

Furthermore, if it is assumed that the measurement model underlying the SAPI only approximates the processes that operated in reality to create the observed co-variance matrix, the following close fit null hypothesis (H02) was also tested (Browne & Cudeck, 1993)[20]

H_{02}: RMSEA≤.05

H_{a2}: RMSEA>.05

The model was fitted by analysing the covariance matrix calculated from the item parcel data set. Moreover, item parcels were treated as continuous variables. A final solution of parameter estimates for the SAPI measurement model was produced through robust maximum likelihood estimation after thirteen iterations.

Table 4.46 presents the full array of fit statistics calculated by LISREL to assess the absolute and comparative fit of the measurement model. The overarching aim of this section is to assess the goodness of fit of the measurement model. A final conclusion, with regards to overall model fit, was based on the full spectrum of indices provided by LISREL to assess the absolute and comparative fit as opposed to basing the final decision on any single indicator of fit (Bollen and Long, 1993; Schumacker and Lomax, 1996; Diamantopoulos and Siguaw, 2000, Thompson and Daniel, 1996 and Thompson, 1997).

In evaluating model fit, the evaluation of the fit indices were combined with an evaluation of the magnitude and distribution of the standardised residuals and an evaluation of the number of large modification indices calculated for the factor loading and theta-delta error variance matrices.

[20] It is argued by Browne and Cudeck (1993, p. 137) that:
In applications of the analysis of co-variance structures in the social sciences it is implausible that any model that we use is anything more than an approximation to reality. Since a null hypothesis that a model fits exactly in some population is known a priori to be false, it seems pointless even to try to test whether it is true.

Table 4.46

Goodness of fit statistics of the SAPI First order measurement model

Degrees of Freedom	2812
Minimum Fit Function Chi-Square	28243.713 (P = .0)
Normal Theory Weighted Least Squares Chi-Square	33460.911 (P = .0)
Satorra-Bentler Scaled Chi-Square	28603.964 (P = .0)
Chi-Square Corrected for Non-Normality	46400.364 (P = .0)
Estimated Non-centrality Parameter (NCP)	25791.964
90 Percent Confidence Interval for NCP	(25251.992 ; 26338.161)
Minimum Fit Function Value	7.222
Population Discrepancy Function Value (F0)	6.595
90 Percent Confidence Interval for F0	(6.457 ; 6.734)
Root Mean Square Error of Approximation (RMSEA)	0.0484
90 Percent Confidence Interval for RMSEA	(.0479 ; .0489)
P-Value for Test of Close Fit (RMSEA < .05)	1.000
Expected Cross-Validation Index (ECVI)	7.492
90 Percent Confidence Interval for ECVI	(7.354 ; 7.631)
ECVI for Saturated Model	1.616
ECVI for Independence Model	268.804
Chi-Square for Independence Model with 3081 Degrees of Freedom	1051135.007
Independence AIC	1051293.007
Model AIC	22979.964
Saturated AIC	6320.000
Independence CAIC	1051867.480
Model BIC	5344.370
Model CAIC	2532.370
Saturated CAIC	29298.901
Normed Fit Index (NFI)	.973
Non-Normed Fit Index (NNFI)	.973
Parsimony Normed Fit Index (PNFI)	.888
Comparative Fit Index (CFI)	.975
Incremental Fit Index (IFI)	.975
Relative Fit Index (RFI)	.970
Critical N (CN)	409.738
Root Mean Square Residual (RMR)	.0268
Standardised RMR	.0585
Goodness of Fit Index (GFI)	.822
Adjusted Goodness of Fit Index (AGFI)	.800
Parsimony Goodness of Fit Index (PGFI)	.731

4.9.3.1 Overall Fit Assessment

The Satorra-Bentler chi square calculated in terms of the robust maximum likelihood estimation procedure returned a statistically significant value (28603.964; p<.05). As a result, the hypothesis of exact model fit (H_{01}:RMSEA=0) was rejected. What this implies is that the SAPI measurement model was not able to reproduce the observed co-variance matrix to a degree of accuracy that could be explained in terms of sampling error alone. Nevertheless, due to the chi-square statistic's sensitivity to deviations from multivariate normality (specifically excessive kurtosis), sample size, and the somewhat idealistic stance that the model fits the population perfectly, it is suggested by Kaplan (2000, p. 84) that "instead of regarding χ^2 as a test statistic, one should regard it as a goodness (or badness) of fit measure in the sense that large χ^2-values correspond to bad fit and small values to good fit".

Furthermore, it is recommended by Diamantopoulos and Siguaw (2000) that the degree of lack of fit of the model should be assessed. In this case it was done through the estimated non-centrality parameter. Treating the chi-square as a descriptive badness-of-fit measure by expressing the minimum fit function chi-square estimate in terms of the degrees of freedom ($\chi^2/df = 10.044$), suggested that the model does not fit the observed data even at the liberal limit of 5.0 (Theron & Spangenberg, 2004). Kelloway (1998), however, advises that these guidelines have little justification and thus recommends against a strong reliance on the normed chi-square. As was mentioned earlier, the assumption of the chi-square that the model fits the population perfectly is highly unlikely and thus the rejection of the null hypothesis of exact model fit was not surprising.

In most instances the *a priori* measurement model is only an approximation to reality, which means the χ^2 test statistic would follow a non-central χ^2 distribution with non-centrality parameter, λ. The estimated λ value (25791.964) assesses the degree of model fit and reflects the estimated discrepancy between the observed (Σ) and estimated population co-variance ($\Sigma(\theta)$) matrices. An estimate of λ is obtained by subtracting the degrees of freedom from the chi-square statistic. The larger the λ, the farther apart the true hypothesis is from the null hypothesis. Based on the 90 percent confidence interval (25251.992; 26338.161) the λ value fell somewhat to the lower limit of the interval. The large value obtained indicated a higher level of discrepancy between (Σ) and ($\Sigma(\theta)$) at a 10% significant level.

In addition, the measurement model was fitted by minimising the fit function that compares the observed sample co-variance matrix (S) to the reproduced sample co-variance matrix (S^) derived from the model parameter estimates (Jöreskog & Sörbom, 1993). An indication of the model fit achieved in this case, was depicted by the extent to which the minimum fit function value (7.222) approaches zero. The estimated population function value (F_0) reflects the extent to which the observed population co-variance matrix (Σ) is estimated to differ from the reproduced population co-variance (Σ^) resulting from the parameters minimising the selected discrepancy function fitting the model on Σ (Brown & Cudeck, 1993). An estimate value of 6.595 was obtained for F_0 with confidence interval limits of 6.457 and 6.734. A perfect fit would have been achieved if F_0 was equal to 0 because the observed population co-variance matrix would then have been the same as the estimated population co-variance matrix (Σ^) (Spangenberg and Theron, 2004).

The root mean square of approximation (RMSEA) indicates how well the model (with unknown but optimally chosen parameter estimates) would fit the population co-variance matrix (Byrne, 1998). The RMSEA express the differences that exist between the observed and estimated sample co-variance matrices with regards to the degrees of freedom of the model (Steiger, 1990). Here values below .05 indicate good fit in the sample and RMSEA smaller than .08 indicate reasonable fit. As soon as values are greater than .08 it indicates poor fit in the sample. The RMSEA statistic is one of the most informative fit indices and is calculated as follows: $(F_0 / df)^{½}$, where F_0 is the population discrepancy function value and df represents the degrees of freedom (Diamantopoulos and Siguaw, 2000). Thus, a value of zero would indicate the absence of any discrepancy, and would therefore entail a perfect model fit to the data (Mulaik & Millsap, 2000). The RMSEA value of .0484 indicated a good model fit in the sample. The 90 percent confidence interval for RMSEA shown in Table 4.46 (.0479; .0489) indicated that the fit of the model could be regarded as good as the upper bound of the interval fell below the critical cut-off value of .05. In addition, a test of significance of the obtained value was also performed by LISREL by testing H_{02}: RMSEA≤ .05 against H_{a2}: RMSEA> .05. The probability of observing a sample RMSEA value of .0484 under H_{02} was significantly larger (1.00) than the critical p-value of .05. The close fit null hypothesis was therefore not rejected at a 5% significant level (p>.05) and thus it is concluded that the measurement model showed close fit in the parameter as well as very good fit in the sample.

The expected cross-validation index (ECVI) focus is on the discrepancy between the reproduced sample co-variance matrix (Σ^) that is derived from fitting the model on the sample at hand, and the expected co-variance matrix that would be obtained in an independent sample of the same size, from the same population (Byrne, 1998; Diamantopoulos & Siguaw, 2000).The ECVI focuses on overall error and is therefore a valuable indicator of a model's overall fit (Diamantopoulos & Siguaw, 2000). Since the model ECVI (7.492) was far smaller than the value obtained for the independence model (268.804) but larger than the ECVI value associated with the saturated model (1.616), a model more closely resembling the saturated model seemed to have a better chance of being replicated in a cross-validation sample than the fitted model (Diamantopoulos & Siguaw, 2000).

Evaluating the values of the Akaike information criterion (AIC = 22979.964) presented in Table 4.46 suggested that the fitted measurement model provided a more parsimonious fit than the independent/null model (1051293.007) but not the saturated model (6320.000) since smaller values on these indices indicate a more parsimonious model (Kelloway, 1998). This showed that the measurement model may lack some influential paths. Values derived for the consistent Akaike information criterion (2532.370) suggested that the fitted measurement model provided a more parsimonious fit than both the independent model (1051867.480) and the saturated model (29298.901). This provided further support for the fitted model.

The various incremental fit indices as reported by LISREL are presented in Table 4.46. These indices include the normed fit index (NFI=.973), the non-normed fit index (NNFI=.973), the comparative fit index (CFI=.975), the incremental fit index (IFI=.975) and the relative fit index (RFI=.970) which can all assume values between 0 and 1, with .90 generally considered as indicative of a well-fitting model. All of the aforementioned indices exceeded the critical value of .90 (as well as the more ambitious critical value of .95), thus indicating good comparative fit relative to the independence model.

The critical sample size statistic (CN) refers to the size of the sample that would have made the obtained minimum fit function χ^2 statistic just significant at the 5% significant level. The estimated CN value (409.738) fell well above the recommended threshold value of 200 which implies that the model provided an sufficient representation of the data (Diamantopoulos & Siguaw, 2000), although this proposed threshold should be used with circumspection.

The root mean square residual (RMR) reflects the square root of the mean squared difference between the sample co-variance matrix and the reproduced co-variance matrix derived from the fitted measurement model. The range of the RMR is calculated based upon the scales of each indicator variable, which makes this index sensitive to the unit of measurement of the model variables and as a result it becomes difficult to determine what a low score is (Diamantopoulos & Siguaw, 2000). The standardised RMR (SRMR) resolves this problem and is thus more meaningful to interpret. Values for the SRMR range from 0 to 1 with well-fitting models obtaining values less than .05 (Byrne, 1998; Diamantopoulos & Siguaw, 2000), however values as high as .08 are deemed acceptable (Hu & Bentler, 1999). The RMR (.0268) and the SRMR (.0585) indicated reasonable to good fit as values less than .05 on the SRMR index suggest the model fits the data well (Kelloway, 1998).

The goodness-of fit (GFI) statistic was created as an alternative to the chi-square test (Jöreskog & Sorböm, 2003). This statistic serves to calculate the proportion of variance that is accounted for by the estimated population co-variance and determines how closely the model comes to replicating the observed co-variance matrix (Hooper et al., 2008). This statistic ranges from 0 to 1 with larger samples increasing its value. Recommendations for GFI cut-off values are .90 and when factor loadings and samples sizes are low, a cut-off value of .95 is required. Related to the GFI is the adjusted goodness-of-fit statistic (AGFI) which adjusts the GFI based upon degrees of freedom. Like the RMSEA, these indices also favour more parsimonious models but get penalised for model complexity. As with the GFI, indications of good model fit is confirmed by values in the range of 0 and 1 with a generally accepted value of .90. Furthermore, AGFI also tends to increase with sample size (Hooper et al., 2008). Evaluating the fit of the model in terms of these two indices, both GFI (.822) and AGFI (.800) portrayed only moderately satisfactory model fit. However, given the often detrimental effect of sample size on these two fit indices they are not really relied upon as stand-alone indices (Kelloway, 1998).

The parsimonious goodness-of-fit index (PGFI) and the parsimonious normed fit index (PNFI) acknowledges that model fit can be improved by adding paths to the model and estimating more parameters until perfect fit is achieved in the form of a saturated or just identified model with no degrees of freedom (Kelloway, 1998). The ideal is, therefore, to find the most parsimonious model that achieves satisfactory fit with the least parameters as possible (Jöreskog & Sorböm, 1993). The parsimonious goodness-of-fit index (PGFI=.731) and the parsimonious normed fit index (PNFI=.888 approach model fit from this perspective. Both of these indices have a range from 0 to 1, with higher values indicating a more parsimonious fit, however, neither is likely to reach the .90 cut-off score as used for other indices and there is no recommendation for how high either index should be to indicate parsimonious fit (Kelloway, 1998).

The foregoing interpretation of the spectrum of fit indices produces by LISREL 8.8 and shown in Table 4.46, gave rise to the conclusion that the first-order SAPI measurement model fitted the data reasonably well. Nonetheless, to ensure a thorough assessment of model fit, the standardised residuals and modification indices were also investigated to further determine the success with which the model explained the observed co-variances amongst the indicator/manifest variables (Jöreskog & Sörbom, 1993).

4.9.3.2 Examination of Residuals

LISREL provides a summary of the largest and smallest standardised co-variance residuals (in contrast to observational residuals) as well as a stem-and-leaf plot that describes how the residuals are distributed around the median residual. Figure 4.1 provides the stem-and-leaf plot of standardised co-variance residuals for the SAPI measurement model.

```
-18|7
-16|1
-14|9309
-12|9875543386521000
-10|87765444332099999877655532222221000000
- 8|99888877766665555554443333322222221000988777776665555555444444443333322+19
- 6|99999998887777776666665555555444444443332222222211111110000000009999998+71
- 4|9999999888888888887777777777777766666666666666555555555555555555555555544444+92
- 2|99999999999999999999999999988888888888888888888888877777777777777777777777666+94
- 0|9999999999999999999988888888888888888888887777777777777777777777777777766666+96
  0|111111111111111111111111111111111122222222222222222222222222222222223333333333+93
  2|0000000000000000000000111111111111111111111111122222222222222222222222222223333+98
  4|00000000000000000001111111111111111111122222222222222222222223333333333333333+98
  6|000000000000000111111111222222222233333333444444444555555555666666677777777+84
  8|000000011111223333344444455555566677777788888999990001122223333334455666+10
 10|000122222334445555667777788890011222334669
 12|0133344556901124456799
 14|1223678802369
 16|257933
 18|91
```

Figure 4.1 Stem-and-leaf plot the standardised residuals

Standardised co-variance residuals can be interpreted as z-scores (i.e. in terms of the number of standard deviation the co-variance residual fall above or below the mean). On a 1% significance level standardised residuals can be considered large if they exceed +2.58 or -2.58 (Diamantopoulos & Siguaw, 2000). Standardised residuals should also be distributed approximately symmetrical around the median residual and the median residual should ideally be centred on zero. Large residuals would be indicative of co-variance relationships (or the lack thereof) between indicator variables that the model fails to explain. More specifically, large positive residuals would indicate that the model underestimates the co-variance between two variables and thus would imply the need for additional explanatory paths, whereas, large negative residuals would suggests that the model overestimates the co-variance between two observed variables, implying the need to prune paths away.

The distribution of standardised residuals appears to be r, slightly negatively skewed with numerous large negative standardised residuals and a smaller number of large positive standardised residuals. Figure 4.1 shows that both the smallest (-19.685) and the largest (19.127) standardised residual fell well outside the 1% significance limits of ± 2.58. The fitted measurement model resulted in 903 large negative residuals and 883 large positive residuals. This means that 1786 out of 3160 observed co-variance terms in the observed sample co-variance matrix (56.55%) were poorly estimated by the derived model parameter estimates. The slight preponderance of large negative residuals, moreover, suggested that some of the paths have to be pruned away to improve model fit. These results go against the relatively positive conclusion of model fit that was suggested by the goodness of-fit statistics in Table 4.46. It should be acknowledged that the multivariate normality assumption was not met. As such the interpretation of the residual co-variances in terms of the normal distribution is therefore not permissible (Mels, personal communication, 14 August, 2014). Stronger emphasis therefore had to be placed on the inferences derived from the basket of fit statistics reported in Table 4.46. Moreover the standard deviation that serves as denominator in the calculation of the z-scores tend to decrease as sample size increase resulting in even modest unstandardised residuals, more easily being transformed to large standardised residuals.

The Q-plot depicted in Figure 4.2, provides an further graphical display of residuals by plotting the standardised residuals (horisontal axis) against the quantiles of the normal distribution (Diamantopoulos & Siguaw, 2000). For the data to indicate good model fit, the points should fall on the 45-degree reference line (Jöreskog & Sörbom, 1993). The more the data points swivel away from the 45-degree reference line, the less satisfactory model fit becomes. The Q-plot in Figure 4.2 indicates less than perfect model fit as the standardised residuals for most pairs of observed variables show progressively large angular deviations from the 45-degree reference line in both the lower- and upper region of the X-axis. The inference derived from the Q-plot also goes against the relatively positive conclusion of model fit that was suggested by the goodness-of-fit statistics in Table 4.46.

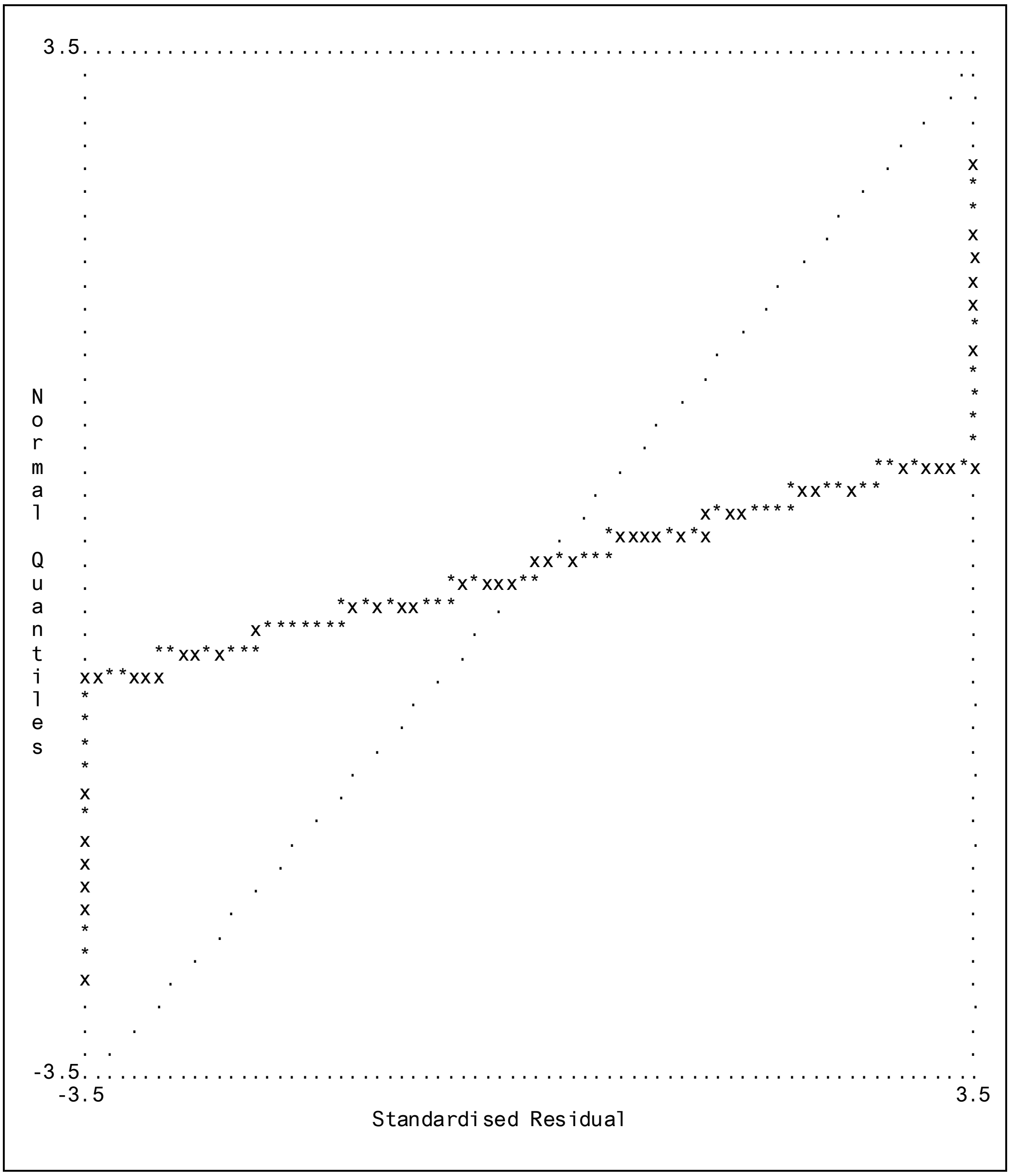

Figure 4.2 Q-plot of standardised residuals

This finding is in-line with the results reported in Figure 4.1. However, these results are, to some extent in conflict with the model fit conclusion derived from the array of fit statistics portrayed in Table 4.46. The foregoing analysis does not suggest that the fit of the model might be improved through the addition of one or more paths. Rather the preponderance of large negative residuals would suggest a need to remove paths from the model. Subsequently, this possibility was further reviewed and is discussed in the next section.

4.9.3.3 Model modification indices

Model modification indices indicate the extent to which the model's normal theory χ^2 fit statistic would decrease if a currently fixed parameter was set free and the model was re-estimated (Jöreskog & Sörbom, 1993). They are aimed at answering the question whether any of the currently fixed parameters, when set free in the model, would significantly ($p<.01$) improve the parsimonious fit of the model. Large modification index values (>6.6349) provide an indication as to which parameters, if set free, would statistically significantly improve the fit of the model at a 1% significant level (Diamantopoulos & Siguaw, 2000). This should however only be done if the researcher can substantively defend such modifications by presenting a convincing theoretical argument to prove why it would make theoretical sense to do so (Diamantopoulos & Siguaw, 2000; Kelloway, 1998). In this study, however, the purpose was not to improve the fit of the measurement model but rather to evaluate the fit of the *a priori* model indicated by the SAPI test developers by expressing the number of large modification index values in terms of the total number of fixed parameters in the Λ^X and Θ_δ matrices. If only a small percentage of all possible ways of adding to the model would result in statistically significant improvements in model fit, this would comment positively on model fit.

Chi-square values exceeding 6.6349 indicate parameters that would statistically significantly improve the fit of the model when they are freed ($p<.01$). Modification indices calculated for the factor loading matrix ($\boldsymbol{\Lambda}^X$) identify 1030 additional paths that will have a significant positive impact on model fit. Therefore 1030 out of 1501 (68.62%) possible additions to Λ^X will result into an improved model fit (p<.01)[21]. This finding essentially corroborated the conclusion derived from the expected cross-validation index (ECVI) and the consistent Akaike information criterion (CAIC), but contradicted the inference derived from the inspection of the stem-and-leaf plot of the standardised residuals. The large percentage of statistically significant modification indices calculated for Λ^X along with the conclusion derived from the expected cross-validation index (ECVI) and the consistent Akaike information criterion (CAIC) suggested that the current model's claim that each sub-scale of items only reflects a single underlying personality dimension should be questioned. In addition, the magnitude of the predicted factor loadings that would be found if currently fixed elements in Λ^X would be freed was also investigated. It was however revealed that the completely standardised expected change values calculated by LISREL, had no loadings exceeding the stringent cut-off level of .50.

Even though the large percentage of statistically significant modification indices suggests that substantial improvement in fit may be obtained from modifying the factor loadings from fixed to free, substantive justification could not be found for making any *post hoc* modifications to the measurement model. Specifically SAPI items were written to function as stimulus sets to which respondents should respond with behaviour which should be a relatively uncontaminated behavioural expression of a specific latent personality dimension. The foregoing results, nonetheless, suggested that some of the items also provide information on latent variables they were not designed to reflect. Upon inspection of the modification indices calculated for the measurement error variance-co variance matrix, approximately 31.68% (972 out of 3081) of the co-variance terms currently fixed to zero, would have significantly improved model fit if they were set free. The magnitude of the completely standardised expected change values, however, do not support making this decision due to the absence of strong correlations between the measurement error terms. This finding therefore commented favourably on the fit of the SAPI measurement model.

It should be noted that, for this study, a conservative approach of upholding the original design intentions was followed. No alterations were made to the model although it could

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[21] It is acknowledged that this procedure could be criticised in the sense that the freeing of the currently fixed factor loading with the largest modification index value could result in the dissolve some of the existing significant modification index values. The procedure therefore probably provides a stringent assessment of model fit.

significantly improve the fit of the measurement model. The objective of the research is to evaluate the construct validity of the SAPI in its current format and the researcher had no mandate to alter the design of the instrument.

Taking the total basket of evidence on the fit of the first-order measurement model into account it was concluded that the model showed reasonable fit. In the evaluation of the fit of the first-order measurement the interpretation the fit statistics were weighted more heavily than the interpretation of the standardised covariance residuals and the modification indices calculated for Λ^X and Θ_δ**.**

4.9.4 EVALUATION OF THE PARAMETER ESTIMATES FOR THE FIRST ORDER MEASUREMENT MODEL

When a measure is designed to provide a valid reflection of a specific latent variable, then the slope of the regression of X_j on ξ_k in the fitted measurement model has to be substantial and statistically significant ($p<.05$) (Diamantopoulos and Siguaw (2000). The unstandardised factor loading matrix (**Λ^X**) (see Table 4.47) contains the slope of the regression of the unstandardised individual item parcel X_j on the unstandardised latent personality dimensions ξ_k, and was used to evaluate the statistical significance of the first-order factor loadings hypothesised by the proposed first-order measurement model expressed as equation 1. The results depicted in Table 4.47 signify that all the freed first-order factor loadings were statistically significant ($p<.05$). Significant loadings are indicated by t-values greater than |1.96| in the matrix. All 126 null hypotheses H_{0i}: $\lambda_{jk}=0$; i=3, 4, …, 81; j=1, 2, …, 79; k=1, 2, …, 20 can therefore be rejected in favour of H_{ai}: $\lambda_{jk}\neq0$; i=3, 4, …, 81; j=1, 2, …, 79; k=1, 2, …, 210. All item parcels therefore reflect the performance dimension they were designed to measure.

Table 4.47

SAPI measurement model unstandardised lambda-X matrix

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC
EMP_P1	.489 (.009) 54.898	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EMP_P2	.359 (.007) 48.458	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EMP_P3	.472 (.008) 57.888	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FAC_P1	--	.536 (.009) 60.915	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FAC_P2	--	.591 (.009) 63.420	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FAC_P3	--	.573 (.010) 59.027	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	--
FAC_P4	--	.530 (.009) 60.474	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FAC_P5	--	.452 (.009) 51.779	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INT_P1	--	--	.391 (.009) 44.487	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INT_P2	--	--	.358 (.007) 51.294	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INT_P3	--	--	.353 (.008) 45.140	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4.47 (continued)

SAPI measurement model unstandardised lambda-X matrix

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC
INT_P4	- -	--	.381 (.009) 41.087	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INT_P5	--	--	.335 (.007) 46.065	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INT_P6		--	.351 (.007) 52.774	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IPR_P1	--	--	--	.367 (.009) 38.811	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IPR_P2	--	--	--	.448 (.010) 46.528	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	--
IPR_P3	--	--	--	.380 (.008) 47.480	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IPR_P4	--	--	--	.363 (.008) 46.770	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SOC_P1	--	--	--	--	.513 (.009) 59.787	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SOC_P2	--	--	--	--	.496 (.008) 59.585	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WAR_P1	--	--	--	--	--	.401 (.007) 53.746	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WAR_P2	--	--	--	--	--	.414 (.008) 50.637	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4.47 (continued)

SAPI measurement model unstandardised lambda-X matrix

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC
WAR_P3	- -	--	--	--	--	0.414 (.007) 55.327	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WAR_P4	--	--	--	--	--	.404 (.007) 55.234	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WAR_P5		--	--	--	--	.388 (.007) 51.785	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARR_P1	--	--	--	--	--	--	.608 (.011) 57.471	--	--	--	--	--	--	--	--	--	--	--	--	--
ARR_P2	--	--	--	--	--	--	.603 (.010) 62.238	--	--	--	--	--	--	--	--	--	--	---	--	--
ARR_P3	--	--	--	--	--	--	.491 (.012) 42.627	--	--	--	--	--	--	--	--	--	--	--	--	--
CON_P1	--	--	--	--	--	--	--	.575 (.013) 45.906	--	--	--	--	--	--	--	--	--	--	--	--
CON_P2	--	--	--	--	--	--	--	.476 (.008) 56.949	--	--	--	--	--	--	--	--	--	--	--	--
CON_P3	--	--	--	--	--	--	--	.451 (.009) 49.352	--	--	--	--	--	--	--	--	--	--	--	--
HOS_P1	--	--	--	--	--	--	--	--	.512 (.011) 46.563	--	--	--	--	--	--	--	--	--	--	--
HOS_P2	--	--	--	--	--	--	--	--	.411 (.011) 38.817	--	--	--	--	--	--	--	--	--	--	--
HOS_P3	--	--	--	--	--	--	--	--	.430 (.008) 52.110	--	--	--	--	--	--	--	--	--	--	--

Table 4.47 (continued)

SAPI measurement model unstandardised lambda-X matrix

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEA R	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC
HOS_P4	- -	--	--	--	--	--	--	--	.420 (.010) 41.892	--	--	--	--	--	--	--	--	--	--	--
HOS_P5	--	--	--	--	--	--	--	--	.496 (.008) 58.918	--	--	--	--	--	--	--	--	--	--	--
HOS_P6		--	--	--	--	--	--	--	.418 (.010) 40.639	--	--	--	--	--	--	--	--	--	--	--
HOS_P7	--	--	--	--	--	--	--	--	.498 (.012) 41.639	--	--	--	--	--	--	--	--	--	--	--
DEC_P1	--	--	--	--	--	--	--	--	--	.511 (.010) 50.948	--	--	--	--	--	--	--	---	--	--
DEC_P2	--	--	--	--	--	--	--	--	--	.405 (.012) 34.821	--	--	--	--	--	--	--	--	--	--
DEC_P3	--	--	--	--	--	--	--	--	--	.577 (.011) 51.566	--	--	--	--	--	--	--	--	--	--
EMO_P1	--	--	--	--	--	--	--	--	--	--	.449 (.011) 41.836	--	--	--	--	--	--	--	--	--
EMO_P2	--	--	--	--	--	--	--	--	--	--	.455 (.011) 42.588	--	--	--	--	--	--	--	--	--
EMO_P3	--	--	--	--	--	--	--	--	--	--	.510 (.010) 49.470	--	--	--	--	--	--	--	--	--
EMO_P4	--	--	--	--	--	--	--	--	--	--	.494 (.010) 51.863	--	--	--	--	--	--	--	--	--
NEG_P1	--	--	--	--	--	--	--	--	--	--	--	.614 (.014) 45.364	--	--	--	--	--	--	--	--

Table 4.47 (continued)

SAPI measurement model unstandardised lambda-X matrix

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC
NEG_P2	- -	--	--	--	--	--	--	--	--	--	--	.594 (.012) 48.400	--	--	--	--	--	--	--	--
NEG_P3	--	--	--	--	--	--	--	--	--	--	--	.661 (.014) 48.679	--	--	--	--	--	--	--	--
NEG_P4		--	--	--	--	--	--	--	--	--	--	.535 (.012) 44.528	--	--	--	--	--	--	--	--
NEG_P5	--	--	--	--	--	--	--	--	--	--	--	.561 (.012) 47.024	--	--	--	--	--	--	--	--
PLA_P1	--	--	--	--	--	--	--	--	--	--	--	--	.584 (.013) 45.239	--	--	--	--	---	--	--
PLA_P2	--	--	--	--	--	--	--	--	--	--	--	--	.624 (.010) 60.419	--	--	--	--	--	--	--
SOB_P1	--	--	--	--	--	--	--	--	--	--	--	--	--	.686 (.012) 58.846	--	--	--	--	--	--
SOB_P2	--	--	--	--	--	--	--	--	--	--	--	--	--	.563 (.009) 60.152	--	--	--	--	--	--
SOB_P3	--	--	--	--	--	--	--	--	--	--	--	--	--	.720 (.012) 62.414	--	--	--	--	--	--
ACH_P1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.438 (.009) 50.909	--	--	--	--	--
ACH_P2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.505 (.009) 56.940	--	--	--	--	--
ACH_P3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.510 (.009) 54.396	--	--	--	--	--

Table 4.47 (continued)
SAPI measurement model unstandardised lambda-X matrix

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC
ACH_P4	- -	--	--	--	--	--	--	--	--	--	--	--	--	--	.388 (.008) 51.198	--	--	--	--	--
ACH_P5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.513 (.009) 58.378	--	--	--	--	--
ORD_P1		--	--	--	--	--	--	--	--	--	--	--	--	--	--	.446 (.009) 47.520	--	--	--	--
ORD_P2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.463 (.008) 55.017	--	--	--	--
ORD_P3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.435 (.009) 48.547	--	---	--	--
ORD_P4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.485 (.009) 52.913	--	--	--	--
ORD_P5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.494 (.009) 52.136	--	--	--	--
ORD_P6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.505 (.008) 63.255	--	--	--	--
TRA_P1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.691 (.015) 46.117	--	--	--
TRA_P2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.820 (.013) 62.296	--	--	--
BRO_P1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.437 (.009) 47.429	--	--
BRO_P2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--.558 (.010) 55.152	--	--

Table 4.47 (continued)

SAPI measurement model unstandardised lambda-X matrix

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC
BRO_P3	- -	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.465 (.009) 52.598	--	--
EPI_P1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.335 (.008) 42.123	--
EPI_P2		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.389 (.007) 52.510	--
EPI_P3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.399 (.007) 58.510	--
ITL_P1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	.371 (0.009) 43.531
ITL_P2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.321 (.008) 39.618
ITL_P3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.476 (.009) 50.859
ITL_P4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.414 (.009) 47.810
ITL_P5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.402 (.009) 46.233

However, Diamantopoulos and Siguaw (2000), warn that there is a problem with only relying on unstandardised loadings and their associated t-values. The problem is that unstandardised loadings retain scaling information of variables and thus can only be interpreted with reference to the scales of the variable in question. Unstandardised factor loadings can therefore not be compared across items unless the items are expressed in the same metric. In the current case the interpretation of the unstandardised factor loadings therefore presented less of a problem. This problem can be avoided by examining the magnitude of the completely standardised solution, in which both latent and manifest variables have been standardised. The completely standardised factor loading values shown in Table 4.48 can be interpreted as the slope of regression of the standardised indicator variables on the standardised latent variables. The completely standardised parameter estimates are described by Spangenberg and Theron (2005) as reflecting the average change in standard deviation units in the manifest variable X_j (i.e., individual item parcels), directly resulting from a one standard deviation change in the exogenous latent variable to which it has been linked, holding the effect of all other variables constant. In this study the critical requirement that standardised factor loadings should be .50 or higher has been set. Most of the loadings in the factor loading matrix (55) exceed the critical value of .71 suggested by Hair et al. (2006) for individual items. Twenty-one item parcels have loadings lower than this cut-off value but still higher than .60. Three item parcels loaded lower than .60 but higher than .50. The item parcels therefore generally do represent the latent performance dimension that they were designed to reflect acceptably well. It does not necessarily mean that all the items comprising the parcel also represent the latent variable well if the item parcels all load well to reasonably well on each of the latent performance dimensions they were tasked to represent. There could be poor items hiding in the item parcel. Although this effect is minimised in this study through the small number of items included in each item this fact nonetheless precludes a really confident verdict on the success with which the individual items comprising the SAPI performed the task that was assigned to them during the design and development of the instrument.

The square of the completely standardised factor loadings indicate the proportion of indicator variance explained in terms of the latent variable it is meant to express (Diamantopoulos & Siguaw, 2000). Since each indicator only loads on a single latent variable the squared completely standardised loadings equal the R^2 values shown below in Table 4.49. The proportion of the variance in the observed variable that is explained by the latent variable linked to it in the measurement model is indicated by the squared multiple correlations (R^2) for the observed indicator variables as shown in Table 4.49.

Table 4.48

SAPI measurement model completely standardised solution lambda-X matrix

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC
EMP_P1	.791	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EMP_P2	.713	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EMP_P3	.789	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FAC_P1	--	.822	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FAC_P2	--	.830	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FAC_P3	--	.790	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	--
FAC_P4	--	.819	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FAC_P5	--	.765	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INT_P1	--	--	.644	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INT_P2	--	--	.705	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INT_P3	--	--	.630	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INT_P4	--	--	.616	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INT_P5	--	--	.672	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INT_P6	--	--	.735	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IPR_P1	--	--	--	.639	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IPR_P2	--	--	--	.680	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	--
IPR_P3	--	--	--	.706	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IPR_P4	--	--	--	.712	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SOC_P1	--	--	--	--	.845	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SOC_P2	--	--	--	--	.831	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WAR_P1	--	--	--	--	--	.744	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WAR_P2	--	--	--	--	--	.719	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WAR_P3	- -	--	--	--	--	.778	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WAR_P4	--	--	--	--	--	.772	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WAR_P5		--	--	--	--	.745	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARR_P1	--	--	--	--	--	--	.779	--	--	--	--	--	--	--	--	--	--	--	--	--
ARR_P2	--	--	--	--	--	--	.825	--	--	--	--	--	--	--	--	--	--	---	--	--
ARR_P3	--	--	--	--	--	--	.655	--	--	--	--	--	--	--	--	--	--	--	--	--
CON_P1	--	--	--	--	--	--	--	.675	--	--	--	--	--	--	--	--	--	--	--	--
CON_P2	--	--	--	--	--	--	--	.770	--	--	--	--	--	--	--	--	--	--	--	--
CON_P3	--	--	--	--	--	--	--	.718	--	--	--	--	--	--	--	--	--	--	--	--
HOS_P1	--	--	--	--	--	--	--	--	.674	--	--	--	--	--	--	--	--	--	--	--
HOS_P2	--	--	--	--	--	--	--	--	.583	--	--	--	--	--	--	--	--	--	--	--
HOS_P3	--	--	--	--	--	--	--	--	.701	--	--	--	--	--	--	--	--	--	--	--

Table 4.48 (continued)

SAPI measurement model completely standardised solution lambda-X matrix

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC
HOS_P4	- -	--	--	--	--	--	--	--	.631	--	--	--	--	--	--	--	--	--	--	--
HOS_P5	--	--	--	--	--	--	--	--	.773	--	--	--	--	--	--	--	--	--	--	--
HOS_P6		--	--	--	--	--	--	--	.623	--	--	--	--	--	--	--	--	--	--	--
HOS_P7	--	--	--	--	--	--	--	--	.596	--	--	--	--	--	--	--	--	--	--	--
DEC_P1	--	--	--	--	--	--	--	--	--	.739	--	--	--	--	--	--	--	---	--	--
DEC_P2	--	--	--	--	--	--	--	--	--	.566	--	--	--	--	--	--	--	--	--	--
DEC_P3	--	--	--	--	--	--	--	--	--	.740	--	--	--	--	--	--	--	--	--	--
EMO_P1	--	--	--	--	--	--	--	--	--	--	.627	--	--	--	--	--	--	--	--	--
EMO_P2	--	--	--	--	--	--	--	--	--	--	.673	--	--	--	--	--	--	--	--	--
EMO_P3	--	--	--	--	--	--	--	--	--	--	.734	--	--	--	--	--	--	--	--	--
EMO_P4	--	--	--	--	--	--	--	--	--	--	.767	--	--	--	--	--	--	--	--	--
NEG_P1	--	--	--	--	--	--	--	--	--	--	--	.678	--	--	--	--	--	--	--	--
NEG_P2	- -	--	--	--	--	--	--	--	--	--	--	.697	--	--	--	--	--	--	--	--
NEG_P3	--	--	--	--	--	--	--	--	--	--	--	.702	--	--	--	--	--	--	--	--
NEG_P4		--	--	--	--	--	--	--	--	--	--	.657	--	--	--	--	--	--	--	--
NEG_P5	--	--	--	--	--	--	--	--	--	--	--	.689	--	--	--	--	--	--	--	--
PLA_P1	--	--	--	--	--	--	--	--	--	--	--	--	.700	--	--	--	--	---	--	--
PLA_P2	--	--	--	--	--	--	--	--	--	--	--	--	.889	--	--	--	--	--	--	--
SOB_P1	--	--	--	--	--	--	--	--	--	--	--	--	--	.815	--	--	--	--	--	--
SOB_P2	--	--	--	--	--	--	--	--	--	--	--	--	--	.813	--	--	--	--	--	--
SOB_P3	--	--	--	--	--	--	--	--	--	--	--	--	--	.836	--	--	--	--	--	--
ACH_P1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.714	--	--	--	--	--
ACH_P2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.777	--	--	--	--	--
ACH_P3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.752	--	--	--	--	--
ACH_P4	- -	--	--	--	--	--	--	--	--	--	--	--	--	--	.714	--	--	--	--	--
ACH_P5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.791	--	--	--	--	--
ORD_P1		--	--	--	--	--	--	--	--	--	--	--	--	--	--	.683	--	--	--	--
ORD_P2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.774	--	--	--	--
ORD_P3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.717	--	---	--	--
ORD_P4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.732	--	--	--	--
ORD_P5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.737	--	--	--	--
ORD_P6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.830	--	--	--	--
TRA_P1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.741	--	--	--
TRA_P2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.958	--	--	--
BRO_P1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.701	--	--
BRO_P2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.783	--	--
BRO_P3	- -	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.762	--	--
EPI_P1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.612	--

Table 4.48 (continued)

SAPI measurement model completely standardised solution lambda-X matrix

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC
EPI_P2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.728	--
EPI_P3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.802	--
ITL_P1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	.656
ITL_P2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.613
ITL_P3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.718
ITL_P4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.708
ITL_P5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.704

Here, a high R^2 value is preferred as it would indicate that the variance in the concerned indictor, to a large degree, reflects variance in the latent variable to which it has been linked. As far as the rest of the variance is concerned that was not explained by the latent variable, they can be attributed to systematic and random measurement error (Diamantopoulos & Siguaw, 2000).

Table 4.49

SAPI measurement model squared multiple correlations for item parcels

EMP_P1	**EMP_P2**	**EMP_P3**	**FAC_P1**	**FAC_P2**	**FAC_P3**	**FAC_P4**	**FAC_P5**	**INT_P1**	**INT_P2**	**INT_P3**
.625	.508	.622	.675	.689	.624	.671	.585	.415	.497	.396
INT_P4	**INT_P5**	**INT_P6**	**IPR_P1**	**IPR_P2**	**IPR_P3**	**IPR_P4**	**SOC_P1**	**SOC_P2**	**WAR_P1**	**WAR_P2**
.379	.451	.541	.408	.462	.499	.507	.713	.690	.554	.518
WAR_P3	**WAR_P4**	**WAR_P5**	**ARR_P1**	**ARR_P2**	**ARR_P3**	**CON_P1**	**CON_P2**	**CON_P3**	**HOS_P1**	**HOS_P2**
.606	.595	.555	.607	.680	.429	.455	.593	.515	.455	.340
HOS_P3	**HOS_P4**	**HOS_P5**	**HOS_P6**	**HOS_P7**	**DEC_P1**	**DEC_P2**	**DEC_P3**	**EMO_P1**	**EMO_P2**	**EMO_P3**
.492	.399	.598	.388	.355	.546	.320	.547	.394	.452	.539
EMO_P4	**NEG_P1**	**NEG_P2**	**NEG_P3**	**NEG_P4**	**NEG_P5**	**PLA_P1**	**PLA_P2**	**SOB_P1**	**SOB_P2**	**SOB_P3**
.589	.460	.486	.493	.431	.475	.490	.791	.664	.660	.699
ACH_P1	**ACH_P2**	**ACH_P3**	**ACH_P4**	**ACH_P5**	**ORD_P1**	**ORD_P2**	**ORD_P3**	**ORD_P4**	**ORD_P5**	**ORD_P6**
.510	.603	.565	.510	.626	.466	.600	.514	.536	.543	.689
TRA_P1	**TRA_P2**	**BRO_P1**	**BRO_P2**	**BRO_P3**	**EPI_P1**	**EPI_P2**	**EPI_P3**	**ITL_P1**	**ITL_P2**	**ITL_P3**
.549	.917	.492	.613	.580	.374	.530	.644	.430	.376	.515
ITL_P4	**ITL_P5**									
.501	.495									

Spangenberg and Theron (2004) explain the total variance in the i^{th} item parcel (X_j) is composed of the following:

- Variance in the latent variable the item set was meant to reflect (ξ_k),
- Variance due to variance in the other systematic latent effects the item parcel was not designed to reflect, and
- Variance due to random measurement error.

The R^2 values shown in Table 4.49 indicate the proportion of variance in the item parcel that can be explained in terms of the variance in the latent variable it was tasked to reflect. The results mirror the conclusion derived from the inspection of the completely standardised factor loadings in Table 4.48. Hair et al.'s (2006) critical factor loading of .71 implies a critical R^2 value of .50. In this case of only 31out of 79 item parcels the latent variable of interest explain less than 50% of the variance in the item parcel. In all cases the latene first-order personality dimensions explained more than 25% of the variance in the item parcels that were designed to reflect them.

The unstandardised measurement error variances for the item parcels are reflected in Table 4.50 and the completely standardised measurement error variances in Table 4.51.

Table 4.50

Unstandardised measurement error variances

EMP_P1	**EMP_P2**	**EMP_P3**	**FAC_P1**	**FAC_P2**	**FAC_P3**	**FAC_P4**	**FAC_P5**	**INT_P1**	**INT_P2**	**INT_P3**
.143	.125	.135	.138	.157	.198	.137	.145	.216	.130	.190
(.006)	(.004)	(.004)	(.005)	(.005)	(.006)	(.005)	(.005)	(.006)	(.004)	(.005)
25.383	30.415	30.543	30.464	30.784	30.963	29.499	31.537	36.298	32.561	35.821
INT_P4	**INT_P5**	**INT_P6**	**IPR_P1**	**IPR_P2**	**IPR_P3**	**IPR_P4**	**SOC_P1**	**SOC_P2**	**WAR_P1**	**WAR_P2**
.237	.136	.104	.195	.233	.145	.128	.106	.111	.129	.160
(.007)	(.004)	(.003)	(.006)	(.006)	(.004)	(.004)	(.004)	(.005)	(.004)	(.005)
36.450	34.339	31.951	30.355	37.918	35.544	33.696	24.105	23.686	34.755	34.794
WAR_P3	**WAR_P4**	**WAR_P5**	**ARR_P1**	**ARR_P2**	**ARR_P3**	**CON_P1**	**CON_P2**	**CON_P3**	**HOS_P1**	**HOS_P2**
.111	.111	.121	.239	.171	.321	.397	.156	.191	.314	.328
(.004)	(.003)	(.003)	(.008)	(.007)	(.009)	(.011)	(.005)	(.006)	(.008)	(.008)
31.006	33.277	35.111	28.566	24.407	36.993	35.409	30.743	31.186	39.013	40.579
HOS_P3	**HOS_P4**	**HOS_P5**	**HOS_P6**	**HOS_P7**	**DEC_P1**	**DEC_P2**	**DEC_P3**	**EMO_P1**	**EMO_P2**	**EMO_P3**
.191	.266	.166	.276	.450	.217	.349	.276	.311	.251	.222
(.005)	(.008)	(.005)	(.007)	(.011)	(.007)	(.009)	(.009)	(.008)	(.007)	(.007)
35.881	34.950	31.960	37.808	40.101	31.658	39.740	31.407	38.159	34.673	33.034
EMO_P4	**NEG_P1**	**NEG_P2**	**NEG_P3**	**NEG_P4**	**NEG_P5**	**PLA_P1**	**PLA_P2**	**SOB_P1**	**SOB_P2**	**SOB_P3**
.171	.442	.373	.450	.378	.347	.354	.103	.238	.163	.223
(.006)	(.012)	(.011)	(.013)	(.010)	(.010)	(.012)	(.008)	(.008)	(.005)	(.008)
30.609	36.047	33.883	33.721	36.662	33.720	30.336	12.386	29.725	30.306	27.410
ACH_P1	**ACH_P2**	**ACH_P3**	**ACH_P4**	**ACH_P5**	**ORD_P1**	**ORD_P2**	**ORD_P3**	**ORD_P4**	**ORD_P5**	**ORD_P6**
.185	.168	.200	.145	.157	.228	.143	.179	.204	.205	.115
(.006)	(.006)	(.006)	(.004)	(.005)	(.006)	(.005)	(.005)	(.006)	(.006)	(.004)
32.192	30.110	32.896	36.324	34.616	35.896	29.462	35.987	33.168	33.210	28.093
TRA_P1	**TRA_P2**	**BRO_P1**	**BRO_P2**	**BRO_P3**	**EPI_P1**	**EPI_P2**	**EPI_P3**	**ITL_P1**	**ITL_P2**	**ITL_P3**
.391	.061	.197	.156	.156	.187	.134	.088	.182	.171	.213
(.015)	(.016)	(.006)	(.006)	(.006)	(.005)	(.005)	(.004)	(.005)	(.005)	(.006)
26.484	3.901	31.343	27.076	27.076	34.893	26.910	24.634	34.543	37.266	33.284
ITL_P4	**ITL_P5**									
.170	.165									
(.005)	(.005)									
35.128	36.053									

* The top value represents the unstandardised $\Theta_{\delta j}$ estimate, the second value in brackets the standard error of $\Theta_{\delta j}$ and the third value the test statistic z

All the unstandardised measurement error variances shown in Table 4.50 are statistically significant (p<.05). H_{0i}: $\Theta_{\delta jj}$ =0; i =82, 83,..., 160; j=1, 2.....79 was therefore rejected in favour of H*ai*: Θδjj > 0; i =82, 83,..., 160; j=1, 2.....79 for all i.

The completely standardised error variance of the i[th] item ($\theta_{\delta ii}$) in Table 4.51 consists of systematic non-relevant variance and random error variance. The values given in Table

4.51 could be interpreted as indicator variable validity coefficients, $\rho(X_j,\xi_k)$. Spangenberg and Theron (2005) as a result concluded that, since ($\lambda^2 jk + \theta_{\delta ii}$) are equal to unity in the completely standardised solution, the validity coefficients can be defined as follows:

$\rho(X_j,\xi_k) = \sigma^2_{systematic\text{-}relevant}/(\sigma^2_{systematic\text{-}relevant} + \sigma^2_{non\text{-}relevant})$

$= \lambda^2_{jk}/([\lambda^2_{jk} + \theta_{\delta ii}]$

$= 1- (\theta_{\delta ij}/([\lambda^2_{jk} + \theta_{\delta ii}])$

$= 1- \theta_{\delta ii}$

$= \lambda^2_{ij}$

Table 4.51

Completely standardised error variances

EMP_P1	**EMP_P2**	**EMP_P3**	**FAC_P1**	**FAC_P2**	**FAC_P3**	**FAC_P4**	**FAC_P5**	**INT_P1**	**INT_P2**	**INT_P3**
.375	.492	.378	.325	.311	.376	.329	.415	.585	.503	.604
INT_P4	**INT_P5**	**INT_P6**	**IPR_P1**	**IPR_P2**	**IPR_P3**	**IPR_P4**	**SOC_P1**	**SOC_P2**	**WAR_P1**	**WAR_P2**
.621	.549	.459	.592	.538	.501	.493	.287	.310	.446	.482
WAR_P3	**WAR_P4**	**WAR_P5**	**ARR_P1**	**ARR_P2**	**ARR_P3**	**CON_P1**	**CON_P2**	**CON_P3**	**HOS_P1**	**HOS_P2**
.394	.405	.445	.393	.320	.571	.545	.407	.485	.545	.660
HOS_P3	**HOS_P4**	**HOS_P5**	**HOS_P6**	**HOS_P7**	**DEC_P1**	**DEC_P2**	**DEC_P3**	**EMO_P1**	**EMO_P2**	**EMO_P3**
.508	.601	.402	.612	.645	.454	.680	.453	.606	.548	.461
EMO_P4	**NEG_P1**	**NEG_P2**	**NEG_P3**	**NEG_P4**	**NEG_P5**	**PLA_P1**	**PLA_P2**	**SOB_P1**	**SOB_P2**	**SOB_P3**
.411	.540	.514	.507	.569	.525	.510	.209	.336	.340	.301
ACH_P1	**ACH_P2**	**ACH_P3**	**ACH_P4**	**ACH_P5**	**ORD_P1**	**ORD_P2**	**ORD_P3**	**ORD_P4**	**ORD_P5**	**ORD_P6**
.490	.397	.435	.490	.374	.534	.400	.486	.464	.457	.311
TRA_P1	**TRA_P2**	**BRO_P1**	**BRO_P2**	**BRO_P3**	**EPI_P1**	**EPI_P2**	**EPI_P3**	**ITL_P1**	**ITL_P2**	**ITL_P3**
.451	.083	.508	.387	.420	.626	.470	.356	.570	.624	.485
ITL_P4	**ITL_P5**									
.499	.505									

Reliability can be defined as the degree to which the variance in items can be attributed to systematic sources, irrespective of whether the source of variance is relevant to the measurement intention or not. Because of this the values shown in Table 4.51 could (when squared) simultaneously be interpreted as lower bound estimates of the item reliabilities ρ_{jj}. The extent to which the true item reliabilities would be under-estimated would be determined by the extent to which δ_{jj} contains the effect of the systematic non-relevant latent influences. In terms of the foregoing argument, the values of the squared multiple correlations for the items presented in Table 4.49, as well as the reciprocal values shown in Table 4.51, does not cause concern as there all the items seem to adequately reflect variance in the latent variables they were meant to reflect, given the critical percentage set at the start of the study ($R^2 \geq .25$).

The 20 latent variables constituting the personality domain as was defined by the SAPI are expected to correlate to some extent. Since the 20 latent personality subscales are qualitatively distinct (although related constructs of personality) they should not correlate very high with each other. The phi-matrix of correlations between the 20 latent personality dimensions is depicted in Table 4.52.

All but two of the inter-latent variables were statistically significant ($p<.05$). The correlation between Arrogance and Playfulness and between Negative Emotionality and Playfulness were statistically significant ($p>.05$). H_{0i}: $\phi_{jk}=0$; i=161, 162, …, 350; j=1, 2…20; k=1, 2…20; j≠k could therefore not be rejected in favour of H_{ai}: $\phi_{jk} \neq 0$; i=161, 162, …, 350; j=1, 2…20; k=1, 2…20; j≠k for i=233 and 238, for j=13 and k=7 and for j=13 and k=12. H_{0i}: $\phi_{jk}=0$; i=161, 162, …, 350; j=1, 2…20; k=1, 2…20; j≠k could be rejected in favour of H_{ai}: $\phi_{jk} \neq 0$; i=161, 162, …, 350; j=1, 2…20; k=1, 2…20 for all other i, j and k; j≠k.

Correlations were considered excessively high in this study if they exceed a value of .90 (Myburgh, 2013). Judged by this criterion, only two correlations in the phi matrix are excessively high. These are correlations between Warmheartedness and Interpersonal Relatedness (.933) and between Conflict-Seeking and Hostility-Egoism (.937). Furthermore, four of the 190 inter-latent variable correlations exceed .80 but fell below .88.

Table 4.52

Phi (Φ) matrix

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC
EMPATHY	1.000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FACILIT	.534 (.016) 32.525	1.000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INTEGRIT	.640 (.015) 43.751	.589 (.014) 41.511	1.000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--
INTERPER	.742 (.014) 53.708	.811 (.011) 74.797	.755 (.013) 60.309	1.000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SOC_INT	.761 (.013) 58.685	.708 (.013) 54.324	.600 (.016) 38.174	.821 71.090 (.012)	1.000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WARMHEAR	.869 (.009) 95.105	.768 (.010) 75.278	.770 (.011) 68.929	.933 (.007) 126.078	.806 (.011) 76.551	1.000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARROGAN	-.478 (.018) -25.947	-.129 (.020) -6.386	-.487 (.017) -28.109	-.396 (.019) -20.445	-.274 (.020) -13.419	-.434 (.018) -24.119	1.000	--	--	--	--	--	--	--	--	--	--	--	--	--
CONFLICT	-.328 (.022) -15.246	-.216 (.020) -10.575	-.595 (.016) -36.421	-.412 (.020) -20.469	-.254 (.021) -11.946	-.380 (.019) -19.669	.739 (.013) 57.155	1.000	--	--	--	--	--	--	--	--	--	--	--	--
HOSTILE	-.488 (.018) -26.435	-.302 (.019) -15.710	-.629 (.015) -42.381	-.545 (.017) -31.203	-.397 (.019) -20.732	-.535 (.016) -32.479	.854 (.009) 91.272	.937 (.008) 116.728	1.000	--	--	--	--	--	--	--	--	--	--	--
DECEIT	-.332 (.021) -15.765	-.424 (.019) -21.941	-.710 (.014) -48.961	-.514 (.019) -26.508	-.391 (.020) -19.092	-.450 (.019) -23.938	.588 (.017) 34.144	.784 (.014) 56.456	.836 (.012) 71.892	1.000	--	--	--	--	--	--	--	--	--	--
EMOTIONB	.295 (.021) 13.877	.576 (.016) 36.911	.614 (.016) 39.633	.654 (.016) 40.975	.525 (.018) 29.407	.497 (.019) 26.854	-.215 (.020) -10.508	-.401 (.019) -20.586	-.416 (.019) -21.992	-.540 (.019) -29.027	1.000	--	--	--	--	--	--	--	--	--

Table 4.52 (continued)

Phi (Φ) matrix

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC
NEGATIVE	.111 (.021) 5.199	-.310 (.020) -15.714	-.338 (.020) -16.982	-.315 (.021) -14.758	-.151 (.022) -7.009	-.122 (.021) -5.739	.239 (.020) 12.095	.493 (.018) 27.943	.496 (.017) 29.969	.654 (.015) 43.490	-.725 (.015) -48.700	1.000	--	--	--	--	--	--	--	--
PLAYFULL	.410 (.020) 20.617	.382 (.019) 20.330	.315 (.019) 16.298	.506 (.018) 27.696	.578 (.018) 32.764	.479 (.019) 25.844	-.020 (.021) -.942	.082 (.021) 3.892	-.046 (.021) -2.232	-.111 (.022) -5.012	.326 (.020) 16.014	-.013 (.022) -.601	1.000	--	--	--	--	--	--	--
SOCIABIL	.441 (.018) 24.278	.540 (.015) 35.192	.419 (.018) 23.803	.647 (.015) 43.699	.718 (.013) 56.571	.589 (.015) 39.776	-.122 (.020) -6.000	-.098 (.020) -4.800	-.243 (.019) -12.714	-.346 (.020) -17.502	.427 (.018) 23.652	-.198 (.020) -9.687	.732 (.013) 56.470	1.000	--	--	--	--	---	--
ACHIEVEM	.353 (.019) 18.739	.671 (.012) 54.093	.676 (.013) 50.808	.596 (.016) 36.900	.494 (.017) 29.023	.547 (.016) 34.520	-.174 (.020) -8.692	-.351 (.019) -18.449	-.360 (.018) -19.630	-.575 (.016) -34.903	.664 (.014) 47.545	-.403 (.018) -22.570	.264 (.020) 13.423	.444 (.017) 26.174	1.000	--	--	--	--	--
ORDILIN	.312 (.020) 15.517	.448 (.017) 26.314	.684 (.013) 54.147	.443 (.019) 23.249	.333 (.020) 16.962	.455 (.018) 25.576	-.240 (.019) -12.469	-.414 (.019) -22.355	-.393 (.018) -21.783	-.546 (.017) -32.131	.466 (.018) 25.630	-.256 (.020) -12.823	.113 (.020) 5.575	.249 (.019) 12.976	.756 (.010) 73.230	1.000	--	--	--	--
TRAD_REL	.443 (.018) 24.434	.420 (.017) 24.455	.446 (.017) 25.804	.492 (.018) 27.648	.405 (.018) 22.000	.519 (.016) 31.858	-.273 (.019) -14.207	-.263 (.020) -13.426	-.347 (.018) -19.117	-.346 (.019) -18.153	.338 (.019) 17.657	-.109 (.020) -5.527	.257 (.020) 13.055	.376 (.018) 20.831	.432 (.017) 25.469	.367 (.018) 20.198	1.000	--	--	--
BROADMIN	.412 (.020) 20.430	.536 (.016) 33.091	.467 (.018) 26.061	.576 (.017) 32.924	.506 (.019) 26.812	.516 (.018) 29.257	-.061 (.021) -2.865	-.127 (.022) -5.811	-.161 (.021) -7.691	-.127 (.022) -5.811	-.161 (.021) -7.691	-.235 (.022) -10.696	.482 (.019) 25.730	-.153 (.021) -7.255	.553 (.017) 31.709	.510 (.017) 29.629	.527 (.017) 31.511	1.000	--	--
EPISTEM	.435 (.020) 21.481	.471 (.017) 27.348	.585 (.017) 35.081	.537 (.019) 28.525	.436 (.020) 21.838	.511 (.018) 28.045	-.212 (.021) -10.246	-.285 (.021) -13.426	-.293 (.020) -14.506	-.324 (.021) -15.468	.502 (.018) 27.467	-.190 (.021) -8.926	.337 (.020) 16.860	.312 (.020) 15.542	.602 (.015) 38.951	.407 (.019) 21.282	.223 (.020) 11.109	.796 (.012) 64.289	1.000	
INTELLEC	.394 (.020) 19.515	.744 (.012) 64.520	.656 (.015 43.551 .)	.695 (.015) 46.782	.634 (.016) 40.080	.584 (.017) 35.018	-.060 (.021) -2.826	-.240 (.022)- 10.978	-.257 (.021) -12.272	-.437 (.021) -21.274	.752 (.013) 57.735	-.418 (.020) -20.571	.435 (.019) 23.433	.531 (.016) 32.595	.763 (.011) 68.687	.578 (.016) 36.734	.260 (.020) 13.074	.745 (.013) 58.633	.750 (0.013) 58.111	1.000

* The top value represents the unstandardised $\Theta_{\delta ij}$ estimate, the second value in brackets the standard error of $\Theta_{\delta ij}$ and the third value the test statistic z

4.9.5 DISCRIMINANT VALIDITY

When looking at the foregoing Φ matrix results, the general absence, but for two, extremely high inter-correlations between latent variables in the phi matrix is, not enough evidence to confidently conclude discriminant validity (Myburgh, 2013). By determining if the correlations contained in the phi matrix are significantly different from one, discriminant validity can be examined (Bagozzi et al., 1991). This can be achieved by calculating a 95% confidence interval for each phi estimate. An Excel macro that was developed by Scientific Software International (Mels, 2010) was used to calculate the 95% confidence interval for each sample ϕ_{ij} estimate inΦ. Discriminant validity is achieved when the correlations between the factors are significantly less than 1.0 ($p<.05$). Discriminant validity will therefore exist if the 95% confidence intervals calculated for the 190 phi estimates do not contain the value 1. Should any confidence interval contain the value 1 it would imply that the null hypothesis H_{0i}: p=1 cannot be rejected. If for instance discriminant validity has not been shown, confidence in the claims that the SAPI succeeded in measuring the latent variables comprising the personality construct as qualitatively distinct constructs would then be seriously compromised.

The 95% confidence intervals for the 190 latent variable inter-correlations in Table 4.53 indicate that not one of the intervals included unity. The discriminant validity of the SAPI dimension measures was thereby confirmed.

The average variance extracted (AVE) reflects the average proportion of variance in the indicator variables that is accounted for by the latent variable that the indicator variables were designed to represent (Diamantopoulos & Sigauw, 2000). The average variance extracted calculated for each latent first-order personality dimension should be greater than .50 and should be greater than the squared correlation between the latent variables (Farrell, 2010). The justification offered for these two criteria is that, the latent variable should account for more variance in the indicator variables that were designed to reflect it than measurement variance and the latent variables should account for more variance in the indicator variables that represent them than what they account for in each other (Farrel, 2010). Table 4.54 represents the squared correlations between the latent personality dimensions as well as the average variance extracted for each latent personality dimension. One hundred and sixty-five of the squared inter-latent variable correlations (86.84%) were smaller than both the AVE values associated with the latent variable pairs being correlated. The latent variables involved in these pairs therefore account for more variance in their indicator variables that were designed to reflect them, than they account for in each other. Twelve of the squared inter-latent variable correlations (6.32%) were smaller than one of the AVE values associated with one of the latent variables in the pair of variables being correlated, whereas thirteen of the squared inter-latent variable correlations (6.84%) were larger than both the AVE values associated with the latent variable pairs being correlated. The AVE criterion provides psychological tests with an exceptionally stringent challenge that only a small number of instruments, that measure comprehensive multi-dimensional constructs comprising a sizeable number of latent dimensions, manage to satisfy completely.

Although the SAPI did demonstrate some difficulty in convincingly discriminating between some of the latent personality dimensions it nonetheless succeeded in doing so on the majority of the latent personality dimensions.

Table 4.53

95% confidence interval for sample (Φ) estimates

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC
EMPATHY	-																			
FACILIT	.502- .565	-																		
INTEGRIT	.610- .668	.561- .616	-																	
INTERPER	.713- .768	.788- .831	.728- .779	-																
SOC_INT	.734- .785	.682- .783	.568- .630	.796- .843	-															
WARMHEAR	.850- .886	.748- .747	.748- .791	.918- .945	.783- .827	-														
ARROGAN	-.513 – -.442	-.168 - - .090	-.520 – - .453	-.433 - -.358	-.313 – -.234	-.469 – -.398	-													
CONFLICT	-.370 – -.284	-.255 - - .176	-.625 – -.563	-.450 – -.372	-.295 - - .212	-.417 – -.342	.712 - .763	-												
HOSTILE	-.522 – -.452	-.339 – -.264	-.658 – -.599	-.577- -.511	-.434 -- .359	-.566 – -.503	.835 - .871	.919 - .951	-											
DECEIT	-.373 – -.290	-.461 – -.386	-.736 – -.681	-.550- -.476	-.429 – -.351	-.486 – -.412	.554 - .620	.755 - .810	.811 - .858	-										
EMOTIONB	.253 - .336	.544 - .607	.582 - .644	.622- .684	-.489 – -.559	.459 - .533	-.254 – -.175	-.438 – -.363	-.453 – -.378	-.576 – -.502	-									
NEGATIVE	.070 - .152	-.349- .270	-.377 – -.298	-.356 – -.273	-.194 – -.108	-.163 – -.081	.199 - .278	.457 - .527	.462 - .529	.624 - .682	-.753 – -.694	-								
PLAYFULL	.370 - .448	.344 - .419	.277 - .352	.470 - .540	.542 - .612	.441 - .515	-.061 - .021	.041 - .123	-.087 – -.005	-.154 – -.068	.286 - .365	-.056 - .030	-							
SOCIABIL	.405 - .476	.510 - .569	.383 - .454	.617 - .675	.692 - .743	.559 - .618	-.051 - .027	-.137 – -.059	-.280 – -.205	-.385 – -.306	.391 - .462	-.241 – -.155	-.022 - .048	-						

Table 4.53 ***(continued)***

95% confidence interval for sample (Φ) estimates

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC
ACHIEVEM	.315 - .390	.64 - .694	.650 - .701	.564 - .626	.460 - .527	.515 - .578	-.213 - -.135	-.388 -- .313	-.395 – -.324	-.606 – -.543	.636 - .691	-.438 – -.367	.224 - .303	.410 - .477	-					
ORDILIN	.272 - .351	.414 - .481	.658 - .709	.405 - .479	.293 - .372	.419 - .490	-.277 - -.202	-.451 – -.376	-.428 – -.357	-.578 – -.512	.430 - .501	-.295 – -.216	.074 - .152	.213 - .284	.736 - .775	-				
TRAD_REL	.407 - .478	.386 - .453	.412 - .479	.456 - .526	.369 - .440	.487 - .550	-.310 – -.235	-.302 - -.223	-.382 – -.311	-.383 – -.308	.300 - .375	-.148 – -.070	.217 - .296	.340 - .411	.398 - .465	.331 - .402	-			
BROADMIN	.372 - .450	.504 - .567	.431 - .502	.542 - .608	.468 - .542	.480 - .550	-.102- -.020	-.170 - -.084	-.202 – -.120	-.170 – -.084	-.202 - -.120	-.272 – -.197	.444 - .518	-.192 – -.114	.510 - .593	.476 - .543	.493 - .560	-		
EPISTEM	.395 - .473	.437 - .504	.551 - .617	.499 - .573	.396 - .474	.475 - .545	-.253 - -.170	-.326 - -.243	-.332 – -.253	-.365 – -.282	.466 - .536	-.231 – -.149	.499 - .573	.297 - .376	.572 - .631	.369 - .444	.183 - .262	.771 - .818	-	
INTELLEC	.354 - .432	.720 - .767	.664 - .723	.626 - .684	.602 - .664	.550 - .616	-.101 - -.019	.196 - .283	-.298 – -.215	.395 - .477	.725 - .776	-.456 – -.378	.397 - .471	.499 - .562	.741 - .784	.546 - .609	.220 - .299	.718 - .769	.723 - .774	-

Table 4.54

Squared sample phi estimates and average variance extracted per latent variable

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE	PLAYFULL	SOCIABIL	AVE
EMPATHY	-														.585217208
FACILIT	.285	-													0,64884705
INTEGRIT	.409	.347	-												.7580897
INTERPER	.550	.658	.570	-											.46901341
SOC_INT	.579	.501	.360	.674	-										.7017365
WARMHEAR	.755	.590	.593	.870	.650	-									.56324134
ARROGAN	.228	.016	.237	.157	.075	.189	--								.57207004
CONFLICT	.108	.047	.354	.170	.064	.144	.546	-							.521167432
HOSTILE	.238	.091	.396	.300	.146	.286	.729	.878	-						.483606843
DECEIT	.110	.180	.504	.264	.153	.203	.346	.615	.699	-					.47118984
EMOTIONB	.087	.332	.237	.428	.276	.247	.046	.161	.173	.292	-				.4933864
NEGATIVE	.012	.096	.114	.099	.022	.015	.057	.243	.246	.477	.526	-			.46896463
PLAYFULL	.168	.146	.099	.256	.334	.229	.0004	.007	.002	.012	.106	.0001	-		.6403779
SOCIABIL	.194	.291	.176	.419	.516	.347	.015	.010	.059	.120	.182	.039	.536	-	.67445162
ACHIEVEM	.125	.450	.457	.355	.244	.299	.030	.123	.130	.331	.441	.162	.070	.197	.56284424
ORDILIN	.097	.200	.468	.196	.111	.207	.058	.171	.154	.298	.217	.066	.013	.062	.630346359
TRAD_REL	.196	.176	.199	.242	.164	.269	.075	.069	.120	.120	.114	.012	.066	.141	.73311276
BROADMIN	.170	.287	.218	.332	.256	.266	.045	.016	.146	.016	.026	.055	.232	.023	.56168624
EPISTEM	.189	.222	.342	.288	.190	.261	.004	.081	.086	.105	.252	.036	.114	.097	.5159568
INTELLEC	.155	.554	.430	.483	.402	.341	.004	.058	.066	.191	.566	.175	.189	.263	.4635619
AVE	.585217208	.64884705	.7580897	.46901341	.7017365	.56324134	.57207004	.521167432	.483606843	.,47118984	.4933864	.46896463	.6403779	.67445162	

Table 4.54 (continued)

Squared sample phi estimates and average variance extracted per latent variable

	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN	EPISTEM	INTELLEC	AVE
ACHIEVEM	-						.56284424
ORDILIN	.572	-					630346359
TRAD_REL	.187	.135	-				.73311276
BROADMIN	.306	.260	.278	-			.56168624
EPISTEM	.362	.166	.050	.634	-		.5159568
INTELLEC	.582	.334	.068	.555	.563	-	.4635619
AVE	.56284424	.630346359	.73311276	56168624	.5159568	.4635619	

AVE < r2 for both latent variables   AVE < r2 for one of the latent variables   AVE > r2 for both latent variables

4.9.6 STATISTICAL POWER ASSESSMENT

When fitting a model, statistical power is very important especially when decisions have to be evaluated regarding the rejection, or not, of the statistical hypotheses. In the context of this study statistical power refers to the conditional probability of rejecting the null hypothesis given that it is false, i.e. in the case of the exact fit null hypothesis P(Reject H_{01}: RMSEA=0| H_{01} false]. If statistical power is looked at from a SEM perspective then statistical power refers to the probability of rejecting an incorrect model. Diamantopoulos and Siguaw (2000) explain the difference between Type I and Type II error in the context of structural equation modelling as follows:

> When we test a model's fit by, say, the chi-square test, we emphasise the probability of making a Type I error, i.e. rejecting a correct model; this probability is captured by the significance level, α which is usually set at 0,05. A significant chi-square result indicates that if the null hypothesis is true (i.e. the model is correct in the population), then the probability of incorrectly rejecting it is low (i.e. less than five times out of 100 if α= 0,05). However, another error that can occur is not to reject an incorrect model. This type of error is known as Type II error and the probability associated with it is denoted as β. The probability of avoiding a Type II error is, therefore, 1-β and it is this probability that indicates the power of our test; thus the power of the test tells us how likely it is that a false null hypothesis (i.e. incorrect model) will be rejected. (p. 93).

Regrettably, the above aspect is more often than not ignored, however it remains important to be aware that any model evaluation would be regarded as incomplete if statistical power considerations were neglected. Conducting a power analysis is important because of the critical role that sample size plays in the decisions made in model testing (Diamantopoulos & Siguaw, 2000). For example, if the close fit null hypothesis (H_{02}: RMSEA≤.05) would not be rejected (as was the case in the current study), the concern arises whether this result is because of a lack of statistical power or whether it accurately reflects the true state of affairs. The more sample size decreases the more this concern increases. This is specifically the case in small samples (i.e., low power conditions) where the decision not to reject the null hypothesis causes ambiguity, because it is not clear if the decision was due to the accuracy of the model or the insensitivity of the test to detect specification errors in the model. On the other hand, where large samples (i.e., high power conditions) are involved, the decision to reject the null hypothesis would create the fear that a reasonably accurate model was rejected because of relatively minor misspecifications rather than due to severe flaws in the model. Furthermore, when the chi-square test is applied only Type I errors are explicitly taken into account, thus, a power analysis must be undertaken to also account for the probability of Type II errors (Diamantopoulos & Siguaw, 2000).

There exits two types of power calculations that can be performed. The first one is where the power associated with a test of exact fit (H_{01}: RMSEA=0), as done by the Satorra-Bentler chi-square test, can be estimated. However, this test is very limited (as argued before), since models are only approximations of reality and, therefore, rarely do they fit exactly in the population. As a result only the power associated with the test of close fit was estimated. The null hypothesis of close fit states that the model has a close, but imperfect fit in the population. The statistical hypothesis of close fit makes use of the RMSEA statistic. If a model fits closely in the population the error due to approximation is set at .05 and the null hypothesis formulated earlier as H_{02} is consequently tested against H_{a2} (Diamantopoulos & Siguaw, 2000).

In order to determine the power of a test of the close fit hypothesis, at least one specific value for the parameter needs to be assumed under H_{a2} because there are as many power estimates as there are possible values for the parameter under H_a2. Here , a value that made good sense in this instance is RMSEA=.08, since RMSEA=.08 is the upper limit of reasonable fit.

The power of the test becomes a function of the degrees of freedom (v) in the model (v=½([p][p+1]-t) = 3160 - 348 = 2812. The higher the degrees of freedom, the greater the power of the test (Diamantopoulos & Siguaw, 2000). The power tables assembled by MacCallum, Browne, and Sugawara (1996) only makes provision for degrees of feedom ≤ 100 and N ≤ 500. Syntax that was developed by Preacher and Coffman (2006) in R (available at http://www.quantpsy.org/rmsea/rmsea.htm) was consequently used to determine the statistical power of the test of close fit. For this purpose a significance level of .05 was specified, a sample size of 3912, degrees of freedom of 2812, RMSEA was set to .05 under H_{02} and RMSEA was set to .08 under H_{a2}. The Preacher and Coffman (2006) software returned a power value of unity. The power of the test of close fit was very high (1.000). If the SAPI measurement model had mediocre fit in the parameter (RMSEA=.08), H_{02} would have been rejected. However, the power estimate, together with the fact that the close fit null hypothesis was not rejected, bolsters confidence in the merits of the model. It could therefore be concluded that the decision not to reject the close fit null hypothesis cannot be attributed to a lack of statistical power as the test is highly sensitive to misspecifications in the model.

4.10 ASSESSING THE OVERALL GOODNESS-OF-FIT OF THE SECOND-ORDER SAPI MEASUREMENT MODEL

The 64-bit version of LISREL 8.8 was used in batch mode to fit the second-order measurement model specified in Equation 2 by analysing the covariance matrix calculated from the normalised item parcel data set utilising robust maximum likelihood estimation. Moreover, item parcels were treated as continuous variables.

Unfortunately LISREL gave a warning message (see Table 4.55 below) with regards to the γ_{11} estimate (*Empathy* and *Positive Social relations*). As a result the model fit and parameter estimates could not be interpreted for the second order SAPI measurement model.

Table 4.55

Goodness of fit statistics of the SAPI measurement model

```
W_A_R_N_I_N_G: GA 1_1 may not be identified.
            Standard Errors, z-Values, Modification Indices,
            and Standardised Residuals cannot be computed.
```

GA(1,1) represents the SRP loading

A number of attempts were made to salvage the impasse. The possibility that the addition of a broad general personality factor on which all first-order factors load, in addition to the narrower second-order personality factors was examined. Diagonally weighted least squares (DWLS) was tried as an alternative to robust maximum likelihood estimation. None of these allowed the fitted model to successfully converge.

4.11 SUMMARY

This chapter explored the psychometric properties of the South African Personality Inventory (SAPI) to establish if the instrument provides construct valid measures of the personality construct as constitutively defined by the developers of the SAPI. Thus far there has not been a confirmatory factor analytic study done on a relatively large South African sample. Moreover, there is not a lot of empirical construct validity evidence available for the SAPI in South Africa. As a result, the need to investigate if the SAPI provides a construct valid measure of personality within the South African work context was identified. This was done for the first- and second-order measurement model. Unfortunately only the first-order measurement model could be interpreted as the second-order measurement model did not converge.

The substantive hypothesis tested in this study was that the SAPI provides a construct valid and reliable measure of personality within a work context as it is defined by the instrument, amongst South Africans.

In operational terms the hypothesis tested in this study was that the measurement model implied by the scoring key and the design intention of the SAPI can closely reproduce the co-variances observed between the individual items comprising each of the SAPI scales. The operational hypothesis implied by the substantive research hypothesis further implies that:

- the factor loadings of the individual items on their designed latent personality dimensions are significant and large,
- that the personality dimensions explain large proportions of the variance in the individual items and
- lastly that the latent personality dimensions correlate low to moderately with each other.

A wide array of criteria fit indices were used to test the fit of the first-order measurement model of the SAPI. It was found that the model's overall fit was satisfactory. The null hypothesis of close fit was not rejected, and the large number of LISREL fit indices were indicative of a close fit in the parameter as well as a very good model fit in the sample. However, a large percentage of standardised residuals, with high percentages of significant modification indices calculated for the $\mathbf{\Lambda}^X$ matrix contradicted this fairly positive conclusion. Nevertheless, the relatively small percentage of the modification indices calculated for the $\mathbf{\Theta}_\delta$ matrix commented relatively favourably on the fit of the measurement model.

Furthermore, the latent performance dimension correlates moderate-strongly with each other in the sample. It was found that (apart from two out of the 190 ϕ_{ij} estimates) no excessively large correlations exist.

In addition, confidence intervals that were calculated for the phi estimates failed to include unity for any of the 190 correlations in Φ. In the case of 13.16% of the latent personality dimension pairs one or both latent variables accounted for less variance in their indicator variables that were designed to reflect them for which they account for in each other. This finding implied that SAPI, although with some difficulty, successfully discriminates between the unique aspects of the latent personality dimension

CHAPTER 5

CONCLUSION AND RECOMMENDATION FOR FUTURE RESEARCH

5.1 INTRODUCTION

In South Africa personality assessment has become a regular practice particularly pertaining to the work context. Due to the country's historical background, information derived from assessments is a contested issue. Moreover, South African legislation protects the population from any discriminatory practices in relation to assessments. This includes ensuring that personality assessments are valid and reliable, especially if selection decisions are made from the inferences derived from these tests.

To be able to confidently use the second experimental version of the SAPI for selection purposes in South Africa requires:

- that a convincing argument be developed as to why and how personality (as interpreted by the SAPI) should be related to job performance,
- that a structural model derived from the foregoing argument fits empirical data and that the freed structural model parameter estimates are statistically significant, (i.e. there is support for the performance hypothesis),
- that evidence be available that the predictor and criterion constructs are validly and reliably measured in the various sub-groups typically comprising applicant groups in South Africa,
- that evidence be available that, at least, race and gender group membership do not systematically affect the manner in which the predictor and criterion constructs express themselves in observed measures,
- that evidence be available that the measures of the SAPI correlate statistically significantly ($p<.05$) with construct valid criterion measures,
- that evidence be available that criterion predictions derived (clinical or mechanical) from the measures of the SAPI correlate statistically significantly ($p<.05$) with construct valid criterion measures and
- that evidence be available whether (at least) race and gender group membership does explain variance in the criterion (either as a main effect or in-interaction with

the criterion estimates derived from the SAPI) that is not explained by the criterion estimates derived from the SAPI.

The objective of this research study is to contribute to the psychometric evidence that is available with regards to the third aspect mentioned above. As was discussed in previous chapters, the architecture of the instrument reflects a specific design intention (based on a specific interpretation of the connotative meaning of personality). Moreover, the scoring key also implies a specific measurement model, suggesting that responses to specific items of the SAPI are a function of a specific underlying latent first-order personality dimension. Furthermore, the design intention of the SAPI is that the items should firstly load statistically significant ($p<.05$) and large ($\lambda ij \leq .50$) on their designated latent personality dimensions, secondly that the measurement error variance associated with each item is statistically significant ($p<.05$) but small, thirdly that the latent personality dimensions explain large proportions of the variance in the items that represent them ($\lambda^2 ij \geq .25$) and lastly that the latent personality dimensions correlate low-moderate ($\varphi ij<.90$) with each other.

In this chapter a summary is provided of the results of this study. In addition, the implications of the findings as well as recommendations for future research are discussed.

5.2 SUMMARY OF PRINCIPAL FINDINGS AND DISCUSSIONS

After defining the personality construct, exploratory factor analysis and item analysis were performed on each sub-scale. These analyses aimed to evaluate whether the items comprising each subscale successfully measure the intended latent performance dimension and whether or not each subset of items provides a uni-dimensional measure of the latent personality dimension that it was intended to measure. Following this the first-order SAPI measurement model was fitted to the data with each latent first-order personality dimension represented by means of item parcels. The seventy nine item parcels were formed by combining the items comprising each subscale of the SAPI into linear composites by taking the mean of the first and last item of the subscale, the second and second-last items *etcetera*. In the case of subscales with an uneven number of iyems on parcel with three items was formed.

Chapter 4 outlined the detailed results of the psychometric analysis. The following summary conclusions are derived from the item analyses, dimensionality analysis, as well as the fit of the measurement model.

5.2.1 DESCRIPTIVE STATISTICS

The archival data obtained consisted of a more or less equal divide between male and female participants. The race distribution consisted of 32.9% white, 17.2% black, 5.9 coloured, 4.5% Indian participants. The remaining 35% of the sample's standing on the race variable was not specified. Moreover, the majority of the participants were English and Afrikaans speaking, 33.7% was not specified whilst the rest were made of the other languages (see descriptive statistics, chapter 4). Most participants described themselves as very fluent in English, with only 3.3% describing their English as poor. Provincial distribution was rather uneven, with the majority of respondents residing in Gauteng, Kwazulu Natal and the Freestate.

According to Index Mundi (2017) 80.2% of the South African population in 2014 were estimated to be black, 8.4% white, 8.8% colored and 2.5% Indian/Asian. In terms of language distribution Index Mundi (2017) reports that in 2011 22.7%, of the South African population were estimated to have IsiZulu as their home language, 16% IsiXhosa, 13.5% Afrikaans, 9.6% English, 9.1% Sepedi, 8% Setswana, 7.6% Sesotho, 4.5% Xitsonga, 2.5% siSwati, 2.4% Tshivenda, 2.1% isiNdebele, 0.5% sign language, and 1.6%.reported some other language as home language. A comparison of the study sample composition to the population terms of race and language suggest that the sample cannot be claimed to be representative of the South African population. When viewed from this perspective generalisations to the South African population should therefore be made with some circumspection. The question could, however be asked whether the target population that the SAPI has been developed for is the unqualified South African population or whether the target population should not rather be defined as adult South Africans with a basic proficiency in English.

5.2.2 ITEM ANALYSIS

The design intention of the SAPI is aimed at constructing twenty essentially unipolar sets of items that would reflect variance in each of the 20 latent variables that collectively comprises the personality construct. These items that are included in each of the 20 subscales are meant to act as stimuli to which respondents react with behaviour that is primarily an expression (or that is a reasonably uncontaminated expression) of a specific underlying latent personality domain. When this design intention succeeded, high correlations between items will occur, item-total correlations will be high and the squared multiple correlations will be high when regressing each item on a weighted linear composite of the remaining items comprising the subscale. Furthermore, the coefficient of internal consistency would be relatively high for each subscale, whilst a decrease will be noted when any item is deleted from the subscale. When such a positive basket of evidence on the item statistics had been obtained it can, however, not be confidently claimed that the design intention had succeeded. It can only be confidently claimed that it could possibly have succeeded. It can only be argued that the claim that the design intention succeeded survived an opportunity to be falsified. Such a basket of evidence only means that the variance in the items comprising the subscales have been produced by a common source of systematic variance. It cannot be claimed that the source is uni-dimensional or that the source is in fact the latent first-order personality dimension of interest. When this design intention failed for one or more items in a subscale, consistently low correlations between those items and the remaining items will occur, item-total correlations and the squared multiple correlations will be high when regressing each item on a weighted linear composite of the remaining items comprising the subscale will be low for those items. Furthermore, the coefficient of internal consistency would be relatively low for those subscales, whilst an increase will be noted when the failed items are deleted from the subscale. When such a negative basket of evidence on the item statistics had been obtained it can therefore not be confidently claimed that the design intention had failed.

A wide array of item statistics was used to calculate how well the items of a sub-scale represent the underlying latent first-order personality dimension. The main purpose of this analysis was to identify poor items. Poor items can be explained as items that fail to discriminate between different states of the underlying latent variable they are meant to reflect as well as items that do not reflect a common underlying latent variable. Eleven of the twenty subscales returned high alpha coefficients (i.e., $.90>\alpha\geq.80$). The other nine subscales showed acceptable alpha coefficients (i.e. $.80>\alpha\geq.70$). The findings on the various baskets of item statistics concluded that all the items of the subscales responded in relative unison to systematic differences in a common underlying latent variable or variables although in the case of a small number of items some concern arose that the items responded to a too great extent to non-relevant sources of variance. Nonetheless the overall conclusion for each of the twenty subscales was that variance in the items of each subscale to a sufficient degree arose from a common (but not necessarily uni-dimensional) source of systematic variance.

Normatively the current study interprets the internal consistency reliability coefficients obtained for the twenty subscales as a highly positive finding that compares very favourably with the reliability results reported by other personality measdures used in South Africa (Moyo, 2009; Holtzkamp, 2013; Wilbers, 2015)

5.2.3 DIMENSIONALITY ANALYSIS

Principal factor analyses (unrestricted) with oblique rotation were performed on each of the 20 subscales of the SAPI. The primary objective was to evaluate the uni-dimensionally of the subscales and confirm the degree to which each item measures the specific latent first-order personality dimension that it was intended to measure. The factor loadings of each item were used to establish the extent to which the specific item reflects the latent variables of the underlying subscale.

The scree plot in conjunction with the eigenvalue-greater-than-one rule of thumb was used to determine the number of factors that needs to be extracted. Thirteen out of the twenty subscales failed the uni-dimensionality test, namely Integrity, Interpersonal Relatedness, Social Intelligence, Conflict Seeking, Hostile Egoism, Deceitfulness, Emotional Balance, Negative Emotionality, Achievement orientation, Orderliness, Traditionalism-Religiosity, Broadmindedness and Intellect. In ten of the cases the factor solution was suggested by the eigenvalue-greater-than-unity rule. In three of the cases the extraction of a second factor was suggested by the large percentage of large residual correlations. In in the case of three of these subscales, an obliquely rotated 3-factor factor structure had to be extracted to obtain a credible explanation of the observed inter-item correlation matrix (Integrity, Hostile Egoism and Orderliness). In the remaining ten of the thirteen subscales that failed the uni-dimensionality test two factors had to be extracted to provide a satisfactory explanation of the observed correlation matrix. In all cases the rotated factor solution could be meaningfully theoretically interpreted. In eight of the subscales the identity of the underlying factors (apart from their first factor) proved to be somewhat elusive. Differential skewness and differential kurtosis were inspected to determine if the extracted factor structure could be explained in terms of systematic differences in these item statistics. However, for all the subscales neither differential skewness nor kurtosis was found to provide a credible explanation for the extracted factors.

Judging from the number of factors extracted and the magnitude of the factor loadings when a single factor is extracted, the findings of the present study seems are compatible with the position that 55% of the items generally do systematically reflect their designated latent first-order personality dimension with reasonable success. This claim is based on that fact 7 (35%) subscales showed uni dimensionality and that an additional, 4 subscales that presented more than one obliquely rotated factor solution, when forced to load on a single factor, the factor loadings were generally satisfactory and the percentage large residual correlations for these four factors (Interpersonal Relatedness, Hostile Egoism, Achievement orientation and Intellect) were considered acceptable.

Finally, the residuals correlations were further examined for both the two/three-factor and the one-factor solution. Of major importance is that the residuals calculated from the inter-item correlation matrix and the reproduced matrix showed that for nine out of the thrirteen subscales the initial solutions, prior to forcing a single factor, provide a much more convincing explanation for the observed inter-item correlation matrix than the single-factor solution. This is indicative of the fact that the personality dimensions measured by these subscales should rather be interpreted as second-order personality factors on which two first-order factors load. Moreover, this makes it likely that the failure of the uni-dimensionality test on nine of the subscales could be convincingly explained by a meaningfull splitting of the primary factors into narrower sub-factors.

Overall, the main aim of the dimensionality analyses was to offer a better understanding and insight into the functioning of the first-order factor structure of the SAPI subscales. In addition, the evaluation assisted in gaining an understanding of the psychometric integrity of the indicator variables that were tasked to represent each of the latent personality variables. The results of the exploratory factor analysis for 11 of the 20 subscales were compatible with the position that the items comprising these subscales measured a uni-dimensional latent first-order personality dimension. For 9 of the 20 subscales the results of the exploratory factor analysis were, however, not compatible with the position that the items comprising these subscales measured a uni-dimensional latent first-order personality dimension. It is worth mentioning though that because of the manner in which the qualitative process was done and the method of constructing the items (see chapter 2), factor fission on some of the SAPI subscales was expected. This raises the question on how to proceed with these 9 subscales. Deleting the items loading on the second (and possibly third), less prominent factors is not considered an attractive possibility. This would reduce the richness of the connotative meaning of those latent first-order personality dimensions where factor fission was found. The most realistic option seems to be to acknowledge the presence of the narrower sub-dimensions in the definitions of those latent first-order personality dimensions where factor fission was found. To justify combining the item scores of these subscales into a single score and to claim that it is permissible to infer test takers' standing on the original latent first-order personality dimension (that in effect is now recognised as a second-order factor) will, however, require that the second-order measurement models are fitted for these 9 subscales where factor fission was found in which the two or three narrower personality sub-dimensions load on the single latent first-order (now in effect second-order) personality dimension. If such a model fits and if the factor loadings of the items on the narrower sub-dimensions (λ_{ij}) are statistically significant and sufficiently large as well as the factor loadings of the narrower sub-dimensions on the original latent first-order personality dimension (γ_{j1}) are statistically significant and sufficiently large it could be argued that such inferences would be valid (i.e., permissible)[22].

The extraction of a single factor, adequate factor loadings and a moderate percentage of large residual correlations, however, result in inadequate evidence to be able to conclusively conclude with any amount of certainty that the uni-dimensional latent variable being measured is the latent first-order personality dimension the SAPI intended to measure. To achieve more persuasive evidence in support of such a claim, a structural model would have to be fitted where the latent personality dimensions are individually modelled that reflects the manner in which the personality dimensions are causally related to each other and that reflects the manner in which the personality construct is embedded in a larger nomological network of latent variables according to the SAPI's definition of personality.

[22] The possibility of calculating and evaluating the statistical significance indirect effects through the CO command in LISREL should be explored in future.

5.2.4 CONFIRMATORY FACTOR ANALYSIS

5.2.4.1 FITTING OF THE FIRST-ORDER SAPI MEASUREMENT MODEL

The SAPI first-order measurement model demonstrated good overall fit in the sample. Although the null hypothesis of exact fit was rejected the null hypothesis of close fit could not be rejected ($p>.05$). The fit indices reflected a close fit in the parameter and a very good model fit in the sample. However, a large percentage of standardised co-variance residuals and a high percentage of statistically significant $\boldsymbol{\Lambda}^X$ modification indices contradicted this positive conclusion. At the same time, however, a modest percentage of significant $\boldsymbol{\Theta}_\delta$ modification indices again commented relatively favourably on the fit of the measurement model. A tentative explanation for the contradictory comments offered by the fit indices and the standardised covariance residuals was offered. As such the stance that the measurement model fits the data closely in the population was found to be a tenable position. It can therefore be concluded that the first-order measurement model provides a valid description of the psychological process underlying the SAPI in that the model together with its parameter estimates was able to closely reproduce the observed covariance matrix.

The finding of close fit warranted the interpretation of the freed first-order measurement model parameter estimates. All the measurement model parameter estimates were statistically significant but for two inter-latent personality factor correlations. The correlation between Arrogance and Playfulness and between Negative Emotionality and Playfulness were statistically significant ($p>.05$). All the formulated path-specific null hypotheses were consequently rejected in favour of Ha, but for H_{0i}: $\phi_{jk}=0$; i=161, 162, …, 350; j=1, 2…20; k=1, 2…20; $j\neq k$ could therefore not be rejected in favour of H_{ai}: $\phi_{jk}\neq 0$; i=161, 162, …, 350; j=1, 2…20; k=1, 2…20; $j\neq k$ for i=233 and 238, for j=13 and k=7 and for j=13 and k=12.

Fifty-five item parcels had loadings higher than .71. Twenty-one item parcels had loadings lower than .71 but still higher than .60. Three item parcels loaded lower than .60 but still higher than .50. These are highly satisfactory results. It implies that in the majority of cases 50% or more of the variance in the item parcels are explained by the latent variable they were tasked to reflect. In the case of the item parcel with the lowest completely standardised factor loading (.566) circa 32% of the variance in this parcel is explained by the latent variable it was earmarked to reflect (Deceitfulness).

The discriminant validity analyses also returned surprisingly positive results. One hundred and sixty-five of the 190 squared inter-latent variable correlations (86.84%) were smaller than both the AVE values associated with the latent variable pairs being correlated. The latent variables involved in these pairs therefore account for more variance in their indicator variables that were designed to reflect them, than they account for in each other. Twelve of the squared inter-latent variable correlations (6.32%) were smaller than one of the AVE values associated with one of the latent variables in the pair of variables being correlated, whereas thirteen of the squared inter-latent variable correlations (6.84%) were larger than both the AVE values associated with the latent variable pairs being correlated. The AVE criterion provides psychological tests with an exceptionally stringent challenge that only a small number of instruments, that measure comprehensive multi-dimensional constructs comprising a sizeable number of latent dimensions, manage to satisfy completely. In the case of the SAPI by far the majority of the latent variable pairs passed this stringent test.

5.2.4.2 FITTING OF THE SECOND-ORDER SAPI MEASUREMENT MODEL

The SAPI's second order measurement model did not successfully converge. The loading of the Empathy first-order factor on the Positive Social Relation facto returned an inadmissible value. As a result inferences could not be made about the fit of the second order measurement model or the statistical significance and magnitude of the freed measurement model parameter estimates.

5.3 LIMITATIONS

The connotative meaning of the personality constructs lies in the internal structure of the construct and also in the manner in which the construct is embedded in a larger nomological network of constructs. To evaluate the construct validity of the SAPI means evaluating whether the instrument successfully measures the personality construct as it was constitutively defined. To evaluate the construct validity of SAPI, the measurement model implied by the constitutive definition of the personality construct (more specifically the internal structure) and the design of the instrument has to be fitted. Demonstrating the measurement model attained close fit and that the freed measurement model parameter estimates are statistically significant and of the appropriate magnitude as yet does not allow the conclusion that the instrument successfully measures the personality construct as it was constitutively defined. It only means that the claim that the instrument successfully measures the personality construct as it was constitutively defined has survived an opportunity to be refuted. To obtain conclusive evidence that the SAPI measures the personality construct as constitutively defined a structural model reflecting the manner in which the 20 latent personality dimensions are embedded in a larger nomological networks must be shown, the freed structural model parameter estimates need be statistically significant and the sign of the estimates need to correspond to the predictions made under the path-specific alternative hypotheses. The latter analysis has not been performed in the current study

Another likely limitation could be the language that was used for the questionnaire; this especially pertains to those who are not fluent in English. Even through the SAPI was developed in 11 different South African languages; the data was only collected on the English version. Language could have affected the way test takers respond to the items. Here, a question that needs to be asked is whether the single-group SAPI measurement model would fit data from each of the language groups. If at least a close fit is obtained the question in addition is whether the measurement model parameters can be considered to be the same across groups. The question is therefore whether the second experimental version of the SAPI displays construct and item bias across the different language groups in South Africa. In other words, if a single-group measurement model fit is achieved in the other language groups the question on the measurement invariance and equivalence of the English language versions of the South African SAPI also has to be examined.

The same questions exist with regards to gender and racioethnic sub-groups. After having demonstrated that the SAPI first-order measurement model fits on a relatively large South African sample the question still exists whether the measurement model fit holds across the various gender-racioethnic subgroups, and if so, whether the model parameters are the same across such groups. Therefore, an important question that needs to be asked is whether the measurement model underlying the SAPI succeeds in measuring the construct across different gender-racioethnic groups as it was constitutively defined and whether the inference that can be made about the state/level of the measured construct given a specific observed score is the same across groups.

The fact that the first-order SAPI measurement model had to be fitted with item parcels rather than representing the latent first-order personality dimensions with the individual items is acknowledged as a limitation. Memory limitations prevented the calculation and inversion of the asymptotic covariance matrix

The manner in which the dimensionality analysis had been performed is also formally acknowledged as a limitation. In addition to the exploratory factor analysis that had been performed, the fitting of single-factor first-and, in cases where the first-order measurement model shows inadequate fit, second-order measurement models for each subscale would have been preferable.

The use of item response theory item analysis, in addition to the classical measurement theory item analysis that had been performed would also have been preferable. Item response theory item analysis has the advantage over classical measurement theory item analysis that it allows the evaluation of the ability of the item to discriminate between individuals that differ in their standing on the latent variable at different points on the latent trait continuum (Hulin et al., 1983).

The failure of the second-order SAPI measurement model to return an admissible solution and the study's failure to find an acceptable solution to the problem is also noted as a limitation.

Nonetheless, even though these limitations are important to take note of the researcher is nonetheless convinced that the study does contribute to a greater understanding of the psychometric properties of the SAPI. Further to this, that the study will without doubt assist in eliciting the necessary further research needed to establish the psychometric credentials of the SAPI as a valuable assessment instrument that can be used with confidence in South Africa.

The confident use of the SAPI in selection decision-making, however requires more than establishing the reliability of the SAPI first-order personality dimension scores, the construct validity of the construct-referenced inferences derived from the dimension scores and the absence of measurement bias in the dimension scores. The confident use of the SAPI in selection decision-making requires the development of a (clinical or mechanical) prediction model that dictates how criterion inferences should be derived from the SAPI first-order (or second-order) personality dimension scores (possibly in conjunction with other predictors). The (predictive) validity of these criterion inferences then needs to be empirically established. If valid, the question moreover needs to be examined whether the criterion inferences are predictively biased.

5.4 RECOMMENDATIONS FOR FUTURE STUDY

As discussed above in the limitation section, there are still numerous questions that need to be addressed. The following proposals for future research on the SAPI are suggested:

- The single-group first-order SAPI measurement model should be fitted on each of the language groups. If at least a close fit is obtained the multi-group SAPI measurement model should be fitted in which only the structure of the model is constrained to be equal across language groups but all other model parameters are estimated freely. If configural invariance would be obtained (Dunbar, Theron & Spangenberg, 2011), the subsequent question is whether the measurement model parameters can be considered invariant and equivalent across the 11 South African language groups. Future studies should focus on investigate the measurement invariance and equivalence of the SAPI for different racio-ethnic and gender groups via a multi-group confirmatory factor analysis;
- The fit of a structural model should be evaluated to further shed light on the construct validity of the SAPI; The structural model should be developed in which the latent personality dimensions are individually modelled and that explicates the manner in which the personality dimensions are causally related to each other and that explicates the manner in which the personality construct is embedded in a larger nomological network of latent variables according to the SAPI's constitutive definition of personality. Such a model should explicate the manner in which the various latent personality dimensions affect dimensions of task and contextual performance.
- If the abovementioned structural model would show at least close fit the structural invariance and equivalence should be investigated across different racio-ethnic and gender groups via a multi-group confirmatory factor analysis. This would essentially give more information with regards to the possibility of construct bias in the SAPI;
- The validity, fairness and utility of criterion predictions derived (clinical or mechanical) from the measures of the SAPI should be investigated.

5.5 CONCLUDING SUMMARY

The South African Personality Inventory project aim was to address the numerous concerns regarding personality assessment in South Africa especially pertaining to the different cultural and linguistic aspects. They developed an entirely new indigenous measurement instrument specifically for South Africa. The hope is that this indigenous psychometric measure of personality will comply with legislative stipulations and that it will also successfully accommodate cultural differences in personality.

As mentioned the confident use of the SAPI in a South African work context and with regards to selection requires (a) that a convincing argument be developed as to why and how personality (as interpreted by SAPI) should be related to job performance, (b) that a structural model derived from the foregoing argument fits empirical data (i.e. there is support for the performance hypothesis), (c) that evidence be available which suggests that the predictor and criterion constructs are validly and reliably measured in the various sub-groups typically comprising applicant groups in South Africa, (d) that evidence be available that (for at least) race and gender group membership do not systematically affect the manner in which the predictor and criterion constructs express themselves in observed measures. The objective of this research was to contribute to the available psychometric evidence with regards to the third aspect (c) mentioned above.

The data used in this study was obtained from the data archives of the SAPI project, with written permission of the test distributor to utilise the sample data for the purpose of this research. The database comprised individual raw items scores for South African participants for each of the items of the SAPI and self-reported information on each respondent's gender, language, English proficiency, provincial distribution and education level. It should be noted that, the records of the sample have been provided in an anonymous format which could not be traced back to an participant's score or profile as anonymity was a condition set by the SAPI project and the Research ethics Committee (Humanities) of Stellenbosch University to gain access to the archival data base.

The main objective of the study was to investigate the first-order factor and second order factor structure of the SAPI through confirmatory factor analysis (CFA). Item and dimensionality analyses were used to determine the extent to which each one of the dedicated items of each of the SAPI subscales satisfactorily reflect the underlying personality dimension it was designed to represent. The first-order SAPI measurement model was successfully fitted using item parcelling that reflects the design intention of the SAPI. Unfortunately only the first-order measurement model could be interpreted as the second-order measurement model did not converge.

The results for the first-order measurement model suggests that the intention of the SAPI to have sets of items replicating specific primary personality factors succeeded and that the subscale measures of the primary personality factors do so with surprisingly little systematic and random error contamination. The evidence resulting from this study is compatible with the position that the SAPI does provide a reliable and construct valid measure of personality within the multi-cultural South African context. The evidence resulting from this study is, however, not sufficient to unequivocally conclude this. There therefore currently still exists a certain degree of uneasiness about the use of the SAPI in personnel selection in South Africa.

To be able to more confidently stand behind the verdict on the construct validity of the SAPI measures, there is a need to broaden the scope of this study by appropriately attending to the proposed recommendations mentioned above.

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APPENDIX A

SOUTH AFRICAN PERSONALITY INVENTORY FACTOR AND FACET DEFINITIONS

- **Positive Social-Relational Disposition** - Positively managing relations with others.
    - **Empathy:** Valuing and showing compassion to others by showing sensitivity towards their needs and emotions.
    - **Facilitating:** Guiding, uplifting, and motivating others through their lives by giving them advice, instruction, and encouragement.
    - **Integrity:** Being consistently dependable, loyal, honest and fair towards others.
    - **Interpersonal Relatedness:** Being accommodating in one's relationships and actively maintaining relationships through forgiveness and helpfulness, and by preserving peace.
    - **Social Intelligence**: Relating to others by being understanding of them and their feelings.
    - **Warm-Heartedness:** Being considerate, protective and supportive of others as well as being approachable and attentive to others' needs.
- **Negative Social Relational Disposition** -Approaching relations with others more controversially.
    - **Conflict-Seeking**: Being socially disruptive, intrusive, and indiscreet about the private affairs of others.
    - **Arrogance**: Seeing oneself as better as and more important than others, by being arrogant and pompous.
    - **Deceitfulness:** Actively deceiving others by being fake, cheating them, and/or fooling them, by creating a false impression of oneself.
    - **Hostility-Egoism:** Aggressively self-promoting, by being self-centred, focusing exclusively on one's own needs and desires, and simultaneously being abusive, denigrating, and critical towards others.
- **Neuroticism -**The tendency of a person to be impulsive and to fluctuate between emotions by being easily aggravated and apprehensive.
    - **Emotional Balance**: Showing respect, knowledge and acceptance of self and ones emotions, and being composed in difficult situations.
    - **Negative Emotionality:** Feeling angry or nervous, worried, and being afraid of various things.

- **Extraversion -** Tendency towards being sociable and talkative, interacting with people in a spontaneous manner by having fun and telling stories that make people laugh.
    - **Playfulness:** Being lively, enjoying having fun, and making others laugh.
    - **Sociability**: Being easy-going and talkative, and enjoying having people around oneself.
- **Conscientiousness** - Orientation towards achievement, order, and traditionalism.
    - **Achievement orientation**: Being motivated, perseverant, ambitious and hard-working into achieving things in life.
    - **Orderliness:** Being organised, neat, punctual, precise and thorough in everything one does.
    - **Traditionalism-Religiosity:** Being traditional by respecting one's own culture and being religious.
    - **Integrity**: Integrity (see Positive Social-Relational Disposition) is also included in the computation of this factor.
- **Openness -** The quality of being well-informed and observant of external and internal things, being a rational and progressive thinker, and acquiring new experiences, knowledge, skills, and ideas.
    - **Broad-Mindedness:** Being imaginative and seeking new experiences and ideas.
    - **Epistemic Curiosity:** Being inquisitive, investigative, and eager to acquire new information.
    - **Intellect: Being** knowledgeable, a quick-learner, adaptable, articulate, innovative and perceptive.
- **Social Desirability** -The tendency to give overly positive or negative self-descriptions/self-impression.
    - **Negative Impression Management** :The tendency to give an overly negative self-description/self-impression
    - **Positive Impression Management** :The tendency to give an overly positive self-description/self-impression.

APPENDIX B
DESCRIPTIVE STATISTICS FOR THE SAPI DATA SET

		ITEM1	ITEM2	ITEM3	ITEM4	ITEM5	ITEM6	ITEM7	ITEM8	ITEM9	ITEM10	ITEM11	ITEM12
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
Mean		4.06	4.09	4.02	3.92	4.03	4.24	3.81	3.75	3.71	3.70	3.74	3.80
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		4	4	4	4	4	4	4	4	4	4	4	4
Std. Deviation		.686	.629	.798	.786	.697	.622	.792	.801	.863	.770	.726	.752
Variance		.471	.395	.636	.617	.486	.387	.628	.642	.745	.592	.528	.566
Skewness		-.621*	-.546*	-.834*	-.750*	-.730*	-.599*	-.832*	-.503*	-.529*	-.391*	-.228*	-.609*
Std. Error of Skewness		.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
Kurtosis		1.142*	1.606*	1.032*	.863*	1.493*	1.374*	1.169*	.304*	.107	.305*	.025	.688*
Std. Error of Kurtosis		.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
Range		4	4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5	5
Percentiles	25	4.00	4.00	4.00	4.00	4.00	4.00	3.00	3.00	3.00	3.00	3.00	3.00
	50	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	75	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00

*(p<.05)

		ITEM13	ITEM14	ITEM15	ITEM16	ITEM17	ITEM18	ITEM19	ITEM20	ITEM21	ITEM22	ITEM23	ITEM24
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
Mean		4.01	3.81	3.53	3.92	3.99	4.05	4.14	4.35	3.93	4.17	4.23	4.14
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		4	4	4	4	4	4	4	4	4	4	4	4
Std. Deviation		.671	.747	.849	.720	.699	.745	.691	.653	.827	.620	.619	.646
Variance		.450	.558	.721	.519	.489	.556	.477	.427	.684	.384	.384	.418
Skewness		-.605*	-.515*	-.239*	-.519*	-.560*	-.498*	-.525*	-.934*	-.641*	-.424*	-.399*	-.666*
Std. Error of Skewness		.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
Kurtosis		1.329*	.573*	-.167*	.606*	.785*	.177*	.512*	1.879*	.315*	.848*	.471*	1.677*
Std. Error of Kurtosis		.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
Range		4	4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5	5
Percentiles	25	4.00	3.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	50	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	75	4.00	4.00	4.00	4.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00

*($p<.05$)

		ITEM25	ITEM26	ITEM27	ITEM28	ITEM29	ITEM30	ITEM31	ITEM32	ITEM33	ITEM34	ITEM35	ITEM36
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
Mean		4.18	4.24	4.07	4.22	4.28	4.09	4.02	3.87	4.29	4.13	3.85	4.00
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		4	4	4	4	4	4	4	4	4	4	4	4
Std. Deviation		.732	.624	.722	.643	.584	.667	.858	.844	.572	.620	.766	.653
Variance		.536	.390	.522	.414	.341	.445	.736	.712	.328	.385	.587	.426
Skewness		-.840*	-.607*	-.738*	-.447*	-.375*	-.429*	-1.129*	-.696*	-.386*	-.445*	-.776*	-.652*
Std. Error of Skewness		.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
Kurtosis		1.348*	1.424*	1.231*	.313*	.892*	.651*	1.915*	.617*	1.254*	1.114*	1.177*	1.786*
Std. Error of Kurtosis		.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
Range		4	4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5	5
Percentiles	25	4.00	4.00	4.00	4.00	4.00	4.00	4.00	3.00	4.00	4	4.00	4.00
	50	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	1	4.00	4.00
	75	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5	4.00	4.00

*(p<.05)

		ITEM37	ITEM38	ITEM39	ITEM40	ITEM41	ITEM42	ITEM43	ITEM44	ITEM45	ITEM46	ITEM47	ITEM48
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
Mean		3.65	3.65	4.03	3.87	4.00	3.99	3.89	4.26	4.17	4.06	4.28	3.90
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		4	4	4	4	4	4	4	4	4	4	4	4
Std. Deviation		.783	.815	.614	.717	.696	.687	.719	.698	.698	.655	.590	.697
Variance		.613	.663	.377	.515	.485	.472	.516	.487	.488	.428	.348	.486
Skewness		-.526*	-.492*	-.646*	-.485*	-.668*	-.821*	-.766*	-.752*	-.722*	-.569*	-.403*	-.462*
Std. Error of Skewness		.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
Kurtosis		.325*	.160*	2.123*	.710*	1.352*	2.028*	1.482*	.863*	1.221*	1.435*	.818*	.699*
Std. Error of Kurtosis		.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
Range		4	4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5	5
Percentiles	25	3.00	3.00	4.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	50	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	75	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00

*(p<.05)

		ITEM49	ITEM50	ITEM51	ITEM52	ITEM53	ITEM54	ITEM55	ITEM56	ITEM57	ITEM58	ITEM59	ITEM60
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
Mean		3.90	4.03	3.84	4.03	3.89	3.97	2.19	1.88	1.90	2.31	1.87	1.98
Median		4.00	4.00	4.00	4.00	4.00	4.00	2.00	2.00	2.00	2.00	2.00	2.00
Mode		4	4	4	4	4	4	2	2	2	2	2	2
Std. Deviation		.746	.642	.718	.616	.714	.620	.931	.884	.848	1.066	.892	.934
Variance		.556	.412	.515	.380	.509	.384	.868	.781	.719	1.137	.796	.872
Skewness		-.516*	-.575*	-.581*	-.531*	-.650*	-.447*	.697*	.963*	1.053*	.538*	.959*	.993*
Std. Error of Skewness		.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
Kurtosis		.509*	1.421*	.781*	1.614*	1.103*	1.226*	.234*	.740*	1.394*	-.516*	.589*	.800*
Std. Error of Kurtosis		.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
Range		4	4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5	5
Percentiles	25	4.00	4.00	3.00	4.00	4.00	4.00	2.00	1.00	1.00	2.00	1.00	1.00
	50	4.00	4.00	4.00	4.00	4.00	4.00	2.00	2.00	2.00	2.00	2.00	2.00
	75	4.00	4.00	4.00	4.00	4.00	4.00	3.00	2.00	2.00	3.00	2.00	2.00

*(p<.05)

		ITEM61	ITEM62	ITEM63	ITEM64	ITEM65	ITEM66	ITEM67	ITEM68	ITEM69	ITEM70	ITEM71	ITEM72
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
Mean		2.69	1.60	1.79	2.50	1.84	1.89	2.44	2.86	1.80	1.69	2.07	1.74
Median		3.00	1.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00
Mode		2[a]	1	2	2	2	2	2	3	2	1	2	2
Std. Deviation		1.029	.706	.764	.988	.854	.812	1.000	.948	.832	.766	.849	.727
Variance		1.059	.498	.584	.977	.729	.659	1.000	.899	.692	.587	.721	.529
Skewness		.161*	1.069*	.943*	.380*	.900*	.902*	.228*	.014	.993*	1.049*	.813*	1.025*
Std. Error of Skewness		.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
Kurtosis		-.617*	1.108*	1.149*	-.468*	.525*	.909*	-.678*	-.474	.894*	1.060*	.816*	1.800*
Std. Error of Kurtosis		.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
Range		4	4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5	5
Percentiles	25	2.00	1.00	1.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
	50	3.00	1.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00
	75	3.00	2.00	2.00	3.00	2.00	2.00	3.00	4.00	2.00	2.00	2.00	2.00

*(p<.05)

		ITEM73	ITEM74	ITEM75	ITEM76	ITEM77	ITEM78	ITEM79	ITEM80	ITEM81	ITEM82	ITEM83	ITEM84
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
Mean		3.37	2.07	1.96	2.02	1.76	1.86	1.75	2.70	2.21	1.67	2.81	2.65
Median		4.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	3.00	2.00
Mode		4	1	2	2	2	2	2	2	2	1	3	2
Std. Deviation		.980	1.046	.912	.836	.801	.803	.762	.962	.964	.796	1.004	1.140
Variance		.960	1.094	.832	.698	.642	.644	.581	.926	.929	.634	1.008	1.301
Skewness		-.503*	.751*	.745*	.868*	1.145*	.975*	1.095*	.189*	.619*	1.270*	-.067	.311*
Std. Error of Skewness		.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
Kurtosis		-.292*	-.298*	.016	1.020*	1.663*	1.370*	1.901*	-.530*	-.175*	1.792*	-.670*	-.761*
Std. Error of Kurtosis		.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
Range		4	4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5	5
Percentiles	25	3.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00	2.00
	50	4.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	3.00	2.00
	75	4.00	3.00	2.00	2.00	2.00	2.00	2.00	3.00	3.00	2.00	4.00	3.00

*(p<.05)

		ITEM85	ITEM86	ITEM87	ITEM88	ITEM89	ITEM90	ITEM91	ITEM92	ITEM93	ITEM94	ITEM95	ITEM96
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
Mean		2.31	1.81	1.84	2.38	4.30	3.82	3.61	4.04	3.66	3.99	3.66	3.99
Median		2.00	2.00	2.00	2.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		2	2	1	2	5	4	4	4	4	4	4	4
Std. Deviation		.975	.827	.929	.903	.769	.829	.961	.697	.890	.761	.858	.854
Variance		.951	.684	.862	.816	.592	.687	.923	.485	.792	.579	.737	.730
Skewness		.560*	1.121*	1.120*	.399*	-1.100*	-.552*	-.530*	-.700*	-.459*	-.788*	-.515*	-.844*
Std. Error of Skewness		.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
Kurtosis		-.142	1.530*	.943*	-.198*	1.494*	.254*	-.143	1.510*	.082	1.334*	.152	.908*
Std. Error of Kurtosis		.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
Range		4	4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5	5
Percentiles	25	2.00	1.00	1.00	2.00	4.00	3.00	3.00	4.00	3.00	4.00	3.00	4.00
	50	2.00	2.00	2.00	2.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	75	3.00	2.00	2.00	3.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00

*(p<.05)

		ITEM97	ITEM98	ITEM99	ITEM100	ITEM101	ITEM102	ITEM103	ITEM104	ITEM105	ITEM106	ITEM107
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
Mean		2.74	3.16	3.41	3.31	2.11	2.38	3.75	3.11	2.85	2.66	4.01
Median		3.00	3.00	4.00	3.00	2.00	2.00	4.00	3.00	3.00	3.00	4.00
Mode		2	4	4	4	2	2	4	4	3	2	4
Std. Deviation		1.233	1.160	1.092	1.069	.869	1.061	1.003	1.083	.965	1.071	.879
Variance		1.519	1.346	1.193	1.144	.755	1.126	1.005	1.173	.931	1.148	.773
Skewness		.297*	-.138*	-.238*	-.273*	.688*	.450*	-.576*	-.008	.102*	.346*	-.711*
Std. Error of Skewness		.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
Kurtosis		-.909*	-.927*	-.792*	-.694*	.475*	-.523*	-.262*	-.829*	-.513*	-.608*	.190*
Std. Error of Kurtosis		.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
Range		4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5
Percentiles	25	2.00	2.00	3.00	3.00	2.00	2.00	3.00	2.00	2.00	2.00	4.00
	50	3.00	3.00	4.00	3.00	2.00	2.00	4.00	3.00	3.00	3.00	4.00
	75	4.00	4.00	4.00	4.00	3.00	3.00	4.00	4.00	4.00	3.00	5.00

*(p<.05)

		ITEM108	ITEM109	ITEM110	ITEM111	ITEM112	ITEM113	ITEM114	ITEM115	ITEM116	ITEM117	ITEM118
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
Mean		3.67	3.53	3.81	3.99	3.26	3.21	3.80	3.58	3.11	3.54	4.09
Median		4.00	4.00	4.00	4.00	3.00	3.00	4.00	4.00	3.00	4.00	4.00
Mode		4	4	4	4	4	3	4	4	4	4	4
Std. Deviation		.964	.997	.816	.704	.990	1.077	.874	1.011	1.116	1.036	.733
Variance		.930	.994	.666	.496	.980	1.161	.764	1.022	1.245	1.073	.537
Skewness		-.665*	-.437*	-.596*	-.717*	-.126*	-.020	-.671*	-.441*	.014	-.473*	-.783*
Std. Error of Skewness		.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
Kurtosis		.027	-.412*	.437*	1.452*	-.622*	-.763*	.397*	-.428*	-.921*	-.463*	1.191*
Std. Error of Kurtosis		.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
Range		4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5
Percentiles	25	3.00	3.00	3.00	4.00	3.00	2.00	3.00	3.00	2.00	3.00	4.00
	50	4.00	4.00	4.00	4.00	3.00	3.00	4.00	4.00	3.00	4.00	4.00
	75	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00

*(p<.05)

		ITEM119	ITEM120	ITEM121	ITEM122	ITEM123	ITEM124	ITEM125	ITEM126	ITEM127	ITEM128	ITEM129
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
Mean		3.75	4.05	3.93	3.80	4.18	4.03	3.52	4.18	4.34	4.05	4.18
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		4	4	4	4	4	4	4	4	4	4	4
Std. Deviation		.915	.866	.899	3.80	.655	.787	1.025	.660	.642	.710	.658
Variance		.836	.749	.808	3.80	.430	.619	1.051	.436	.412	.505	.432
Skewness		-.646*	-.850*	-.772*	3.80	-.654*	-.701*	-.351*	-.602*	-.692*	-.639*	-.680*
Std. Error of Skewness		.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
Kurtosis		.116	.702*	.502*	.400*	1.465*	.660*	-.532*	1.097*	.599*	1.028*	1.504*
Std. Error of Kurtosis		.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
Range		4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5
Percentiles	25	3.00	4.00	3.00	3.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00
	50	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	75	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00

*(p<.05)

		ITEM130	ITEM131	ITEM132	ITEM133	ITEM134	ITEM135	ITEM136	ITEM137	ITEM138	ITEM139	ITEM140	ITEM141
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
Mean		4.13	4.04	4.14	3.86	4.01	3.84	3.97	3.89	4.06	4.00	4.01	4.00
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		4	4	4	4	4	4	4	4	4	4	4	4
Std. Deviation		.648	.859	.700	.827	.780	.887	.836	.827	.656	.726	.790	.690
Variance		.420	.738	.490	.684	.609	.787	.699	.684	.430	.527	.624	.476
Skewness		-.449*	-.705*	-.653*	-.614*	-.577*	-.586*	-.716*	-.587*	-.435*	-.593*	-.701*	-.566*
Std. Error of Skewness		.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
Kurtosis		.696*	.194*	.941*	.293*	.334*	.099	.486*	.307*	.797*	.730*	.670*	.992*
Std. Error of Kurtosis		.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
Range		4	4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5	5
Percentiles	25	4.00	4.00	4.00	3.00	4.00	3.00	4.00	3.00	4.00	4.00	4.00	4.00
	50	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	75	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00	4.00

*(p<.05)

		ITEM142	ITEM143	ITEM144	ITEM145	ITEM146	ITEM147	ITEM148	ITEM149	ITEM150	ITEM151	ITEM152	ITEM153
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
Mean		3.93	3.93	3.37	3.59	4.00	3.53	3.94	3.88	4.20	3.96	3.68	4.37
Median		4.00	4.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		4	4	4	4	4	4	4	4	4	4	4	5
Std. Deviation		.757	.775	.992	1.255	.810	1.288	.902	.909	.661	.820	.835	.703
Variance		.574	.600	.984	1.576	.657	1.658	.813	.826	.437	.673	.697	.495
Skewness		-.601*	-.620*	-.324*	-.733*	-.822*	-.641*	-.715*	-.686*	-.646*	-.679*	-.324*	-1.137*
Std. Error of Skewness		.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
Kurtosis		.701*	.765*	-.298*	-.460*	1.006*	-.659*	.193*	.197*	1.223*	.384*	-.114	1.898*
Std. Error of Kurtosis		.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
Range		4	4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5	5
Percentiles	25	4.00	4.00	3.00	3.00	4.00	3.00	3.00	3.00	4.00	4.00	3.00	4.00
	50	4.00	4.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	75	4.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00

*(p<.05)

		ITEM154	ITEM155	ITEM156	ITEM157	ITEM158	ITEM159	ITEM160	ITEM161	ITEM162	ITEM163	ITEM164	ITEM165
N	Valid	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
Mean		4.40	4.28	4.18	4.38	4.32	4.51	4.31	3.96	3.93	4.02	3.48	4.21
Median		5.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		5	4	4	4	4	5	4	4	4	4	4	4
Std. Deviation		.708	.715	.609	.582	.568	.635	.678	.750	.788	.693	1.029	.677
Variance		.501	.511	.371	.339	.322	.403	.460	.562	.621	.480	1.058	.459
Skewness		-1.330*	-.939*	-.443*	-.454*	-.379*	-1.256*	-.970*	-.496*	-.557*	-.491*	-.456*	-.782*
Std. Error of Skewness		.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039	.039
Kurtosis		2.861*	1.330*	1.087*	.082	1.043*	2.180*	2.009*	.315*	.335*	.620*	-.327*	1.572*
Std. Error of Kurtosis		.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078
Range		4	4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5	5
Percentiles	25	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	3.00	4.00
	50	5.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00
	75	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	5.00

*(p<.05)

		ITEM166	ITEM167	ITEM168	ITEM169	ITEM170
N	Valid	3912	3912	3912	3912	3912
Mean		3.76	3.89	3.74	4.20	3.96
Median		4.00	4.00	4.00	4.00	4.00
Mode		4	4	4	4	4
Std. Deviation		.657	.727	.748	.615	.738
Variance		.431	.528	.559	.378	.544
Skewness		-.398*	-.612*	-.371*	-.612*	-.558*
Std. Error of Skewness		.039	.039	.039	.039	.039
Kurtosis		.779*	.851*	.240*	1.971*	.601*
Std. Error of Kurtosis		.078	.078	.078	.078	.078
Range		4	4	4	4	4
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5
Percentiles	25	3.00	4.00	3.00	4.00	4.00
	50	4.00	4.00	4.00	4.00	4.00
	75	4.00	4.00	4.00	5.00	4.00

*(p<.05)

APPENDIX C
CD CONTAINING THE SPSS AND LISREL 8.88 OUTPUT

1. Scale: Empathy

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.812	.812	7

Item Statistics

	Mean	Std. Deviation	N
ITEM1	4.06	.686	3912
ITEM2	4.09	.629	3912
ITEM3	4.02	.798	3912
ITEM4	3.92	.786	3912
ITEM5	4.03	.697	3912
ITEM6	4.24	.622	3912
ITEM7	3.81	.792	3912

Inter-Item Correlation Matrix

	ITEM1	ITEM2	ITEM3	ITEM4	ITEM5	ITEM6	ITEM7
ITEM1	1.000	.546	.316	.536	.442	.323	.398
ITEM2	.546	1.000	.264	.388	.365	.299	.303
ITEM3	.316	.264	1.000	.393	.430	.264	.400
ITEM4	.536	.388	.393	1.000	.471	.286	.466
ITEM5	.442	.365	.430	.471	1.000	.382	.468
ITEM6	.323	.299	.264	.286	.382	1.000	.288
ITEM7	.398	.303	.400	.466	.468	.288	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.026	3.811	4.239	.429	1.112	.018	7
Item Variances	.517	.387	.636	.249	1.644	.012	7
Inter-Item Correlations	.382	.264	.546	.283	2.072	.007	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM1	24.12	8.900	.617	.450	.775
ITEM2	24.09	9.528	.509	.332	.794
ITEM3	24.15	8.911	.494	.265	.798
ITEM4	24.26	8.451	.619	.410	.774
ITEM5	24.15	8.825	.624	.395	.774
ITEM6	23.94	9.844	.427	.197	.806
ITEM7	24.37	8.649	.562	.334	.785

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
28.18	11.898	3.449	7

2. Scale: Facilitating

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.898	.901	10

Item Statistics

	Mean	Std. Deviation	N
ITEM8	3.75	.801	3912
ITEM9	3.71	.863	3912
ITEM10	3.70	.770	3912
ITEM11	3.74	.726	3912
ITEM12	3.80	.752	3912
ITEM13	4.01	.671	3912
ITEM14	3.81	.747	3912
ITEM15	3.53	.849	3912
ITEM16	3.92	.720	3912
ITEM17	3.99	.699	3912

Inter-Item Correlation Matrix

	ITEM8	ITEM9	ITEM10	ITEM11	ITEM12	ITEM13	ITEM14	ITEM15	ITEM16	ITEM17
ITEM8	1.000	.487	.415	.455	.465	.442	.541	.503	.518	.510
ITEM9	.487	1.000	.311	.401	.389	.355	.424	.382	.423	.394
ITEM10	.415	.311	1.000	.447	.358	.327	.393	.607	.458	.406
ITEM11	.455	.401	.447	1.000	.393	.457	.540	.528	.539	.500
ITEM12	.465	.389	.358	.393	1.000	.379	.458	.451	.453	.433
ITEM13	.442	.355	.327	.457	.379	1.000	.635	.440	.579	.564
ITEM14	.541	.424	.393	.540	.458	.635	1.000	.553	.644	.616
ITEM15	.503	.382	.607	.528	.451	.440	.553	1.000	.584	.534
ITEM16	.518	.423	.458	.539	.453	.579	.644	.584	1.000	.691
ITEM17	.510	.394	.406	.500	.433	.564	.616	.534	.691	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.797	3.531	4.013	.482	1.136	.021	10
Item Variances	.581	.450	.745	.295	1.654	.009	10
Inter-Item Correlations	.475	.311	.691	.380	2.222	.008	10

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM8	34.21	24.462	.663	.452	.887
ITEM9	34.26	24.998	.534	.313	.897
ITEM10	34.26	25.398	.563	.405	.894
ITEM11	34.23	25.111	.648	.427	.888
ITEM12	34.16	25.458	.571	.333	.893
ITEM13	33.95	25.626	.630	.474	.890
ITEM14	34.16	24.375	.735	.590	.883
ITEM15	34.43	23.823	.701	.547	.885
ITEM16	34.05	24.487	.750	.610	.882
ITEM17	33.98	24.918	.709	.562	.885

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
37.97	30.356	5.510	10

3. Scale: Integrity

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.837	.840	13

Item Statistics

	Mean	Std. Deviation	N
ITEM18	4.05	.745	3912
ITEM19	4.14	.691	3912
ITEM20	4.35	.653	3912
ITEM21	3.93	.827	3912
ITEM22	4.17	.620	3912
ITEM23	4.23	.619	3912
ITEM24	4.14	.646	3912
ITEM25	4.18	.732	3912
ITEM26	4.24	.624	3912
ITEM27	4.07	.722	3912
ITEM28	4.22	.643	3912
ITEM29	4.28	.584	3912
ITEM30	4.09	.667	3912

Inter-Item Correlation Matrix

	ITEM18	ITEM19	ITEM20	ITEM21	ITEM22	ITEM23	ITEM24	ITEM25	ITEM26	ITEM27	ITEM28	ITEM29	ITEM30
ITEM18	1.000	.386	.258	.293	.224	.474	.209	.205	.219	.272	.227	.282	.477
ITEM19	.386	1.000	.395	.236	.237	.435	.230	.287	.319	.219	.299	.266	.437
ITEM20	.258	.395	1.000	.179	.246	.324	.219	.245	.400	.157	.494	.224	.260
ITEM21	.293	.236	.179	1.000	.445	.324	.176	.192	.191	.270	.202	.254	.279
ITEM22	.224	.237	.246	.445	1.000	.295	.238	.235	.281	.281	.300	.274	.261
ITEM23	.474	.435	.324	.324	.295	1.000	.325	.285	.339	.311	.331	.381	.516
ITEM24	.209	.230	.219	.176	.238	.325	1.000	.200	.262	.202	.218	.298	.255
ITEM25	.205	.287	.245	.192	.235	.285	.200	1.000	.323	.207	.288	.236	.277
ITEM26	.219	.319	.400	.191	.281	.339	.262	.323	1.000	.191	.421	.245	.279
ITEM27	.272	.219	.157	.270	.281	.311	.202	.207	.191	1.000	.196	.452	.310
ITEM28	.227	.299	.494	.202	.300	.331	.218	.288	.421	.196	1.000	.322	.304
ITEM29	.282	.266	.224	.254	.274	.381	.298	.236	.245	.452	.322	1.000	.360
ITEM30	.477	.437	.260	.279	.261	.516	.255	.277	.279	.310	.304	.360	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.161	3.935	4.352	.417	1.106	.012	13
Item Variances	.460	.341	.684	.343	2.007	.009	13
Inter-Item Correlations	.288	.157	.516	.359	3.282	.007	13

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM18	50.04	22.172	.501	.331	.824
ITEM19	49.95	22.295	.532	.336	.822
ITEM20	49.74	22.845	.475	.344	.826
ITEM21	50.15	22.238	.426	.265	.831
ITEM22	49.92	23.038	.474	.289	.826
ITEM23	49.86	22.201	.626	.432	.816
ITEM24	49.95	23.376	.392	.175	.831
ITEM25	49.90	22.805	.415	.190	.831
ITEM26	49.84	22.941	.487	.298	.825
ITEM27	50.02	22.765	.429	.264	.830
ITEM28	49.87	22.736	.504	.357	.824
ITEM29	49.81	23.043	.510	.327	.824
ITEM30	50.00	22.183	.575	.399	.819

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
54.09	26.242	5.123	13

4. Scale: Interpersonal Relatedness

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.772	.782	9

Item Statistics

	Mean	Std. Deviation	N
ITEM31	4.02	.858	3912
ITEM32	3.87	.844	3912
ITEM33	4.29	.572	3912
ITEM34	4.13	.620	3912
ITEM35	3.85	.766	3912
ITEM36	4.00	.653	3912
ITEM37	3.65	.783	3912
ITEM38	3.65	.815	3912
ITEM39	4.03	.614	3912

Inter-Item Correlation Matrix

	ITEM31	ITEM32	ITEM33	ITEM34	ITEM35	ITEM36	ITEM37	ITEM38	ITEM39
ITEM31	1.000	.161	.157	.218	.166	.148	.184	.225	.198
ITEM32	.161	1.000	.213	.293	.210	.252	.196	.260	.228
ITEM33	.157	.213	1.000	.359	.245	.298	.242	.252	.341
ITEM34	.218	.293	.359	1.000	.299	.478	.260	.315	.367
ITEM35	.166	.210	.245	.299	1.000	.270	.392	.390	.344
ITEM36	.148	.252	.298	.478	.270	1.000	.276	.299	.272
ITEM37	.184	.196	.242	.260	.392	.276	1.000	.641	.371
ITEM38	.225	.260	.252	.315	.390	.299	.641	1.000	.418
ITEM39	.198	.228	.341	.367	.344	.272	.371	.418	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.944	3.651	4.287	.636	1.174	.044	9
Item Variances	.536	.328	.736	.408	2.245	.025	9
Inter-Item Correlations	.284	.148	.641	.493	4.321	.010	9

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM31	31.48	12.871	.288	.088	.780
ITEM32	31.62	12.519	.360	.142	.767
ITEM33	31.21	13.308	.418	.206	.757
ITEM34	31.36	12.681	.524	.346	.743
ITEM35	31.65	12.254	.474	.244	.747
ITEM36	31.50	12.813	.458	.280	.750
ITEM37	31.85	11.865	.538	.446	.737
ITEM38	31.84	11.452	.592	.479	.727
ITEM39	31.47	12.725	.520	.294	.743

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
35.50	15.380	3.922	9

5. Scale: Social Intelligence

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.797	.798	4

Item Statistics

	Mean	Std. Deviation	N
ITEM40	3.87	.717	3912
ITEM41	4.00	.696	3912
ITEM42	3.99	.687	3912
ITEM43	3.89	.719	3912

Inter-Item Correlation Matrix

	ITEM40	ITEM41	ITEM42	ITEM43
ITEM40	1.000	.500	.439	.434
ITEM41	.500	1.000	.491	.444
ITEM42	.439	.491	1.000	.671
ITEM43	.434	.444	.671	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.940	3.873	4.000	.127	1.033	.004	4
Item Variances	.497	.472	.516	.044	1.094	.000	4
Inter-Item Correlations	.497	.434	.671	.237	1.547	.007	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM40	11.89	3.051	.551	.317	.776
ITEM41	11.76	3.047	.581	.349	.760
ITEM42	11.77	2.907	.668	.505	.718
ITEM43	11.87	2.874	.638	.481	.732

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
15.76	4.945	2.224	4

6. Scale: Warm-Heartedness

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.858	.859	11

Item Statistics

	Mean	Std. Deviation	N
ITEM44	4.26	.698	3912
ITEM45	4.17	.698	3912
ITEM46	4.06	.655	3912
ITEM47	4.28	.590	3912
ITEM48	3.90	.697	3912
ITEM49	3.90	.746	3912
ITEM50	4.03	.642	3912
ITEM51	3.84	.718	3912
ITEM52	4.03	.616	3912

ITEM53	3.89	.714	3912
ITEM54	3.97	.620	3912

Inter-Item Correlation Matrix

	ITEM44	ITEM45	ITEM46	ITEM47	ITEM48	ITEM49	ITEM50	ITEM51	ITEM52	ITEM53	ITEM54
ITEM44	1.000	.423	.385	.322	.327	.381	.363	.353	.407	.328	.334
ITEM45	.423	1.000	.396	.306	.291	.266	.274	.332	.417	.329	.354
ITEM46	.385	.396	1.000	.342	.314	.305	.323	.316	.402	.321	.363
ITEM47	.322	.306	.342	1.000	.267	.291	.278	.274	.369	.328	.344
ITEM48	.327	.291	.314	.267	1.000	.337	.329	.371	.394	.341	.330
ITEM49	.381	.266	.305	.291	.337	1.000	.361	.340	.402	.346	.339
ITEM50	.363	.274	.323	.278	.329	.361	1.000	.491	.430	.357	.361
ITEM51	.353	.332	.316	.274	.371	.340	.491	1.000	.491	.365	.403
ITEM52	.407	.417	.402	.369	.394	.402	.430	.491	1.000	.451	.457
ITEM53	.328	.329	.321	.328	.341	.346	.357	.365	.451	1.000	.520
ITEM54	.334	.354	.363	.344	.330	.339	.361	.403	.457	.520	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.031	3.839	4.284	.445	1.116	.023	11
Item Variances	.454	.348	.556	.209	1.600	.004	11
Inter-Item Correlations	.357	.266	.520	.255	1.958	.003	11

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM44	40.08	18.817	.560	.333	.845
ITEM45	40.17	19.046	.518	.305	.848
ITEM46	40.28	19.215	.531	.299	.847
ITEM47	40.05	19.852	.474	.236	.851
ITEM48	40.43	19.120	.506	.261	.849
ITEM49	40.44	18.799	.516	.280	.849
ITEM50	40.30	19.182	.551	.341	.846
ITEM51	40.50	18.607	.576	.379	.844
ITEM52	40.30	18.784	.661	.443	.838
ITEM53	40.45	18.688	.566	.367	.845
ITEM54	40.36	19.111	.590	.386	.843

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
44.34	22.692	4.764	11

7. Scale: Arrogance

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.770	.774	6

Item Statistics

	Mean	Std. Deviation	N
ITEM55	2.19	.931	3912
ITEM56	1.88	.884	3912
ITEM57	1.90	.848	3912
ITEM58	2.31	1.066	3912
ITEM59	1.87	.892	3912
ITEM60	1.98	.934	3912

Inter-Item Correlation Matrix

	ITEM55	ITEM56	ITEM57	ITEM58	ITEM59	ITEM60
ITEM55	1.000	.411	.372	.319	.522	.401
ITEM56	.411	1.000	.383	.228	.355	.393
ITEM57	.372	.383	1.000	.217	.346	.342
ITEM58	.319	.228	.217	1.000	.439	.290
ITEM59	.522	.355	.346	.439	1.000	.435
ITEM60	.401	.393	.342	.290	.435	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.024	1.870	2.309	.439	1.235	.034	6
Item Variances	.862	.719	1.137	.417	1.580	.021	6
Inter-Item Correlations	.364	.217	.522	.305	2.403	.006	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM55	9.95	10.115	.585	.366	.718
ITEM56	10.26	10.775	.498	.275	.741
ITEM57	10.24	11.107	.463	.234	.749
ITEM58	9.83	10.439	.417	.213	.767
ITEM59	10.27	10.137	.618	.405	.710
ITEM60	10.16	10.384	.530	.291	.732

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
12.14	14.446	3.801	6

8. Scale: Conflict Seeking

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.763	.772	7

Item Statistics

	Mean	Std. Deviation	N
ITEM61	2.69	1.029	3912
ITEM62	1.60	.706	3912
ITEM63	1.79	.764	3912
ITEM64	2.50	.988	3912
ITEM65	1.84	.854	3912
ITEM66	1.89	.812	3912
ITEM67	2.44	1.000	3912

Inter-Item Correlation Matrix

	ITEM61	ITEM62	ITEM63	ITEM64	ITEM65	ITEM66	ITEM67
ITEM61	1.000	.347	.252	.260	.372	.301	.414
ITEM62	.347	1.000	.364	.171	.481	.325	.408
ITEM63	.252	.364	1.000	.255	.391	.361	.292
ITEM64	.260	.171	.255	1.000	.214	.356	.159
ITEM65	.372	.481	.391	.214	1.000	.334	.488
ITEM66	.301	.325	.361	.356	.334	1.000	.297

ITEM67	.414	.408	.292	.159	.488	.297	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.106	1.596	2.687	1.091	1.683	.182	7
Item Variances	.787	.498	1.059	.561	2.126	.050	7
Inter-Item Correlations	.326	.159	.488	.329	3.070	.008	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM61	12.06	11.422	.495	.260	.733
ITEM62	13.15	12.759	.528	.320	.729
ITEM63	12.96	12.758	.472	.249	.737
ITEM64	12.24	12.545	.343	.167	.767
ITEM65	12.90	11.788	.580	.383	.714
ITEM66	12.86	12.418	.497	.266	.732
ITEM67	12.30	11.415	.519	.330	.726

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
14.74	15.920	3.990	7

9. Scale: Hostile Egoism

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.837	.842	14

Item Statistics

	Mean	Std. Deviation	N
ITEM68	2.86	.948	3912
ITEM69	1.80	.832	3912
ITEM70	1.69	.766	3912
ITEM71	2.07	.849	3912
ITEM72	1.74	.727	3912

ITEM73	3.37	.980	3912
ITEM74	2.07	1.046	3912
ITEM75	1.96	.912	3912
ITEM76	2.02	.836	3912
ITEM77	1.76	.801	3912
ITEM78	1.86	.803	3912
ITEM79	1.75	.762	3912
ITEM80	2.70	.962	3912
ITEM81	2.21	.964	3912

Inter-Item Correlation Matrix

	ITEM68	ITEM69	ITEM70	ITEM71	ITEM72	ITEM73	ITEM74	ITEM75	ITEM76	ITEM77	ITEM78	ITEM79	ITEM80	ITEM81
ITEM68	1.000	.289	.283	.169	.228	.269	.155	.233	.150	.317	.195	.220	.215	.261
ITEM69	.289	1.000	.461	.196	.349	.257	.151	.305	.189	.340	.217	.263	.231	.325
ITEM70	.283	.461	1.000	.193	.359	.302	.182	.342	.197	.376	.247	.286	.224	.345
ITEM71	.169	.196	.193	1.000	.279	.107	.124	.186	.288	.300	.297	.337	.097	.218
ITEM72	.228	.349	.359	.279	1.000	.227	.238	.346	.296	.408	.341	.324	.294	.378
ITEM73	.269	.257	.302	.107	.227	1.000	.271	.413	.090	.271	.128	.134	.207	.410
ITEM74	.155	.151	.182	.124	.238	.271	1.000	.453	.185	.257	.211	.176	.226	.362
ITEM75	.233	.305	.342	.186	.346	.413	.453	1.000	.255	.391	.311	.298	.213	.461
ITEM76	.150	.189	.197	.288	.296	.090	.185	.255	1.000	.342	.549	.394	.198	.221
ITEM77	.317	.340	.376	.300	.408	.271	.257	.391	.342	1.000	.413	.401	.274	.463
ITEM78	.195	.217	.247	.297	.341	.128	.211	.311	.549	.413	1.000	.439	.228	.298
ITEM79	.220	.263	.286	.337	.324	.134	.176	.298	.394	.401	.439	1.000	.161	.287
ITEM80	.215	.231	.224	.097	.294	.207	.226	.213	.198	.274	.228	.161	1.000	.317
ITEM81	.261	.325	.345	.218	.378	.410	.362	.461	.221	.463	.298	.287	.317	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.133	1.689	3.375	1.685	1.998	.252	14
Item Variances	.767	.529	1.094	.566	2.070	.030	14
Inter-Item Correlations	.276	.090	.549	.460	6.131	.009	14

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM68	27.00	42.464	.394	.182	.832
ITEM69	28.06	42.420	.472	.297	.827
ITEM70	28.17	42.574	.507	.323	.825
ITEM71	27.79	43.506	.357	.185	.834

ITEM72	28.13	42.542	.544	.315	.823
ITEM73	26.49	41.962	.418	.273	.831
ITEM74	27.79	41.697	.403	.250	.833
ITEM75	27.90	40.692	.576	.403	.820
ITEM76	27.84	42.779	.435	.352	.829
ITEM77	28.10	41.258	.615	.402	.818
ITEM78	28.01	42.263	.510	.409	.825
ITEM79	28.11	42.786	.488	.319	.826
ITEM80	27.17	42.507	.382	.177	.833
ITEM81	27.65	40.051	.594	.399	.818

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
29.86	48.230	6.945	14

10. Scale: Deceitfulness

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.751	.756	7

Item Statistics

	Mean	Std. Deviation	N
ITEM82	1.67	.796	3912
ITEM83	2.81	1.004	3912
ITEM84	2.65	1.140	3912
ITEM85	2.31	.975	3912
ITEM86	1.81	.827	3912
ITEM87	1.84	.929	3912
ITEM88	2.38	.903	3912

Inter-Item Correlation Matrix

	ITEM82	ITEM83	ITEM84	ITEM85	ITEM86	ITEM87	ITEM88
ITEM82	1.000	.183	.268	.299	.468	.391	.320
ITEM83	.183	1.000	.294	.266	.202	.098	.143
ITEM84	.268	.294	1.000	.603	.310	.211	.327
ITEM85	.299	.266	.603	1.000	.386	.237	.374
ITEM86	.468	.202	.310	.386	1.000	.369	.335
ITEM87	.391	.098	.211	.237	.369	1.000	.350
ITEM88	.320	.143	.327	.374	.335	.350	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.211	1.673	2.811	1.138	1.680	.196	7
Item Variances	.894	.634	1.301	.666	2.050	.050	7
Inter-Item Correlations	.306	.098	.603	.506	6.185	.012	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM82	13.80	14.007	.486	.299	.718
ITEM83	12.67	14.270	.298	.111	.759
ITEM84	12.83	12.034	.532	.397	.706
ITEM85	13.17	12.552	.584	.432	.693
ITEM86	13.66	13.628	.529	.326	.709
ITEM87	13.64	13.886	.403	.237	.734
ITEM88	13.09	13.583	.472	.246	.719

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
15.48	17.541	4.188	7

11. Scale: Emotional Balance

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.797	.800	8

Item Statistics

	Mean	Std. Deviation	N
ITEM89	4.30	.769	3912
ITEM90	3.82	.829	3912
ITEM91	3.61	.961	3912
ITEM92	4.04	.697	3912
ITEM93	3.66	.890	3912

ITEM94	3.99	.761	3912
ITEM95	3.66	.858	3912
ITEM96	3.99	.854	3912

Inter-Item Correlation Matrix

	ITEM89	ITEM90	ITEM91	ITEM92	ITEM93	ITEM94	ITEM95	ITEM96
ITEM89	1.000	.219	.217	.278	.283	.316	.208	.556
ITEM90	.219	1.000	.408	.311	.441	.316	.287	.262
ITEM91	.217	.408	1.000	.276	.407	.291	.326	.289
ITEM92	.278	.311	.276	1.000	.307	.498	.305	.343
ITEM93	.283	.441	.407	.307	1.000	.377	.312	.376
ITEM94	.316	.316	.291	.498	.377	1.000	.344	.423
ITEM95	.208	.287	.326	.305	.312	.344	1.000	.341
ITEM96	.556	.262	.289	.343	.376	.423	.341	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.882	3.611	4.300	.689	1.191	.057	8
Item Variances	.691	.485	.923	.438	1.902	.019	8
Inter-Item Correlations	.333	.208	.556	.348	2.671	.006	8

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM89	26.76	15.009	.446	.325	.783
ITEM90	27.24	14.459	.494	.287	.776
ITEM91	27.44	13.867	.485	.269	.780
ITEM92	27.02	15.069	.501	.304	.777
ITEM93	27.40	13.796	.555	.331	.767
ITEM94	27.07	14.453	.558	.364	.767
ITEM95	27.39	14.514	.460	.225	.782
ITEM96	27.07	13.925	.566	.422	.765

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
31.06	18.261	4.273	8

12. Scale: Negative Emotionality

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.820	.822	10

Item Statistics

	Mean	Std. Deviation	N
ITEM97	2.74	1.233	3912
ITEM98	3.16	1.160	3912
ITEM99	3.41	1.092	3912
ITEM100	3.31	1.069	3912
ITEM101	2.11	.869	3912
ITEM102	2.38	1.061	3912
ITEM103	3.75	1.003	3912
ITEM104	3.11	1.083	3912
ITEM105	2.85	.965	3912
ITEM106	2.66	1.071	3912

Inter-Item Correlation Matrix

	ITEM97	ITEM98	ITEM99	ITEM100	ITEM101	ITEM102	ITEM103	ITEM104	ITEM105	ITEM106
ITEM97	1.000	.291	.285	.241	.196	.215	.404	.330	.158	.231
ITEM98	.291	1.000	.440	.431	.274	.270	.235	.412	.280	.232
ITEM99	.285	.440	1.000	.539	.328	.312	.310	.500	.298	.320
ITEM100	.241	.431	.539	1.000	.323	.307	.238	.439	.339	.314
ITEM101	.196	.274	.328	.323	1.000	.415	.129	.308	.353	.381
ITEM102	.215	.270	.312	.307	.415	1.000	.177	.316	.366	.636
ITEM103	.404	.235	.310	.238	.129	.177	1.000	.297	.167	.192
ITEM104	.330	.412	.500	.439	.308	.316	.297	1.000	.308	.309
ITEM105	.158	.280	.298	.339	.353	.366	.167	.308	1.000	.349
ITEM106	.231	.232	.320	.314	.381	.636	.192	.309	.349	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.949	2.110	3.748	1.638	1.776	.246	10
Item Variances	1.134	.755	1.519	.765	2.013	.044	10
Inter-Item Correlations	.315	.129	.636	.507	4.943	.010	10

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM97	26.75	35.727	.413	.239	.816
ITEM98	26.32	34.959	.512	.301	.803
ITEM99	26.08	34.409	.603	.426	.793
ITEM100	26.17	34.979	.570	.385	.797
ITEM101	27.38	37.509	.476	.271	.808
ITEM102	27.10	35.487	.531	.460	.801
ITEM103	25.74	37.607	.383	.218	.816
ITEM104	26.38	34.726	.582	.364	.796
ITEM105	26.64	37.039	.456	.243	.809
ITEM106	26.82	35.520	.522	.445	.802

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
29.49	43.328	6.582	10

13. Scale: Playfulness

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.821	.825	6

Item Statistics

	Mean	Std. Deviation	N
ITEM107	4.01	.879	3912
ITEM108	3.67	.964	3912
ITEM109	3.53	.997	3912
ITEM110	3.81	.816	3912
ITEM111	3.99	.704	3912
ITEM112	3.26	.990	3912

Inter-Item Correlation Matrix

	ITEM107	ITEM108	ITEM109	ITEM110	ITEM111	ITEM112
ITEM107	1.000	.351	.405	.467	.430	.267
ITEM108	.351	1.000	.570	.573	.360	.456
ITEM109	.405	.570	1.000	.652	.430	.376

ITEM110	.467	.573	.652	1.000	.527	.434
ITEM111	.430	.360	.430	.527	1.000	.312
ITEM112	.267	.456	.376	.434	.312	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.711	3.256	4.010	.754	1.232	.083	6
Item Variances	.806	.496	.994	.498	2.004	.040	6
Inter-Item Correlations	.441	.267	.652	.385	2.439	.011	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM107	18.26	11.573	.497	.279	.811
ITEM108	18.60	10.433	.635	.436	.782
ITEM109	18.73	10.110	.664	.495	.775
ITEM110	18.46	10.712	.738	.566	.763
ITEM111	18.28	12.156	.543	.332	.803
ITEM112	19.01	11.124	.487	.260	.816

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
22.27	15.317	3.914	6

14. Scale: Sociability

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.861	.867	7

Item Statistics

	Mean	Std. Deviation	N
ITEM113	3.21	1.077	3912
ITEM114	3.80	.874	3912
ITEM115	3.58	1.011	3912
ITEM116	3.11	1.116	3912

ITEM117	3.54	1.036	3912
ITEM118	4.09	.733	3912
ITEM119	3.75	.915	3912

Inter-Item Correlation Matrix

	ITEM113	ITEM114	ITEM115	ITEM116	ITEM117	ITEM118	ITEM119
ITEM113	1.000	.421	.466	.334	.427	.319	.427
ITEM114	.421	1.000	.474	.444	.590	.482	.613
ITEM115	.466	.474	1.000	.376	.544	.453	.560
ITEM116	.334	.444	.376	1.000	.580	.342	.477
ITEM117	.427	.590	.544	.580	1.000	.496	.717
ITEM118	.319	.482	.453	.342	.496	1.000	.576
ITEM119	.427	.613	.560	.477	.717	.576	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.583	3.112	4.093	.981	1.315	.115	7
Item Variances	.948	.537	1.245	.709	2.320	.062	7
Inter-Item Correlations	.482	.319	.717	.397	2.244	.010	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM113	21.86	19.302	.519	.289	.859
ITEM114	21.28	19.444	.670	.464	.837
ITEM115	21.50	18.801	.633	.419	.842
ITEM116	21.97	18.736	.558	.359	.855
ITEM117	21.54	17.686	.759	.620	.822
ITEM118	20.98	20.958	.578	.378	.851
ITEM119	21.33	18.575	.756	.624	.825

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
25.08	25.373	5.037	7

15. Scale: Achievement orientation

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.861	.870	11

Item Statistics

	Mean	Std. Deviation	N
ITEM120	4.05	.866	3912
ITEM121	3.93	.899	3912
ITEM122	3.80	.971	3912
ITEM123	4.18	.655	3912
ITEM124	4.03	.787	3912
ITEM125	3.52	1.025	3912
ITEM126	4.18	.660	3912
ITEM127	4.34	.642	3912
ITEM128	4.05	.710	3912
ITEM129	4.18	.658	3912
ITEM130	4.13	.648	3912

Inter-Item Correlation Matrix

	ITEM120	ITEM121	ITEM122	ITEM123	ITEM124	ITEM125	ITEM126	ITEM127	ITEM128	ITEM129	ITEM130
ITEM120	1.000	.528	.402	.299	.496	.306	.404	.321	.289	.333	.301
ITEM121	.528	1.000	.485	.297	.558	.297	.428	.306	.255	.383	.308
ITEM122	.402	.485	1.000	.294	.526	.277	.399	.345	.287	.498	.271
ITEM123	.299	.297	.294	1.000	.396	.225	.447	.405	.452	.379	.311
ITEM124	.496	.558	.526	.396	1.000	.414	.550	.464	.394	.494	.395
ITEM125	.306	.297	.277	.225	.414	1.000	.327	.253	.280	.275	.242
ITEM126	.404	.428	.399	.447	.550	.327	1.000	.480	.441	.489	.396
ITEM127	.321	.306	.345	.405	.464	.253	.480	1.000	.447	.476	.327
ITEM128	.289	.255	.287	.452	.394	.280	.441	.447	1.000	.411	.295
ITEM129	.333	.383	.498	.379	.494	.275	.489	.476	.411	1.000	.402
ITEM130	.301	.308	.271	.311	.395	.242	.396	.327	.295	.402	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.036	3.524	4.343	.820	1.233	.050	11
Item Variances	.618	.412	1.051	.639	2.550	.054	11
Inter-Item Correlations	.377	.225	.558	.333	2.483	.008	11

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM120	40.35	25.676	.564	.366	.849
ITEM121	40.46	25.211	.593	.434	.847
ITEM122	40.60	24.865	.575	.395	.849
ITEM123	40.22	27.428	.512	.319	.853
ITEM124	40.37	25.012	.729	.545	.836
ITEM125	40.87	25.835	.430	.206	.864
ITEM126	40.21	26.470	.657	.457	.844
ITEM127	40.05	27.189	.563	.376	.850
ITEM128	40.35	27.042	.517	.343	.852
ITEM129	40.21	26.709	.622	.437	.846
ITEM130	40.27	27.701	.477	.252	.855

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
44.40	31.371	5.601	11

16. Scale: Orderliness

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.882	.884	13

Item Statistics

	Mean	Std. Deviation	N
ITEM131	4.04	.859	3912
ITEM132	4.14	.700	3912
ITEM133	3.86	.827	3912
ITEM134	4.01	.780	3912
ITEM135	3.84	.887	3912
ITEM136	3.97	.836	3912
ITEM137	3.89	.827	3912
ITEM138	4.06	.656	3912
ITEM139	4.00	.726	3912
ITEM140	4.01	.790	3912
ITEM141	4.00	.690	3912

ITEM142	3.93	.757	3912
ITEM143	3.93	.775	3912

Inter-Item Correlation Matrix

	ITEM131	ITEM132	ITEM133	ITEM134	ITEM135	ITEM136	ITEM137	ITEM138	ITEM139	ITEM140	ITEM141	ITEM142	ITEM143
ITEM131	1.000	.373	.205	.287	.610	.511	.538	.307	.382	.238	.344	.264	.277
ITEM132	.373	1.000	.397	.356	.311	.446	.306	.563	.508	.347	.409	.343	.243
ITEM133	.205	.397	1.000	.255	.215	.277	.221	.407	.404	.214	.274	.228	.222
ITEM134	.287	.356	.255	1.000	.323	.414	.305	.381	.350	.424	.526	.422	.283
ITEM135	.610	.311	.215	.323	1.000	.474	.561	.286	.377	.227	.345	.263	.271
ITEM136	.511	.446	.277	.414	.474	1.000	.474	.455	.491	.441	.511	.449	.330
ITEM137	.538	.306	.221	.305	.561	.474	1.000	.338	.394	.288	.345	.317	.306
ITEM138	.307	.563	.407	.381	.286	.455	.338	1.000	.567	.387	.446	.402	.325
ITEM139	.382	.508	.404	.350	.377	.491	.394	.567	1.000	.339	.426	.363	.325
ITEM140	.238	.347	.214	.424	.227	.441	.288	.387	.339	1.000	.485	.640	.340
ITEM141	.344	.409	.274	.526	.345	.511	.345	.446	.426	.485	1.000	.483	.343
ITEM142	.264	.343	.228	.422	.263	.449	.317	.402	.363	.640	.483	1.000	.347
ITEM143	.277	.243	.222	.283	.271	.330	.306	.325	.325	.340	.343	.347	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.976	3.842	4.144	.302	1.079	.007	13
Item Variances	.609	.430	.787	.357	1.830	.012	13
Inter-Item Correlations	.370	.205	.640	.436	3.126	.010	13

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM131	47.65	36.023	.564	.478	.873
ITEM132	47.55	37.083	.586	.429	.872
ITEM133	47.83	37.721	.410	.238	.882
ITEM134	47.68	36.763	.550	.357	.874
ITEM135	47.85	35.898	.554	.473	.874
ITEM136	47.72	35.076	.687	.495	.866
ITEM137	47.80	36.200	.572	.425	.873
ITEM138	47.63	37.178	.621	.480	.871
ITEM139	47.69	36.499	.632	.458	.870
ITEM140	47.68	36.664	.553	.478	.874
ITEM141	47.69	36.783	.635	.456	.870
ITEM142	47.76	36.713	.576	.481	.873

ITEM143	47.76	37.638	.456	.223	.879

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
51.69	42.574	6.525	13

17. Scale: Traditionalism-Religiosity

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.749	.752	4

Item Statistics

	Mean	Std. Deviation	N
ITEM144	3.37	.992	3912
ITEM145	3.59	1.255	3912
ITEM146	4.00	.810	3912
ITEM147	3.53	1.288	3912

Inter-Item Correlation Matrix

	ITEM144	ITEM145	ITEM146	ITEM147
ITEM144	1.000	.306	.517	.325
ITEM145	.306	1.000	.344	.722
ITEM146	.517	.344	1.000	.376
ITEM147	.325	.722	.376	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.624	3.373	4.005	.632	1.187	.073	4
Item Variances	1.219	.657	1.658	1.002	2.525	.231	4
Inter-Item Correlations	.432	.306	.722	.416	2.357	.024	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM144	11.12	7.709	.440	.290	.743
ITEM145	10.91	5.744	.631	.530	.638
ITEM146	10.49	8.146	.500	.319	.723
ITEM147	10.96	5.510	.653	.543	.624

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
14.50	11.117	3.334	4

18. Scale: Broadmindedness

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.759	.764	6

Item Statistics

	Mean	Std. Deviation	N
ITEM152	3.68	.835	3912
ITEM153	4.37	.703	3912
ITEM148	3.94	.902	3912
ITEM149	3.88	.909	3912
ITEM150	4.20	.661	3912
ITEM151	3.96	.820	3912

Inter-Item Correlation Matrix

	ITEM152	ITEM153	ITEM148	ITEM149	ITEM150	ITEM151
ITEM152	1.000	.201	.516	.336	.382	.382
ITEM153	.201	1.000	.195	.448	.425	.277
ITEM148	.516	.195	1.000	.298	.317	.306
ITEM149	.336	.448	.298	1.000	.493	.336
ITEM150	.382	.425	.317	.493	1.000	.350
ITEM151	.382	.277	.306	.336	.350	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.004	3.678	4.370	.692	1.188	.060	6
Item Variances	.657	.437	.826	.390	1.893	.026	6
Inter-Item Correlations	.351	.195	.516	.321	2.641	.008	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM152	20.35	7.568	.537	.357	.714
ITEM153	19.65	8.467	.433	.264	.741
ITEM148	20.08	7.577	.472	.296	.734
ITEM149	20.15	7.242	.545	.348	.713
ITEM150	19.83	8.130	.575	.357	.711
ITEM151	20.06	7.883	.472	.229	.732

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
24.02	10.732	3.276	6

19. Scale: Epistemic Curiosity

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.754	.761	6

Item Statistics

	Mean	Std. Deviation	N
ITEM154	4.40	.708	3912
ITEM155	4.28	.715	3912
ITEM156	4.18	.609	3912
ITEM157	4.38	.582	3912
ITEM158	4.32	.568	3912
ITEM159	4.51	.635	3912

Inter-Item Correlation Matrix

	ITEM154	ITEM155	ITEM156	ITEM157	ITEM158	ITEM159
ITEM154	1.000	.238	.288	.411	.321	.325
ITEM155	.238	1.000	.316	.410	.380	.233
ITEM156	.288	.316	1.000	.395	.428	.265
ITEM157	.411	.410	.395	1.000	.517	.369
ITEM158	.321	.380	.428	.517	1.000	.313
ITEM159	.325	.233	.265	.369	.313	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.346	4.181	4.507	.326	1.078	.012	6
Item Variances	.408	.322	.511	.188	1.585	.007	6
Inter-Item Correlations	.347	.233	.517	.284	2.218	.006	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM154	21.68	4.704	.449	.222	.733
ITEM155	21.80	4.695	.445	.223	.734
ITEM156	21.90	4.908	.483	.251	.721
ITEM157	21.69	4.669	.626	.404	.686
ITEM158	21.75	4.831	.573	.358	.700
ITEM159	21.57	4.972	.426	.193	.736

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
26.08	6.583	2.566	6

20. Scale: Intellect

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.812	.817	11

Item Statistics

	Mean	Std. Deviation	N
ITEM160	4.31	.678	3912
ITEM161	3.96	.750	3912
ITEM162	3.93	.788	3912
ITEM163	4.02	.693	3912
ITEM164	3.48	1.029	3912
ITEM165	4.21	.677	3912
ITEM166	3.76	.657	3912
ITEM167	3.89	.727	3912
ITEM168	3.74	.748	3912
ITEM169	4.20	.615	3912
ITEM170	3.96	.738	3912

Inter-Item Correlation Matrix

	ITEM160	ITEM161	ITEM162	ITEM163	ITEM164	ITEM165	ITEM166	ITEM167	ITEM168	ITEM169	ITEM170
ITEM160	1.000	.329	.268	.534	.226	.228	.238	.292	.314	.202	.274
ITEM161	.329	1.000	.311	.413	.219	.182	.264	.254	.316	.167	.216
ITEM162	.268	.311	1.000	.325	.292	.224	.258	.329	.492	.248	.244
ITEM163	.534	.413	.325	1.000	.257	.250	.341	.355	.386	.214	.311
ITEM164	.226	.219	.292	.257	1.000	.211	.276	.376	.294	.158	.262
ITEM165	.228	.182	.224	.250	.211	1.000	.361	.288	.286	.304	.214
ITEM166	.238	.264	.258	.341	.276	.361	1.000	.329	.351	.292	.269
ITEM167	.292	.254	.329	.355	.376	.288	.329	1.000	.375	.280	.293
ITEM168	.314	.316	.492	.386	.294	.286	.351	.375	1.000	.292	.375
ITEM169	.202	.167	.248	.214	.158	.304	.292	.280	.292	1.000	.253
ITEM170	.274	.216	.244	.311	.262	.214	.269	.293	.375	.253	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.951	3.476	4.310	.834	1.240	.057	11
Item Variances	.553	.378	1.058	.680	2.799	.033	11
Inter-Item Correlations	.289	.158	.534	.376	3.377	.005	11

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITEM160	39.15	19.883	.481	.324	.797
ITEM161	39.49	19.755	.441	.234	.801

ITEM162	39.53	19.165	.503	.306	.795
ITEM163	39.44	19.319	.567	.412	.789
ITEM164	39.98	18.423	.427	.211	.808
ITEM165	39.25	20.270	.414	.211	.803
ITEM166	39.69	19.923	.494	.272	.796
ITEM167	39.56	19.294	.537	.299	.791
ITEM168	39.71	18.867	.589	.387	.786
ITEM169	39.26	20.692	.390	.187	.805
ITEM170	39.50	19.765	.449	.219	.800

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
43.46	23.253	4.822	11

Exploratory Factor Analysis

1. EMPATHY

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM1	4.06	.686	3912
ITEM2	4.09	.629	3912
ITEM3	4.02	.798	3912
ITEM4	3.92	.786	3912
ITEM5	4.03	.697	3912
ITEM6	4.24	.622	3912
ITEM7	3.81	.792	3912

Correlation Matrix[a]

		ITEM1	ITEM2	ITEM3	ITEM4	ITEM5	ITEM6	ITEM7
Correlation	ITEM1	1.000	.546	.316	.536	.442	.323	.398
	ITEM2	.546	1.000	.264	.388	.365	.299	.303
	ITEM3	.316	.264	1.000	.393	.430	.264	.400
	ITEM4	.536	.388	.393	1.000	.471	.286	.466
	ITEM5	.442	.365	.430	.471	1.000	.382	.468
	ITEM6	.323	.299	.264	.286	.382	1.000	.288
	ITEM7	.398	.303	.400	.466	.468	.288	1.000
Sig. (1-tailed)	ITEM1		.000	.000	.000	.000	.000	.000
	ITEM2	.000		.000	.000	.000	.000	.000
	ITEM3	.000	.000		.000	.000	.000	.000
	ITEM4	.000	.000	.000		.000	.000	.000
	ITEM5	.000	.000	.000	.000		.000	.000
	ITEM6	.000	.000	.000	.000	.000		.000
	ITEM7	.000	.000	.000	.000	.000	.000	

a. Determinant = .144

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.857
Bartlett's Test of Sphericity	Approx. Chi-Square	7575.118
	df	21
	Sig.	.000

Anti-image Matrices

		ITEM1	ITEM2	ITEM3	ITEM4	ITEM5	ITEM6	ITEM7
Anti-image Covariance	ITEM1	.550	-.231	-.010	-.169	-.066	-.054	-.055
	ITEM2	-.231	.668	-.024	-.043	-.051	-.077	-.015
	ITEM3	-.010	-.024	.735	-.095	-.135	-.051	-.123
	ITEM4	-.169	-.043	-.095	.590	-.097	-.014	-.128
	ITEM5	-.066	-.051	-.135	-.097	.605	-.135	-.133
	ITEM6	-.054	-.077	-.051	-.014	-.135	.803	-.047
	ITEM7	-.055	-.015	-.123	-.128	-.133	-.047	.666
Anti-image Correlation	ITEM1	.813[a]	-.382	-.016	-.296	-.115	-.082	-.091
	ITEM2	-.382	.831[a]	-.034	-.068	-.080	-.105	-.022
	ITEM3	-.016	-.034	.883[a]	-.144	-.202	-.066	-.176
	ITEM4	-.296	-.068	-.144	.860[a]	-.162	-.020	-.205
	ITEM5	-.115	-.080	-.202	-.162	.868[a]	-.193	-.209
	ITEM6	-.082	-.105	-.066	-.020	-.193	.900[a]	-.064
	ITEM7	-.091	-.022	-.176	-.205	-.209	-.064	.878[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

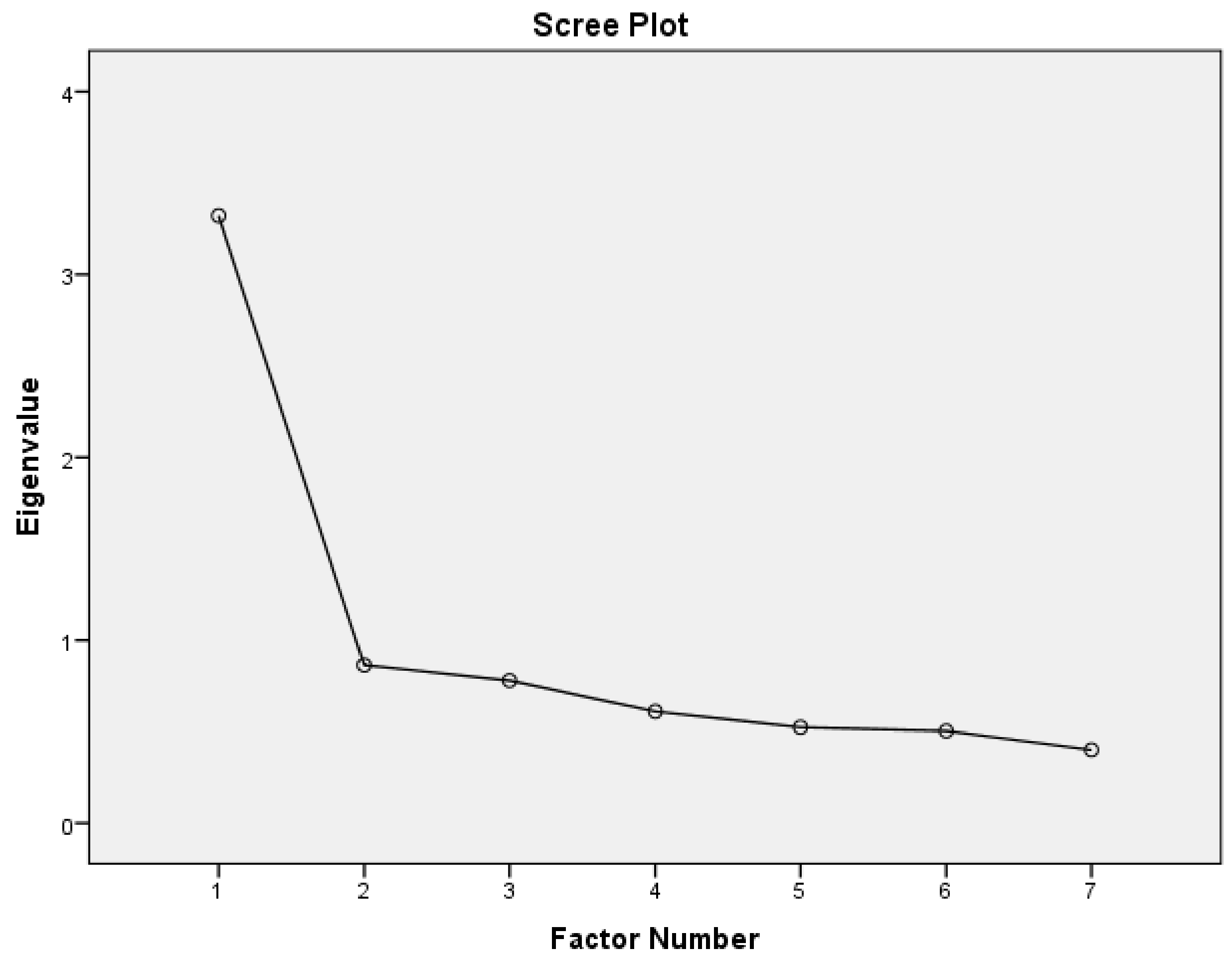
	Initial	Extraction
ITEM1	.450	.498
ITEM2	.332	.336
ITEM3	.265	.298
ITEM4	.410	.495
ITEM5	.395	.485
ITEM6	.197	.227
ITEM7	.334	.393

Extraction Method: Principal Axis Factoring.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.320	47.423	47.423	2.732	39.032	39.032
2	.864	12.338	59.761			
3	.779	11.127	70.889			
4	.610	8.710	79.598			
5	.524	7.483	87.081			
6	.503	7.193	94.273			
7	.401	5.727	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM1	.706
ITEM4	.703
ITEM5	.697
ITEM7	.627
ITEM2	.580
ITEM3	.546
ITEM6	.476

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 5 iterations required.

Reproduced Correlations

		ITEM1	ITEM2	ITEM3	ITEM4	ITEM5	ITEM6	ITEM7
Reproduced Correlation	ITEM1	.498[a]	.409	.385	.497	.492	.336	.442
	ITEM2	.409	.336[a]	.317	.408	.404	.276	.363
	ITEM3	.385	.317	.298[a]	.384	.380	.260	.342
	ITEM4	.497	.408	.384	.495[a]	.490	.335	.441
	ITEM5	.492	.404	.380	.490	.485[a]	.332	.437
	ITEM6	.336	.276	.260	.335	.332	.227[a]	.298
	ITEM7	.442	.363	.342	.441	.437	.298	.393[a]
Residual[b]	ITEM1		.137	-.069	.039	-.050	-.014	-.045
	ITEM2	.137		-.053	-.020	-.039	.023	-.060
	ITEM3	-.069	-.053		.009	.050	.004	.058
	ITEM4	.039	-.020	.009		-.019	-.049	.025
	ITEM5	-.050	-.039	.050	-.019		.051	.032
	ITEM6	-.014	.023	.004	-.049	.051		-.011
	ITEM7	-.045	-.060	.058	.025	.032	-.011	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 6 (28.0%) nonredundant residuals with absolute values greater than 0.05.

2. FACILITATING

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM8	3.75	.801	3912
ITEM9	3.71	.863	3912
ITEM10	3.70	.770	3912
ITEM11	3.74	.726	3912
ITEM12	3.80	.752	3912
ITEM13	4.01	.671	3912
ITEM14	3.81	.747	3912
ITEM15	3.53	.849	3912
ITEM16	3.92	.720	3912
ITEM17	3.99	.699	3912

Correlation Matrix[a]

		ITEM8	ITEM9	ITEM10	ITEM11	ITEM12	ITEM13	ITEM14	ITEM15	ITEM16	ITEM17
Correlation	ITEM8	1.000	.487	.415	.455	.465	.442	.541	.503	.518	.510
	ITEM9	.487	1.000	.311	.401	.389	.355	.424	.382	.423	.394
	ITEM10	.415	.311	1.000	.447	.358	.327	.393	.607	.458	.406
	ITEM11	.455	.401	.447	1.000	.393	.457	.540	.528	.539	.500
	ITEM12	.465	.389	.358	.393	1.000	.379	.458	.451	.453	.433
	ITEM13	.442	.355	.327	.457	.379	1.000	.635	.440	.579	.564
	ITEM14	.541	.424	.393	.540	.458	.635	1.000	.553	.644	.616
	ITEM15	.503	.382	.607	.528	.451	.440	.553	1.000	.584	.534
	ITEM16	.518	.423	.458	.539	.453	.579	.644	.584	1.000	.691
	ITEM17	.510	.394	.406	.500	.433	.564	.616	.534	.691	1.000
Sig. (1-tailed)	ITEM8		.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM9	.000		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM10	.000	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM11	.000	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM12	.000	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM13	.000	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM14	.000	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM15	.000	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM16	.000	.000	.000	.000	.000	.000	.000	.000		.000
	ITEM17	.000	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .009

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.932
Bartlett's Test of Sphericity	Approx. Chi-Square	18509.093
	df	45
	Sig.	.000

Anti-image Matrices

		ITEM8	ITEM9	ITEM10	ITEM11	ITEM12	ITEM13	ITEM14	ITEM15	ITEM16	ITEM17
Anti-image Covariance	ITEM8	.548	-.143	-.047	-.027	-.092	-.018	-.063	-.045	-.021	-.048
	ITEM9	-.143	.687	-.010	-.066	-.081	-.014	-.028	-.008	-.030	-.011
	ITEM10	-.047	-.010	.595	-.074	-.029	.008	.022	-.202	-.036	-.005
	ITEM11	-.027	-.066	-.074	.573	-.024	-.038	-.065	-.066	-.048	-.031
	ITEM12	-.092	-.081	-.029	-.024	.667	-.017	-.042	-.056	-.028	-.028
	ITEM13	-.018	-.014	.008	-.038	-.017	.526	-.147	.005	-.067	-.073
	ITEM14	-.063	-.028	.022	-.065	-.042	-.147	.410	-.054	-.067	-.058
	ITEM15	-.045	-.008	-.202	-.066	-.056	.005	-.054	.453	-.057	-.034
	ITEM16	-.021	-.030	-.036	-.048	-.028	-.067	-.067	-.057	.390	-.145
	ITEM17	-.048	-.011	-.005	-.031	-.028	-.073	-.058	-.034	-.145	.438
Anti-image Correlation	ITEM8	.944[a]	-.234	-.082	-.049	-.152	-.034	-.134	-.090	-.045	-.097
	ITEM9	-.234	.942[a]	-.015	-.106	-.120	-.023	-.053	-.014	-.057	-.020
	ITEM10	-.082	-.015	.897[a]	-.128	-.046	.014	.044	-.389	-.074	-.010
	ITEM11	-.049	-.106	-.128	.960[a]	-.039	-.068	-.134	-.130	-.101	-.062
	ITEM12	-.152	-.120	-.046	-.039	.961[a]	-.028	-.080	-.102	-.054	-.052
	ITEM13	-.034	-.023	.014	-.068	-.028	.930[a]	-.316	.010	-.148	-.152
	ITEM14	-.134	-.053	.044	-.134	-.080	-.316	.926[a]	-.126	-.167	-.137
	ITEM15	-.090	-.014	-.389	-.130	-.102	.010	-.126	.913[a]	-.137	-.077
	ITEM16	-.045	-.057	-.074	-.101	-.054	-.148	-.167	-.137	.927[a]	-.350
	ITEM17	-.097	-.020	-.010	-.062	-.052	-.152	-.137	-.077	-.350	.930[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

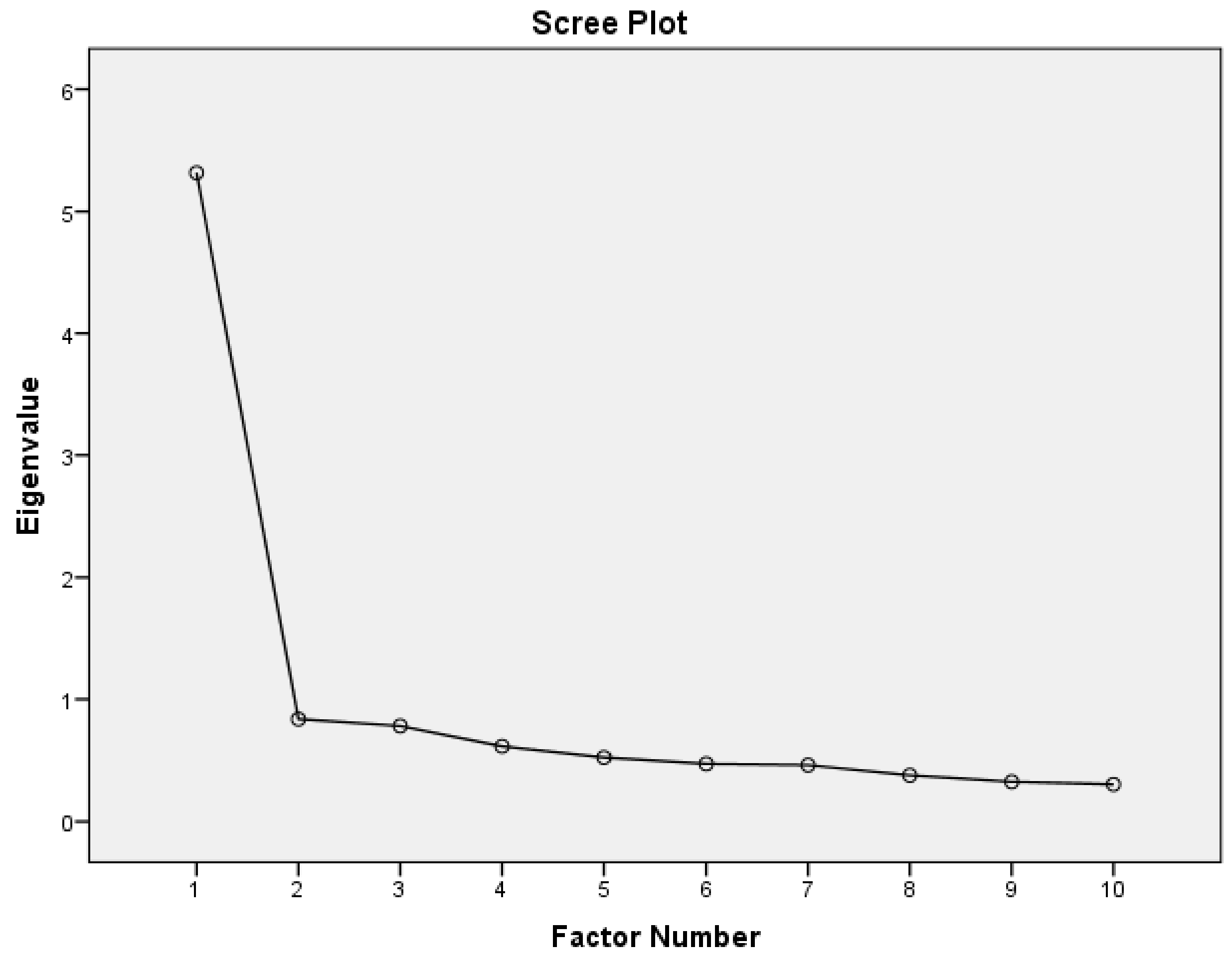
	Initial	Extraction
ITEM8	.452	.480
ITEM9	.313	.313
ITEM10	.405	.348
ITEM11	.427	.468
ITEM12	.333	.356
ITEM13	.474	.460
ITEM14	.590	.622
ITEM15	.547	.546
ITEM16	.610	.649
ITEM17	.562	.581

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.318	53.183	53.183	4.824	48.239	48.239
2	.837	8.375	61.557			
3	.780	7.805	69.362			
4	.613	6.135	75.497			
5	.522	5.220	80.717			
6	.470	4.698	85.415			
7	.459	4.594	90.009			
8	.376	3.757	93.766			
9	.323	3.226	96.992			
10	.301	3.008	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM16	.806
ITEM14	.789
ITEM17	.762
ITEM15	.739
ITEM8	.693
ITEM11	.684
ITEM13	.678
ITEM12	.597
ITEM10	.590
ITEM9	.560

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 4 iterations required.

Reproduced Correlations

		ITEM8	ITEM9	ITEM10	ITEM11	ITEM12	ITEM13	ITEM14	ITEM15	ITEM16	ITEM17
Reproduced Correlation	ITEM8	.480[a]	.388	.409	.474	.414	.470	.547	.512	.558	.528
	ITEM9	.388	.313[a]	.330	.383	.334	.380	.442	.414	.451	.427
	ITEM10	.409	.330	.348[a]	.403	.352	.400	.465	.436	.475	.449
	ITEM11	.474	.383	.403	.468[a]	.408	.464	.539	.506	.551	.521
	ITEM12	.414	.334	.352	.408	.356[a]	.405	.471	.441	.481	.455
	ITEM13	.470	.380	.400	.464	.405	.460[a]	.535	.501	.546	.517
	ITEM14	.547	.442	.465	.539	.471	.535	.622[a]	.583	.635	.601
	ITEM15	.512	.414	.436	.506	.441	.501	.583	.546[a]	.596	.563
	ITEM16	.558	.451	.475	.551	.481	.546	.635	.596	.649[a]	.614
	ITEM17	.528	.427	.449	.521	.455	.517	.601	.563	.614	.581[a]
Residual[b]	ITEM8		.099	.006	-.019	.052	-.028	-.006	-.009	-.041	-.018
	ITEM9	.099		-.019	.018	.055	-.025	-.017	-.032	-.028	-.033
	ITEM10	.006	-.019		.044	.006	-.073	-.072	.171	-.017	-.044
	ITEM11	-.019	.018	.044		-.016	-.007	.000	.022	-.012	-.021
	ITEM12	.052	.055	.006	-.016		-.025	-.013	.010	-.028	-.022
	ITEM13	-.028	-.025	-.073	-.007	-.025		.100	-.062	.032	.048
	ITEM14	-.006	-.017	-.072	.000	-.013	.100		-.030	.009	.015

ITEM15	-.009	-.032	.171	.022	.010	-.062	-.030		-.012	-.029
ITEM16	-.041	-.028	-.017	-.012	-.028	.032	.009	-.012		.077
ITEM17	-.018	-.033	-.044	-.021	-.022	.048	.015	-.029	.077	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 9 (20.0%) nonredundant residuals with absolute values greater than 0.05.

3. INTEGRITY

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM18	4.05	.745	3912
ITEM19	4.14	.691	3912
ITEM20	4.35	.653	3912
ITEM21	3.93	.827	3912
ITEM22	4.17	.620	3912
ITEM23	4.23	.619	3912
ITEM24	4.14	.646	3912
ITEM25	4.18	.732	3912
ITEM26	4.24	.624	3912
ITEM27	4.07	.722	3912
ITEM28	4.22	.643	3912
ITEM29	4.28	.584	3912
ITEM30	4.09	.667	3912

Correlation Matrix[a]

		ITEM18	ITEM19	ITEM20	ITEM21	ITEM22	ITEM23	ITEM24	ITEM25	ITEM26	ITEM27	ITEM28	ITEM29	ITEM30
Correlation	ITEM18	1.000	.386	.258	.293	.224	.474	.209	.205	.219	.272	.227	.282	.477
	ITEM19	.386	1.000	.395	.236	.237	.435	.230	.287	.319	.219	.299	.266	.437
	ITEM20	.258	.395	1.000	.179	.246	.324	.219	.245	.400	.157	.494	.224	.260
	ITEM21	.293	.236	.179	1.000	.445	.324	.176	.192	.191	.270	.202	.254	.279
	ITEM22	.224	.237	.246	.445	1.000	.295	.238	.235	.281	.281	.300	.274	.261
	ITEM23	.474	.435	.324	.324	.295	1.000	.325	.285	.339	.311	.331	.381	.516
	ITEM24	.209	.230	.219	.176	.238	.325	1.000	.200	.262	.202	.218	.298	.255
	ITEM25	.205	.287	.245	.192	.235	.285	.200	1.000	.323	.207	.288	.236	.277
	ITEM26	.219	.319	.400	.191	.281	.339	.262	.323	1.000	.191	.421	.245	.279
	ITEM27	.272	.219	.157	.270	.281	.311	.202	.207	.191	1.000	.196	.452	.310
	ITEM28	.227	.299	.494	.202	.300	.331	.218	.288	.421	.196	1.000	.322	.304
	ITEM29	.282	.266	.224	.254	.274	.381	.298	.236	.245	.452	.322	1.000	.360
	ITEM30	.477	.437	.260	.279	.261	.516	.255	.277	.279	.310	.304	.360	1.000
Sig. (1-tailed)	ITEM18		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM19	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM20	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM21	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM22	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM23	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM24	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM25	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM26	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM27	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM28	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM29	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	ITEM30	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .038

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.888
Bartlett's Test of Sphericity	Approx. Chi-Square	12794.442
	df	78
	Sig.	.000

Anti-image Matrices

		ITEM18	ITEM19	ITEM20	ITEM21	ITEM22	ITEM23	ITEM24	ITEM25	ITEM26	ITEM27	ITEM28	ITEM29	ITEM30
Anti-image Covariance	ITEM18	.669	-.084	-.036	-.073	.006	-.130	-.005	.003	.011	-.045	.011	-.012	-.148
	ITEM19	-.084	.664	-.137	-.017	-.007	-.081	-.017	-.067	-.046	-.001	.004	-.008	-.115
	ITEM20	-.036	-.137	.656	.005	-.025	-.028	-.031	-.013	-.111	.011	-.215	.009	.024
	ITEM21	-.073	-.017	.005	.735	-.244	-.060	.003	-.019	.006	-.057	.002	-.023	-.020
	ITEM22	.006	-.007	-.025	-.244	.711	-.012	-.062	-.040	-.058	-.071	-.067	-.024	-.010
	ITEM23	-.130	-.081	-.028	-.060	-.012	.568	-.085	-.027	-.053	-.028	-.026	-.062	-.131
	ITEM24	-.005	-.017	-.031	.003	-.062	-.085	.825	-.032	-.070	-.010	.002	-.099	-.021
	ITEM25	.003	-.067	-.013	-.019	-.040	-.027	-.032	.810	-.112	-.037	-.059	-.025	-.043
	ITEM26	.011	-.046	-.111	.006	-.058	-.053	-.070	-.112	.702	-.008	-.128	-.003	-.013
	ITEM27	-.045	-.001	.011	-.057	-.071	-.028	-.010	-.037	-.008	.736	.016	-.224	-.046
	ITEM28	.011	.004	-.215	.002	-.067	-.026	.002	-.059	-.128	.016	.643	-.091	-.041
	ITEM29	-.012	-.008	.009	-.023	-.024	-.062	-.099	-.025	-.003	-.224	-.091	.673	-.059
	ITEM30	-.148	-.115	.024	-.020	-.010	-.131	-.021	-.043	-.013	-.046	-.041	-.059	.601
Anti-image Correlation	ITEM18	.895[a]	-.127	-.054	-.104	.008	-.210	-.007	.004	.016	-.065	.017	-.018	-.234
	ITEM19	-.127	.909[a]	-.208	-.025	-.010	-.132	-.022	-.091	-.068	-.001	.006	-.012	-.181
	ITEM20	-.054	-.208	.850[a]	.007	-.036	-.046	-.041	-.017	-.164	.015	-.331	.013	.038
	ITEM21	-.104	-.025	.007	.854[a]	-.338	-.093	.004	-.025	.008	-.078	.003	-.033	-.031
	ITEM22	.008	-.010	-.036	-.338	.862[a]	-.019	-.081	-.053	-.082	-.098	-.100	-.034	-.015
	ITEM23	-.210	-.132	-.046	-.093	-.019	.910[a]	-.124	-.041	-.083	-.044	-.043	-.101	-.225
	ITEM24	-.007	-.022	-.041	.004	-.081	-.124	.929[a]	-.039	-.091	-.013	.003	-.133	-.030
	ITEM25	.004	-.091	-.017	-.025	-.053	-.041	-.039	.937[a]	-.148	-.048	-.082	-.034	-.062
	ITEM26	.016	-.068	-.164	.008	-.082	-.083	-.091	-.148	.904[a]	-.011	-.191	-.004	-.020
	ITEM27	-.065	-.001	.015	-.078	-.098	-.044	-.013	-.048	-.011	.867[a]	.023	-.318	-.069
	ITEM28	.017	.006	-.331	.003	-.100	-.043	.003	-.082	-.191	.023	.861[a]	-.138	-.067
	ITEM29	-.018	-.012	.013	-.033	-.034	-.101	-.133	-.034	-.004	-.318	-.138	.875[a]	-.092
	ITEM30	-.234	-.181	.038	-.031	-.015	-.225	-.030	-.062	-.020	-.069	-.067	-.092	.898[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM18	.331	.427
ITEM19	.336	.405
ITEM20	.344	.482
ITEM21	.265	.320
ITEM22	.289	.412
ITEM23	.432	.531
ITEM24	.175	.185
ITEM25	.190	.213
ITEM26	.298	.387
ITEM27	.264	.314
ITEM28	.357	.472
ITEM29	.327	.344
ITEM30	.399	.521

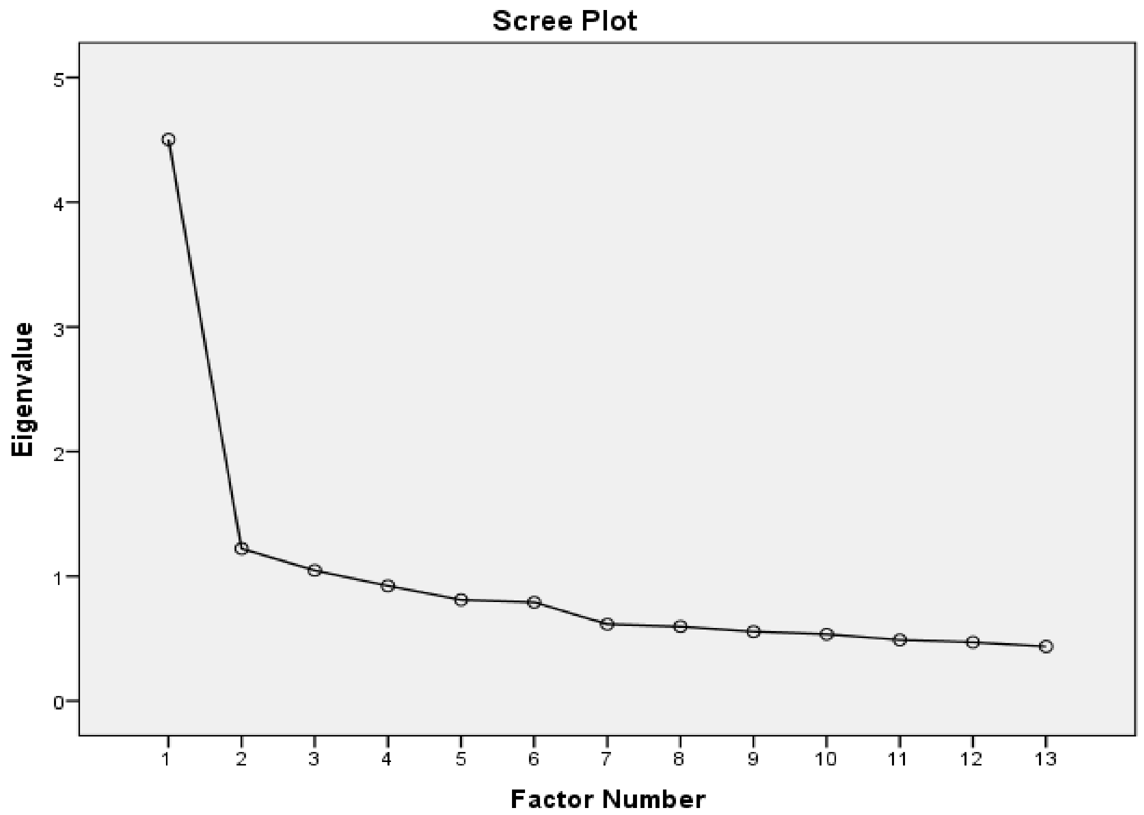
Extraction Method: Principal Axis Factoring.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4.502	34.631	34.631	3.910	30.076	30.076	3.087
2	1.222	9.397	44.029	.642	4.940	35.016	2.793
3	1.046	8.049	52.078	.460	3.537	38.553	2.728
4	.923	7.102	59.179				
5	.811	6.238	65.417				
6	.791	6.088	71.506				
7	.616	4.735	76.241				
8	.597	4.594	80.835				
9	.557	4.284	85.120				
10	.536	4.121	89.241				
11	.490	3.771	93.011				
12	.471	3.626	96.638				
13	.437	3.362	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor Matrix[a]

	Factor		
	1	2	3
ITEM23	.694	-.147	-.165
ITEM30	.650	-.211	-.232
ITEM19	.593	.039	-.226
ITEM28	.575	.370	.067
ITEM18	.568	-.227	-.230
ITEM29	.552	-.147	.135
ITEM20	.551	.416	-.072
ITEM26	.542	.302	.036
ITEM22	.516	-.041	.380
ITEM27	.474	-.236	.181
ITEM21	.471	-.183	.254
ITEM25	.451	.094	.031
ITEM24	.427	-.008	.049

Extraction Method: Principal Axis Factoring.

a. 3 factors extracted. 15 iterations required.

Reproduced Correlations

		ITEM18	ITEM19	ITEM20	ITEM21	ITEM22	ITEM23	ITEM24	ITEM25	ITEM26	ITEM27	ITEM28	ITEM29	ITEM30
Reproduced Correlation	ITEM18	.427[a]	.380	.235	.251	.215	.466	.233	.228	.231	.281	.227	.316	.470
	ITEM19	.380	.405[a]	.359	.215	.218	.443	.242	.264	.325	.231	.341	.291	.430
	ITEM20	.235	.359	.482[a]	.165	.240	.333	.228	.285	.422	.150	.466	.233	.287
	ITEM21	.251	.215	.165	.320[a]	.347	.312	.215	.203	.209	.313	.220	.321	.286
	ITEM22	.215	.218	.240	.347	.412[a]	.301	.239	.241	.281	.323	.307	.342	.256
	ITEM23	.466	.443	.333	.312	.301	.531[a]	.290	.294	.326	.334	.334	.382	.520
	ITEM24	.233	.242	.228	.215	.239	.290	.185[a]	.193	.231	.214	.246	.243	.268
	ITEM25	.228	.264	.285	.203	.241	.294	.193	.213[a]	.274	.197	.296	.239	.266
	ITEM26	.231	.325	.422	.209	.281	.326	.231	.274	.387[a]	.192	.426	.260	.280
	ITEM27	.281	.231	.150	.313	.323	.334	.214	.197	.192	.314[a]	.197	.321	.316
	ITEM28	.227	.341	.466	.220	.307	.334	.246	.296	.426	.197	.472[a]	.272	.280
	ITEM29	.316	.291	.233	.321	.342	.382	.243	.239	.260	.321	.272	.344[a]	.358
	ITEM30	.470	.430	.287	.286	.256	.520	.268	.266	.280	.316	.280	.358	.521[a]
Residual[b]	ITEM18		.006	.023	.042	.009	.008	-.024	-.023	-.013	-.009	-.001	-.034	.006
	ITEM19	.006		.036	.022	.018	-.009	-.012	.023	-.007	-.012	-.041	-.025	.007
	ITEM20	.023	.036		.014	.007	-.009	-.009	-.041	-.022	.007	.028	-.009	-.027
	ITEM21	.042	.022	.014		.098	.013	-.039	-.011	-.018	-.043	-.018	-.067	-.007
	ITEM22	.009	.018	.007	.098		-.006	-.001	-.006	7.587E-5	-.042	-.007	-.068	.005
	ITEM23	.008	-.009	-.009	.013	-.006		.036	-.008	.013	-.023	-.003	-.001	-.004
	ITEM24	-.024	-.012	-.009	-.039	-.001	.036		.007	.031	-.011	-.028	.054	-.013
	ITEM25	-.023	.023	-.041	-.011	-.006	-.008	.007		.049	.010	-.008	-.003	.011
	ITEM26	-.013	-.007	-.022	-.018	7.587E-5	.013	.031	.049		-.002	-.005	-.014	-.001
	ITEM27	-.009	-.012	.007	-.043	-.042	-.023	-.011	.010	-.002		-.001	.131	-.007
	ITEM28	-.001	-.041	.028	-.018	-.007	-.003	-.028	-.008	-.005	-.001		.050	.024
	ITEM29	-.034	-.025	-.009	-.067	-.068	-.001	.054	-.003	-.014	.131	.050		.002
	ITEM30	.006	.007	-.027	-.007	.005	-.004	-.013	.011	-.001	-.007	.024	.002	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 5 (6.0%) nonredundant residuals with absolute values greater than 0.05.

Pattern Matrix[a]

	Factor		
	1	2	3
ITEM30	.674	.014	.064
ITEM18	.644	-.037	.046
ITEM23	.585	.106	.123
ITEM19	.488	.280	-.072
ITEM20	.071	.701	-.098
ITEM28	-.037	.659	.090
ITEM26	.023	.566	.078
ITEM25	.115	.290	.143
ITEM22	-.141	.163	.627
ITEM21	.060	-.021	.539
ITEM27	.172	-.081	.484
ITEM29	.201	.053	.414
ITEM24	.149	.162	.206

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Rotation converged in 9 iterations.

Structure Matrix

	Factor		
	1	2	3
ITEM30	.719	.402	.466
ITEM23	.713	.476	.517
ITEM18	.652	.326	.405
ITEM19	.593	.502	.352
ITEM20	.384	.690	.290
ITEM28	.364	.684	.394
ITEM26	.368	.617	.371
ITEM25	.352	.421	.354
ITEM22	.311	.398	.625
ITEM21	.364	.277	.564
ITEM29	.470	.363	.557
ITEM27	.412	.248	.544
ITEM24	.355	.342	.373

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Factor Correlation Matrix

Factor	1	2	3
1	1.000	.528	.585
2	.528	1.000	.494
3	.585	.494	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

FACTOR MATRIX WHEN FORCING THE EXTRACTION OF A SINGLE FACTOR

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM18	4.05	.745	3912
ITEM19	4.14	.691	3912
ITEM20	4.35	.653	3912
ITEM21	3.93	.827	3912
ITEM22	4.17	.620	3912
ITEM23	4.23	.619	3912
ITEM24	4.14	.646	3912
ITEM25	4.18	.732	3912
ITEM26	4.24	.624	3912
ITEM27	4.07	.722	3912
ITEM28	4.22	.643	3912
ITEM29	4.28	.584	3912
ITEM30	4.09	.667	3912

Correlation Matrix[a]

		ITEM18	ITEM19	ITEM20	ITEM21	ITEM22	ITEM23	ITEM24	ITEM25	ITEM26	ITEM27	ITEM28	ITEM29	ITEM30
Correlation	ITEM18	1.000	.386	.258	.293	.224	.474	.209	.205	.219	.272	.227	.282	.477
	ITEM19	.386	1.000	.395	.236	.237	.435	.230	.287	.319	.219	.299	.266	.437
	ITEM20	.258	.395	1.000	.179	.246	.324	.219	.245	.400	.157	.494	.224	.260
	ITEM21	.293	.236	.179	1.000	.445	.324	.176	.192	.191	.270	.202	.254	.279
	ITEM22	.224	.237	.246	.445	1.000	.295	.238	.235	.281	.281	.300	.274	.261
	ITEM23	.474	.435	.324	.324	.295	1.000	.325	.285	.339	.311	.331	.381	.516
	ITEM24	.209	.230	.219	.176	.238	.325	1.000	.200	.262	.202	.218	.298	.255
	ITEM25	.205	.287	.245	.192	.235	.285	.200	1.000	.323	.207	.288	.236	.277
	ITEM26	.219	.319	.400	.191	.281	.339	.262	.323	1.000	.191	.421	.245	.279
	ITEM27	.272	.219	.157	.270	.281	.311	.202	.207	.191	1.000	.196	.452	.310
	ITEM28	.227	.299	.494	.202	.300	.331	.218	.288	.421	.196	1.000	.322	.304
	ITEM29	.282	.266	.224	.254	.274	.381	.298	.236	.245	.452	.322	1.000	.360
	ITEM30	.477	.437	.260	.279	.261	.516	.255	.277	.279	.310	.304	.360	1.000
Sig. (1-tailed)	ITEM18		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM19	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM20	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM21	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM22	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM23	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM24	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM25	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM26	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM27	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM28	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM29	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	ITEM30	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .038

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.888
Bartlett's Test of Sphericity	Approx. Chi-Square	12794.442
	df	78
	Sig.	.000

Anti-image Matrices

		ITEM18	ITEM19	ITEM20	ITEM21	ITEM22	ITEM23	ITEM24	ITEM25	ITEM26	ITEM27	ITEM28	ITEM29	ITEM30
Anti-image Covariance	ITEM18	.669	-.084	-.036	-.073	.006	-.130	-.005	.003	.011	-.045	.011	-.012	-.148
	ITEM19	-.084	.664	-.137	-.017	-.007	-.081	-.017	-.067	-.046	-.001	.004	-.008	-.115
	ITEM20	-.036	-.137	.656	.005	-.025	-.028	-.031	-.013	-.111	.011	-.215	.009	.024
	ITEM21	-.073	-.017	.005	.735	-.244	-.060	.003	-.019	.006	-.057	.002	-.023	-.020
	ITEM22	.006	-.007	-.025	-.244	.711	-.012	-.062	-.040	-.058	-.071	-.067	-.024	-.010
	ITEM23	-.130	-.081	-.028	-.060	-.012	.568	-.085	-.027	-.053	-.028	-.026	-.062	-.131
	ITEM24	-.005	-.017	-.031	.003	-.062	-.085	.825	-.032	-.070	-.010	.002	-.099	-.021
	ITEM25	.003	-.067	-.013	-.019	-.040	-.027	-.032	.810	-.112	-.037	-.059	-.025	-.043
	ITEM26	.011	-.046	-.111	.006	-.058	-.053	-.070	-.112	.702	-.008	-.128	-.003	-.013
	ITEM27	-.045	-.001	.011	-.057	-.071	-.028	-.010	-.037	-.008	.736	.016	-.224	-.046
	ITEM28	.011	.004	-.215	.002	-.067	-.026	.002	-.059	-.128	.016	.643	-.091	-.041
	ITEM29	-.012	-.008	.009	-.023	-.024	-.062	-.099	-.025	-.003	-.224	-.091	.673	-.059
	ITEM30	-.148	-.115	.024	-.020	-.010	-.131	-.021	-.043	-.013	-.046	-.041	-.059	.601
Anti-image Correlation	ITEM18	.895[a]	-.127	-.054	-.104	.008	-.210	-.007	.004	.016	-.065	.017	-.018	-.234
	ITEM19	-.127	.909[a]	-.208	-.025	-.010	-.132	-.022	-.091	-.068	-.001	.006	-.012	-.181
	ITEM20	-.054	-.208	.850[a]	.007	-.036	-.046	-.041	-.017	-.164	.015	-.331	.013	.038
	ITEM21	-.104	-.025	.007	.854[a]	-.338	-.093	.004	-.025	.008	-.078	.003	-.033	-.031
	ITEM22	.008	-.010	-.036	-.338	.862[a]	-.019	-.081	-.053	-.082	-.098	-.100	-.034	-.015
	ITEM23	-.210	-.132	-.046	-.093	-.019	.910[a]	-.124	-.041	-.083	-.044	-.043	-.101	-.225
	ITEM24	-.007	-.022	-.041	.004	-.081	-.124	.929[a]	-.039	-.091	-.013	.003	-.133	-.030
	ITEM25	.004	-.091	-.017	-.025	-.053	-.041	-.039	.937[a]	-.148	-.048	-.082	-.034	-.062
	ITEM26	.016	-.068	-.164	.008	-.082	-.083	-.091	-.148	.904[a]	-.011	-.191	-.004	-.020
	ITEM27	-.065	-.001	.015	-.078	-.098	-.044	-.013	-.048	-.011	.867[a]	.023	-.318	-.069
	ITEM28	.017	.006	-.331	.003	-.100	-.043	.003	-.082	-.191	.023	.861[a]	-.138	-.067
	ITEM29	-.018	-.012	.013	-.033	-.034	-.101	-.133	-.034	-.004	-.318	-.138	.875[a]	-.092
	ITEM30	-.234	-.181	.038	-.031	-.015	-.225	-.030	-.062	-.020	-.069	-.067	-.092	.898[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

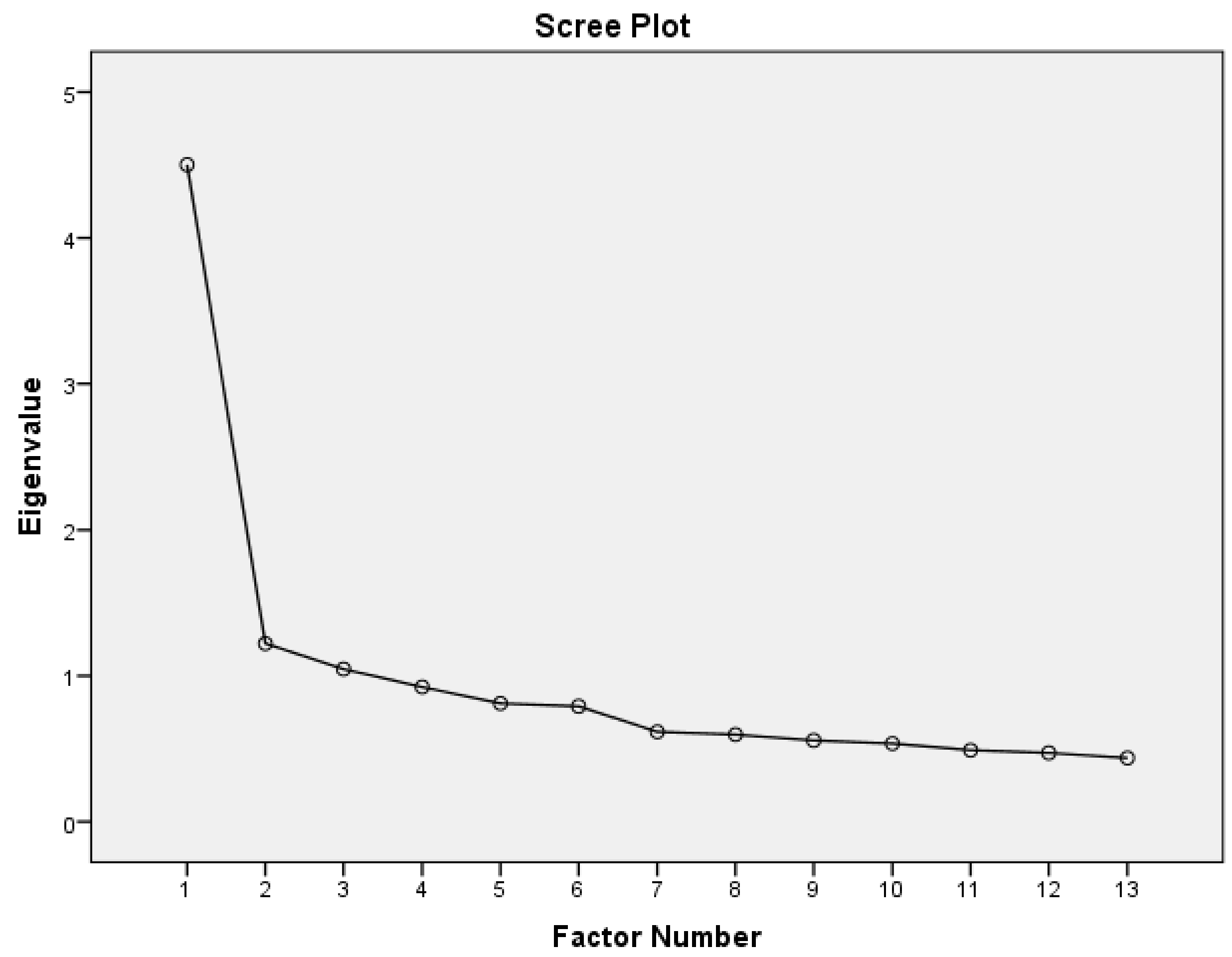
	Initial	Extraction
ITEM18	.331	.312
ITEM19	.336	.350
ITEM20	.344	.279
ITEM21	.265	.215
ITEM22	.289	.251
ITEM23	.432	.482
ITEM24	.175	.188
ITEM25	.190	.207
ITEM26	.298	.285
ITEM27	.264	.220
ITEM28	.357	.310
ITEM29	.327	.306
ITEM30	.399	.409

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.502	34.631	34.631	3.816	29.353	29.353
2	1.222	9.397	44.029			
3	1.046	8.049	52.078			
4	.923	7.102	59.179			
5	.811	6.238	65.417			
6	.791	6.088	71.506			
7	.616	4.735	76.241			
8	.597	4.594	80.835			
9	.557	4.284	85.120			
10	.536	4.121	89.241			
11	.490	3.771	93.011			
12	.471	3.626	96.638			
13	.437	3.362	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM23	.694
ITEM30	.640
ITEM19	.592
ITEM18	.559
ITEM28	.557
ITEM29	.553
ITEM26	.534
ITEM20	.528
ITEM22	.501
ITEM27	.469
ITEM21	.464
ITEM25	.455
ITEM24	.433

Extraction Method:

Principal Axis Factoring.

a. 1 factors extracted. 4 iterations required.

Reproduced Correlations

		ITEM18	ITEM19	ITEM20	ITEM21	ITEM22	ITEM23	ITEM24	ITEM25	ITEM26	ITEM27	ITEM28	ITEM29	ITEM30
Reproduced Correlation	ITEM18	.312[a]	.331	.295	.259	.280	.388	.242	.255	.299	.262	.311	.309	.358
	ITEM19	.331	.350[a]	.313	.274	.296	.411	.256	.270	.316	.278	.330	.327	.379
	ITEM20	.295	.313	.279[a]	.245	.264	.367	.229	.241	.282	.248	.294	.292	.338
	ITEM21	.259	.274	.245	.215[a]	.232	.322	.201	.211	.248	.218	.258	.257	.297
	ITEM22	.280	.296	.264	.232	.251[a]	.347	.217	.228	.267	.235	.279	.277	.320
	ITEM23	.388	.411	.367	.322	.347	.482[a]	.301	.316	.371	.326	.387	.384	.444
	ITEM24	.242	.256	.229	.201	.217	.301	.188[a]	.197	.231	.203	.241	.240	.277
	ITEM25	.255	.270	.241	.211	.228	.316	.197	.207[a]	.243	.214	.254	.252	.291
	ITEM26	.299	.316	.282	.248	.267	.371	.231	.243	.285[a]	.251	.298	.296	.342
	ITEM27	.262	.278	.248	.218	.235	.326	.203	.214	.251	.220[a]	.262	.260	.300
	ITEM28	.311	.330	.294	.258	.279	.387	.241	.254	.298	.262	.310[a]	.308	.357
	ITEM29	.309	.327	.292	.257	.277	.384	.240	.252	.296	.260	.308	.306[a]	.354
	ITEM30	.358	.379	.338	.297	.320	.444	.277	.291	.342	.300	.357	.354	.409[a]
Residual[b]	ITEM18		.055	-.037	.034	-.055	.086	-.033	-.050	-.080	.010	-.084	-.027	.119
	ITEM19	.055		.082	-.038	-.059	.024	-.026	.017	.003	-.059	-.031	-.061	.058
	ITEM20	-.037	.082		-.066	-.018	-.043	-.009	.004	.117	-.091	.200	-.068	-.078
	ITEM21	.034	-.038	-.066		.213	.002	-.025	-.019	-.056	.052	-.056	-.003	-.018
	ITEM22	-.055	-.059	-.018	.213		-.052	.021	.007	.014	.046	.021	-.003	-.059
	ITEM23	.086	.024	-.043	.002	-.052		.025	-.031	-.031	-.015	-.056	-.003	.072
	ITEM24	-.033	-.026	-.009	-.025	.021	.025		.003	.030	-.001	-.024	.058	-.022
	ITEM25	-.050	.017	.004	-.019	.007	-.031	.003		.080	-.006	.034	-.016	-.015
	ITEM26	-.080	.003	.117	-.056	.014	-.031	.030	.080		-.060	.123	-.050	-.063
	ITEM27	.010	-.059	-.091	.052	.046	-.015	-.001	-.006	-.060		-.065	.192	.009
	ITEM28	-.084	-.031	.200	-.056	.021	-.056	-.024	.034	.123	-.065		.013	-.053
	ITEM29	-.027	-.061	-.068	-.003	-.003	-.003	.058	-.016	-.050	.192	.013		.006
	ITEM30	.119	.058	-.078	-.018	-.059	.072	-.022	-.015	-.063	.009	-.053	.006	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 34 (43.0%) nonredundant residuals with absolute values greater than 0.05.

4. INTERPERSONAL RELATEDNESS

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM31	4.02	.858	3912
ITEM32	3.87	.844	3912
ITEM33	4.29	.572	3912
ITEM34	4.13	.620	3912
ITEM35	3.85	.766	3912
ITEM36	4.00	.653	3912
ITEM37	3.65	.783	3912
ITEM38	3.65	.815	3912
ITEM39	4.03	.614	3912

Correlation Matrix[a]

		ITEM31	ITEM32	ITEM33	ITEM34	ITEM35	ITEM36	ITEM37	ITEM38	ITEM39
Correlation	ITEM31	1.000	.161	.157	.218	.166	.148	.184	.225	.198
	ITEM32	.161	1.000	.213	.293	.210	.252	.196	.260	.228
	ITEM33	.157	.213	1.000	.359	.245	.298	.242	.252	.341
	ITEM34	.218	.293	.359	1.000	.299	.478	.260	.315	.367
	ITEM35	.166	.210	.245	.299	1.000	.270	.392	.390	.344
	ITEM36	.148	.252	.298	.478	.270	1.000	.276	.299	.272
	ITEM37	.184	.196	.242	.260	.392	.276	1.000	.641	.371
	ITEM38	.225	.260	.252	.315	.390	.299	.641	1.000	.418
	ITEM39	.198	.228	.341	.367	.344	.272	.371	.418	1.000
Sig. (1-tailed)	ITEM31		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM32	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM33	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM34	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM35	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM36	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM37	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM38	.000	.000	.000	.000	.000	.000	.000		.000
	ITEM39	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .140

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.833
Bartlett's Test of Sphericity	Approx. Chi-Square	7688.568
	df	36
	Sig.	.000

Anti-image Matrices

		ITEM31	ITEM32	ITEM33	ITEM34	ITEM35	ITEM36	ITEM37	ITEM38	ITEM39
Anti-image Covariance	ITEM31	.912	-.056	-.032	-.072	-.027	-.001	-.016	-.054	-.043
	ITEM32	-.056	.858	-.052	-.092	-.043	-.067	.007	-.064	-.036
	ITEM33	-.032	-.052	.794	-.119	-.043	-.079	-.029	-.004	-.128
	ITEM34	-.072	-.092	-.119	.654	-.056	-.233	.012	-.031	-.103
	ITEM35	-.027	-.043	-.043	-.056	.756	-.049	-.104	-.069	-.094
	ITEM36	-.001	-.067	-.079	-.233	-.049	.720	-.040	-.033	-.009
	ITEM37	-.016	.007	-.029	.012	-.104	-.040	.554	-.278	-.055
	ITEM38	-.054	-.064	-.004	-.031	-.069	-.033	-.278	.521	-.100
	ITEM39	-.043	-.036	-.128	-.103	-.094	-.009	-.055	-.100	.706
Anti-image Correlation	ITEM31	.916[a]	-.063	-.037	-.093	-.033	-.002	-.023	-.078	-.054
	ITEM32	-.063	.905[a]	-.063	-.123	-.053	-.086	.010	-.096	-.046
	ITEM33	-.037	-.063	.883[a]	-.164	-.055	-.105	-.043	-.006	-.171
	ITEM34	-.093	-.123	-.164	.816[a]	-.080	-.340	.020	-.053	-.151
	ITEM35	-.033	-.053	-.055	-.080	.908[a]	-.067	-.161	-.110	-.129
	ITEM36	-.002	-.086	-.105	-.340	-.067	.831[a]	-.063	-.054	-.013
	ITEM37	-.023	.010	-.043	.020	-.161	-.063	.760[a]	-.517	-.088
	ITEM38	-.078	-.096	-.006	-.053	-.110	-.054	-.517	.772[a]	-.164
	ITEM39	-.054	-.046	-.171	-.151	-.129	-.013	-.088	-.164	.886[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM31	.088	.102
ITEM32	.142	.175
ITEM33	.206	.263
ITEM34	.346	.566
ITEM35	.244	.291
ITEM36	.280	.357
ITEM37	.446	.616
ITEM38	.479	.653
ITEM39	.294	.345

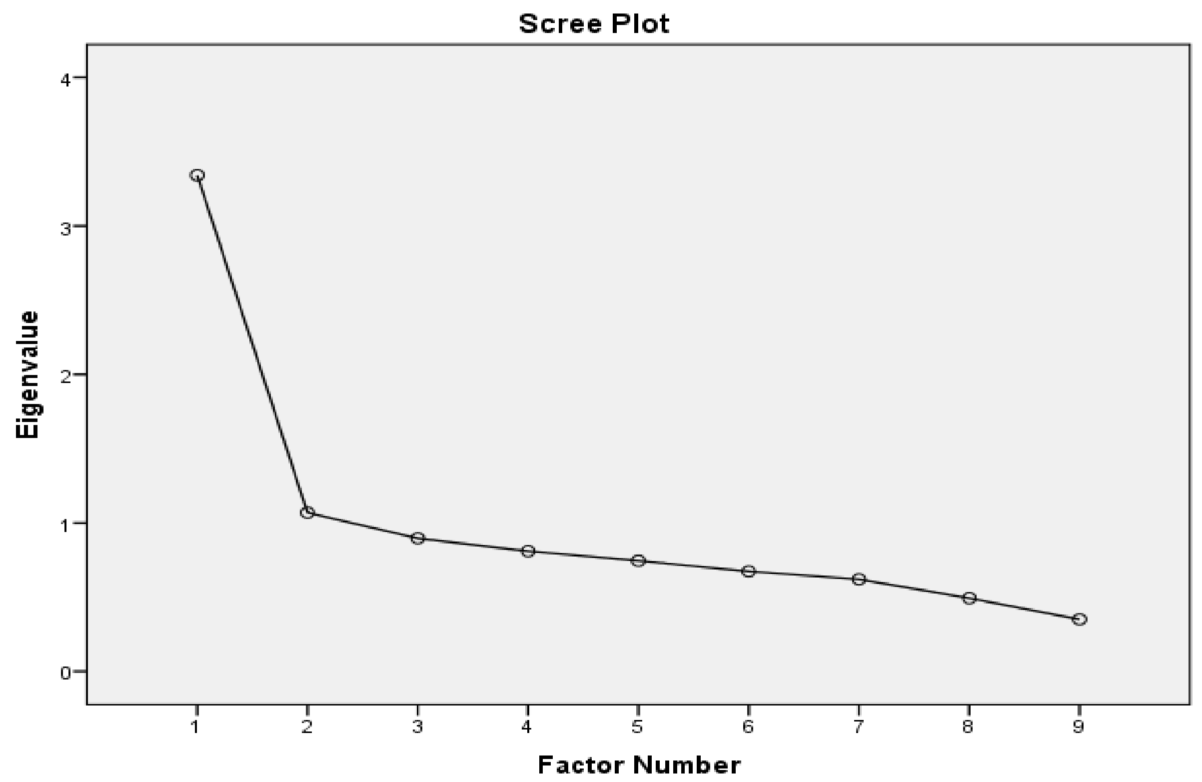
Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3.341	37.125	37.125	2.778	30.871	30.871	2.397
2	1.070	11.884	49.009	.590	6.551	37.422	2.295
3	.896	9.959	58.968				
4	.810	8.997	67.965				
5	.745	8.282	76.248				
6	.674	7.484	83.732				
7	.620	6.888	90.620				
8	.493	5.480	96.100				
9	.351	3.900	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor Matrix[a]

	Factor	
	1	2
ITEM38	.724	-.359
ITEM37	.673	-.404
ITEM34	.629	.413
ITEM39	.587	.016
ITEM35	.536	-.060
ITEM36	.535	.264
ITEM33	.476	.190
ITEM32	.399	.127
ITEM31	.317	.037

Extraction Method: Principal Axis Factoring.

a. 2 factors extracted. 12 iterations required.

Reproduced Correlations

		ITEM31	ITEM32	ITEM33	ITEM34	ITEM35	ITEM36	ITEM37	ITEM38	ITEM39
Reproduced Correlation	ITEM31	.102[a]	.131	.158	.214	.168	.179	.198	.216	.187
	ITEM32	.131	.175[a]	.214	.303	.206	.247	.217	.244	.236
	ITEM33	.158	.214	.263[a]	.378	.244	.305	.243	.276	.283
	ITEM34	.214	.303	.378	.566[a]	.312	.446	.257	.307	.376
	ITEM35	.168	.206	.244	.312	.291[a]	.271	.385	.410	.314
	ITEM36	.179	.247	.305	.446	.271	.357[a]	.254	.293	.319
	ITEM37	.198	.217	.243	.257	.385	.254	.616[a]	.632	.389
	ITEM38	.216	.244	.276	.307	.410	.293	.632	.653[a]	.419
	ITEM39	.187	.236	.283	.376	.314	.319	.389	.419	.345[a]
Residual[b]	ITEM31		.030	-.001	.004	-.001	-.031	-.014	.008	.011
	ITEM32	.030		-.001	-.010	.004	.004	-.021	.017	-.008
	ITEM33	-.001	-.001		-.019	.001	-.007	-.001	-.024	.058
	ITEM34	.004	-.010	-.019		-.013	.032	.004	.007	-.009
	ITEM35	-.001	.004	.001	-.013		-.001	.007	-.021	.030
	ITEM36	-.031	.004	-.007	.032	-.001		.022	.006	-.047
	ITEM37	-.014	-.021	-.001	.004	.007	.022		.009	-.018
	ITEM38	.008	.017	-.024	.007	-.021	.006	.009		-.001
	ITEM39	.011	-.008	.058	-.009	.030	-.047	-.018	-.001	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 1 (2.0%) nonredundant residuals with absolute values greater than 0.05.

Pattern Matrix[a]

	Factor	
	1	2
ITEM34	.830	.142
ITEM36	.610	.021
ITEM33	.493	-.032
ITEM32	.376	-.065
ITEM39	.365	-.289
ITEM31	.228	-.124
ITEM37	-.050	-.814
ITEM38	.030	-.790
ITEM35	.250	-.350

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Rotation converged in 7 iterations.

Structure Matrix

	Factor	
	1	2
ITEM34	.744	-.361
ITEM36	.597	-.348
ITEM39	.541	-.511
ITEM33	.512	-.331
ITEM32	.416	-.293
ITEM31	.303	-.262
ITEM38	.509	-.808
ITEM37	.443	-.784
ITEM35	.462	-.502

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Factor Correlation Matrix

Factor	1	2
1	1.000	-.606
2	-.606	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

FACTOR MATRIX WHEN FORCING THE EXTRACTION OF A SINGLE FACTOR

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM31	4.02	.858	3912
ITEM32	3.87	.844	3912
ITEM33	4.29	.572	3912
ITEM34	4.13	.620	3912
ITEM35	3.85	.766	3912
ITEM36	4.00	.653	3912
ITEM37	3.65	.783	3912
ITEM38	3.65	.815	3912
ITEM39	4.03	.614	3912

Correlation Matrix[a]

		ITEM31	ITEM32	ITEM33	ITEM34	ITEM35	ITEM36	ITEM37	ITEM38	ITEM39
Correlation	ITEM31	1.000	.161	.157	.218	.166	.148	.184	.225	.198
	ITEM32	.161	1.000	.213	.293	.210	.252	.196	.260	.228
	ITEM33	.157	.213	1.000	.359	.245	.298	.242	.252	.341
	ITEM34	.218	.293	.359	1.000	.299	.478	.260	.315	.367
	ITEM35	.166	.210	.245	.299	1.000	.270	.392	.390	.344
	ITEM36	.148	.252	.298	.478	.270	1.000	.276	.299	.272
	ITEM37	.184	.196	.242	.260	.392	.276	1.000	.641	.371
	ITEM38	.225	.260	.252	.315	.390	.299	.641	1.000	.418
	ITEM39	.198	.228	.341	.367	.344	.272	.371	.418	1.000
Sig. (1-tailed)	ITEM31		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM32	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM33	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM34	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM35	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM36	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM37	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM38	.000	.000	.000	.000	.000	.000	.000		.000
	ITEM39	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .140

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.833
Bartlett's Test of Sphericity	Approx. Chi-Square	7688.568
	df	36
	Sig.	.000

Anti-image Matrices

		ITEM31	ITEM32	ITEM33	ITEM34	ITEM35	ITEM36	ITEM37	ITEM38	ITEM39
Anti-image Covariance	ITEM31	.912	-.056	-.032	-.072	-.027	-.001	-.016	-.054	-.043
	ITEM32	-.056	.858	-.052	-.092	-.043	-.067	.007	-.064	-.036
	ITEM33	-.032	-.052	.794	-.119	-.043	-.079	-.029	-.004	-.128
	ITEM34	-.072	-.092	-.119	.654	-.056	-.233	.012	-.031	-.103
	ITEM35	-.027	-.043	-.043	-.056	.756	-.049	-.104	-.069	-.094
	ITEM36	-.001	-.067	-.079	-.233	-.049	.720	-.040	-.033	-.009
	ITEM37	-.016	.007	-.029	.012	-.104	-.040	.554	-.278	-.055
	ITEM38	-.054	-.064	-.004	-.031	-.069	-.033	-.278	.521	-.100
	ITEM39	-.043	-.036	-.128	-.103	-.094	-.009	-.055	-.100	.706
Anti-image Correlation	ITEM31	.916[a]	-.063	-.037	-.093	-.033	-.002	-.023	-.078	-.054
	ITEM32	-.063	.905[a]	-.063	-.123	-.053	-.086	.010	-.096	-.046
	ITEM33	-.037	-.063	.883[a]	-.164	-.055	-.105	-.043	-.006	-.171
	ITEM34	-.093	-.123	-.164	.816[a]	-.080	-.340	.020	-.053	-.151
	ITEM35	-.033	-.053	-.055	-.080	.908[a]	-.067	-.161	-.110	-.129
	ITEM36	-.002	-.086	-.105	-.340	-.067	.831[a]	-.063	-.054	-.013
	ITEM37	-.023	.010	-.043	.020	-.161	-.063	.760[a]	-.517	-.088
	ITEM38	-.078	-.096	-.006	-.053	-.110	-.054	-.517	.772[a]	-.164
	ITEM39	-.054	-.046	-.171	-.151	-.129	-.013	-.088	-.164	.886[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

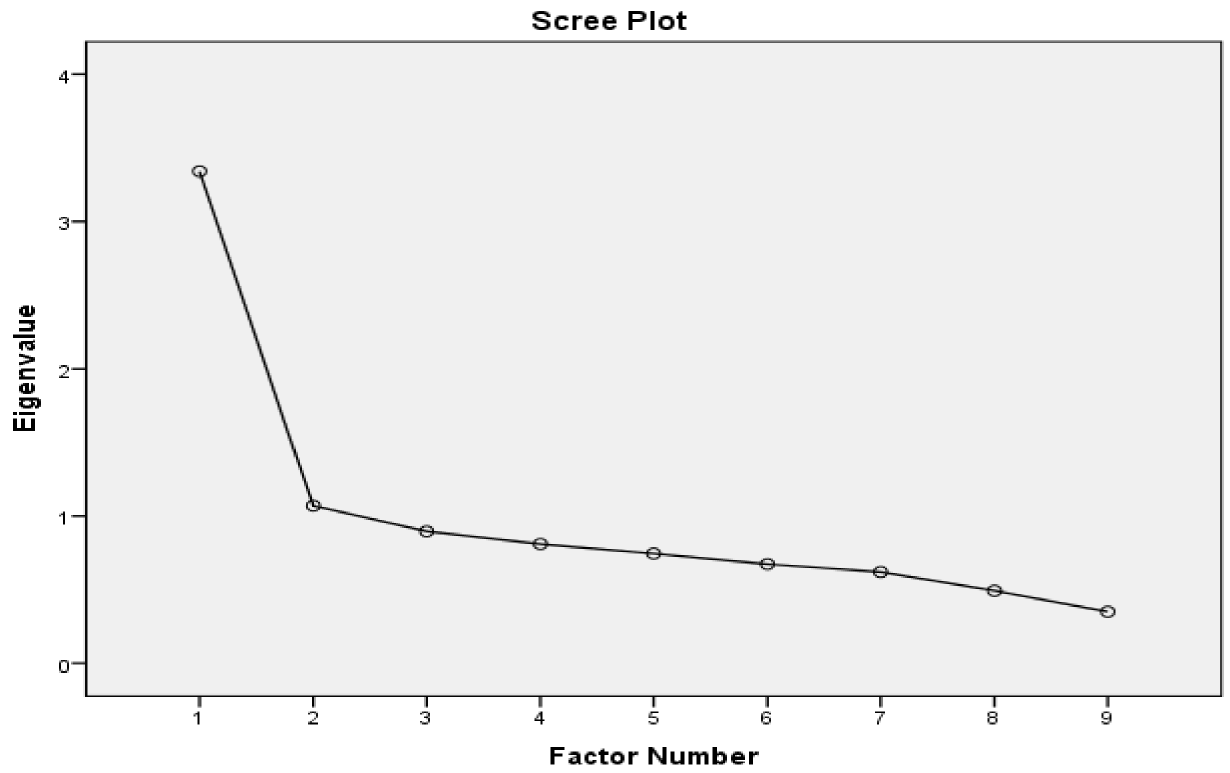
	Initial	Extraction
ITEM31	.088	.105
ITEM32	.142	.165
ITEM33	.206	.231
ITEM34	.346	.355
ITEM35	.244	.301
ITEM36	.280	.282
ITEM37	.446	.399
ITEM38	.479	.475
ITEM39	.294	.364

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.341	37.125	37.125	2.675	29.727	29.727
2	1.070	11.884	49.009			
3	.896	9.959	58.968			
4	.810	8.997	67.965			
5	.745	8.282	76.248			
6	.674	7.484	83.732			
7	.620	6.888	90.620			
8	.493	5.480	96.100			
9	.351	3.900	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM38	.689
ITEM37	.631
ITEM39	.603
ITEM34	.596
ITEM35	.548
ITEM36	.531
ITEM33	.481
ITEM32	.406
ITEM31	.323

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 5 iterations required.

Reproduced Correlations

		ITEM31	ITEM32	ITEM33	ITEM34	ITEM35	ITEM36	ITEM37	ITEM38	ITEM39
Reproduced Correlation	ITEM31	.105[a]	.131	.156	.193	.177	.172	.204	.223	.195
	ITEM32	.131	.165[a]	.195	.242	.222	.215	.256	.280	.245
	ITEM33	.156	.195	.231[a]	.287	.264	.255	.304	.332	.290
	ITEM34	.193	.242	.287	.355[a]	.327	.316	.376	.411	.359
	ITEM35	.177	.222	.264	.327	.301[a]	.291	.346	.378	.331
	ITEM36	.172	.215	.255	.316	.291	.282[a]	.335	.366	.320
	ITEM37	.204	.256	.304	.376	.346	.335	.399[a]	.435	.381
	ITEM38	.223	.280	.332	.411	.378	.366	.435	.475[a]	.416
	ITEM39	.195	.245	.290	.359	.331	.320	.381	.416	.364[a]
Residual[b]	ITEM31		.030	.001	.026	-.011	-.023	-.020	.002	.003
	ITEM32	.030		.017	.051	-.012	.036	-.060	-.019	-.017
	ITEM33	.001	.017		.072	-.019	.043	-.062	-.079	.051
	ITEM34	.026	.051	.072		-.028	.162	-.116	-.096	.008
	ITEM35	-.011	-.012	-.019	-.028		-.021	.046	.012	.014
	ITEM36	-.023	.036	.043	.162	-.021		-.060	-.067	-.048
	ITEM37	-.020	-.060	-.062	-.116	.046	-.060		.206	-.010
	ITEM38	.002	-.019	-.079	-.096	.012	-.067	.206		.003
	ITEM39	.003	-.017	.051	.008	.014	-.048	-.010	.003	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 12 (33.0%) nonredundant residuals with absolute values greater than 0.05.

5. SOCIAL INTELLIGENCE

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM40	3.87	.717	3912
ITEM41	4.00	.696	3912
ITEM42	3.99	.687	3912
ITEM43	3.89	.719	3912

Correlation Matrix[a]

		ITEM40	ITEM41	ITEM42	ITEM43
Correlation	ITEM40	1.000	.500	.439	.434
	ITEM41	.500	1.000	.491	.444
	ITEM42	.439	.491	1.000	.671
	ITEM43	.434	.444	.671	1.000
Sig. (1-tailed)	ITEM40		.000	.000	.000
	ITEM41	.000		.000	.000
	ITEM42	.000	.000		.000
	ITEM43	.000	.000	.000	

a. Determinant = .276

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.745
Bartlett's Test of Sphericity	Approx. Chi-Square	5034.372
	df	6
	Sig.	.000

Anti-image Matrices

		ITEM40	ITEM41	ITEM42	ITEM43
Anti-image Covariance	ITEM40	.683	-.226	-.073	-.094
	ITEM41	-.226	.651	-.130	-.065
	ITEM42	-.073	-.130	.495	-.278
	ITEM43	-.094	-.065	-.278	.519
Anti-image Correlation	ITEM40	.803[a]	-.338	-.126	-.158
	ITEM41	-.338	.793[a]	-.229	-.111
	ITEM42	-.126	-.229	.705[a]	-.549
	ITEM43	-.158	-.111	-.549	.712[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

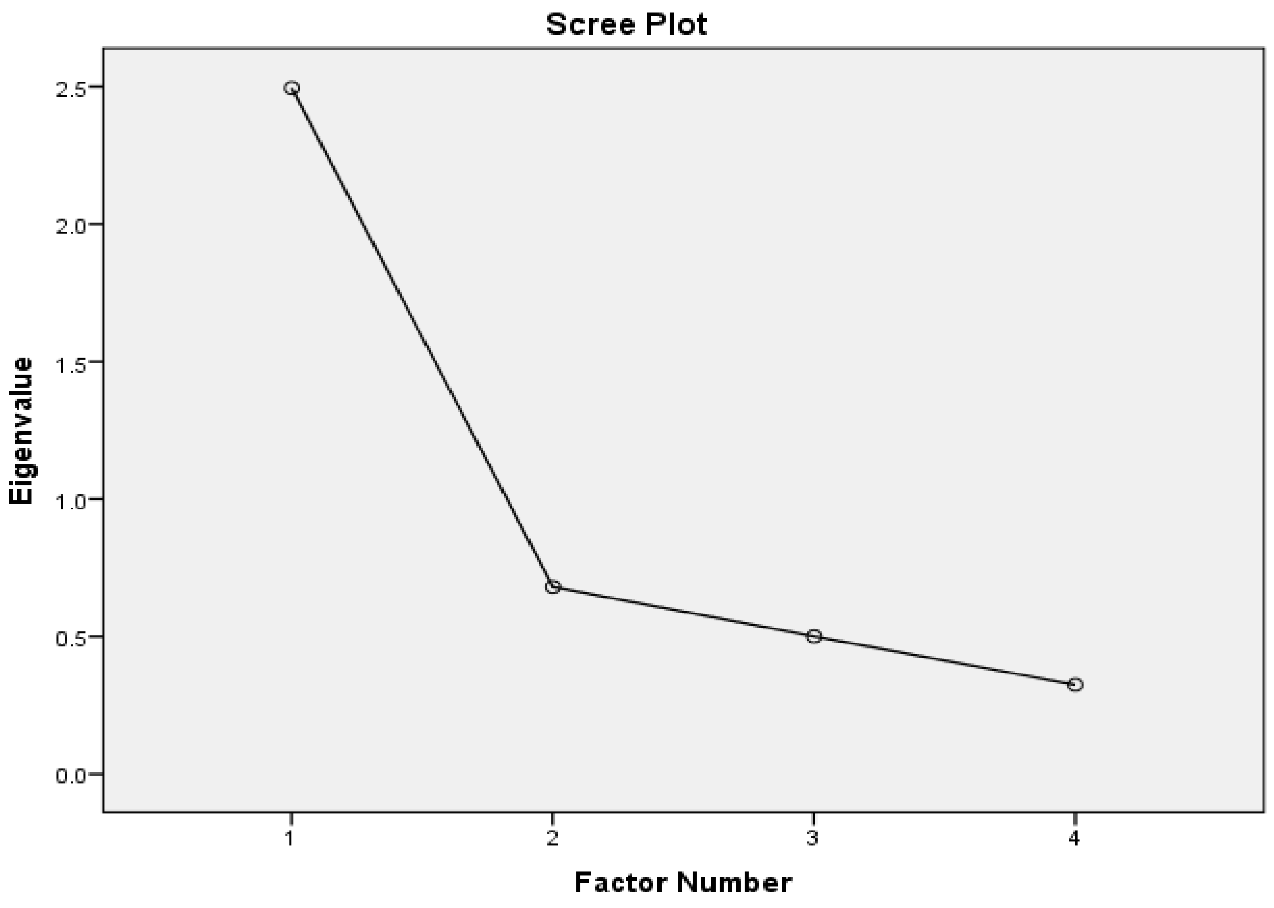
	Initial	Extraction
ITEM40	.317	.378
ITEM41	.349	.425
ITEM42	.505	.636
ITEM43	.481	.576

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.494	62.359	62.359	2.014	50.351	50.351
2	.680	17.008	79.367			
3	.501	12.517	91.884			
4	.325	8.116	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM42	.797
ITEM43	.759
ITEM41	.652
ITEM40	.615

Extraction Method: Principal Axis Factoring.
a. 1 factors extracted. 7 iterations required.

Reproduced Correlations

		ITEM40	ITEM41	ITEM42	ITEM43
Reproduced Correlation	ITEM40	.378[a]	.401	.490	.466
	ITEM41	.401	.425[a]	.520	.495
	ITEM42	.490	.520	.636[a]	.605
	ITEM43	.466	.495	.605	.576[a]
Residual[b]	ITEM40		.099	-.050	-.032
	ITEM41	.099		-.029	-.051
	ITEM42	-.050	-.029		.066
	ITEM43	-.032	-.051	.066	

Extraction Method: Principal Axis Factoring.
a. Reproduced communalities
b. Residuals are computed between observed and reproduced correlations. There are 4 (66.0%) nonredundant residuals with absolute values greater than 0.05.

TWO FACTORS EXTRACTED

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM40	3.87	.717	3912
ITEM41	4.00	.696	3912
ITEM42	3.99	.687	3912
ITEM43	3.89	.719	3912

Correlation Matrix[a]

		ITEM40	ITEM41	ITEM42	ITEM43
Correlation	ITEM40	1.000	.500	.439	.434
	ITEM41	.500	1.000	.491	.444
	ITEM42	.439	.491	1.000	.671
	ITEM43	.434	.444	.671	1.000
Sig. (1-tailed)	ITEM40		.000	.000	.000
	ITEM41	.000		.000	.000
	ITEM42	.000	.000		.000
	ITEM43	.000	.000	.000	

a. Determinant = .276

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.745
Bartlett's Test of Sphericity	Approx. Chi-Square	5034.372
	df	6
	Sig.	.000

Anti-image Matrices

		ITEM40	ITEM41	ITEM42	ITEM43
Anti-image Covariance	ITEM40	.683	-.226	-.073	-.094
	ITEM41	-.226	.651	-.130	-.065
	ITEM42	-.073	-.130	.495	-.278
	ITEM43	-.094	-.065	-.278	.519
Anti-image Correlation	ITEM40	.803[a]	-.338	-.126	-.158
	ITEM41	-.338	.793[a]	-.229	-.111
	ITEM42	-.126	-.229	.705[a]	-.549
	ITEM43	-.158	-.111	-.549	.712[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM40	.317	.476
ITEM41	.349	.524
ITEM42	.505	.693
ITEM43	.481	.650

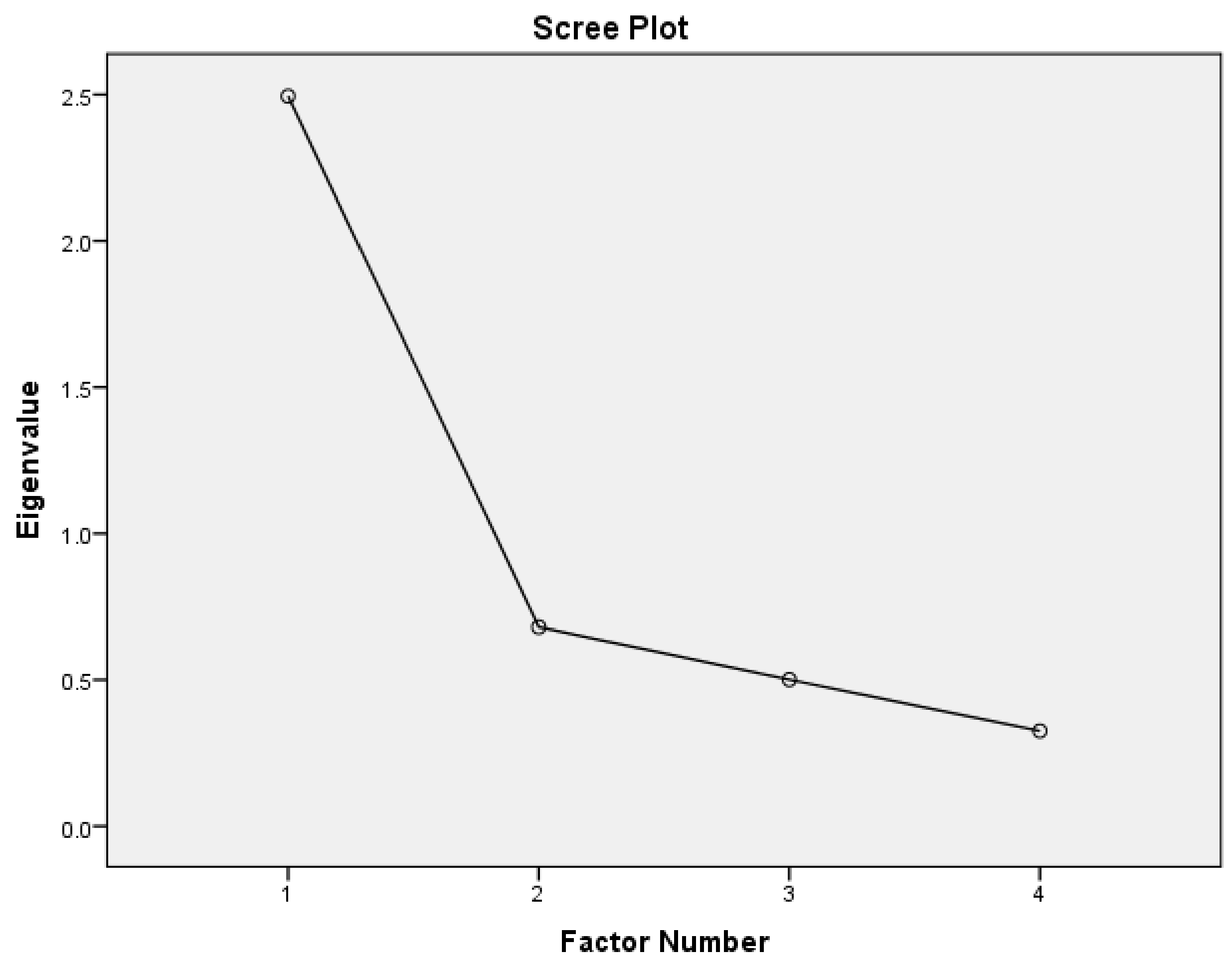
Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	2.494	62.359	62.359	2.093	52.321	52.321	1.951
2	.680	17.008	79.367	.251	6.269	58.590	1.817
3	.501	12.517	91.884				
4	.325	8.116	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



	Factor	
	1	2
ITEM42	.804	-.216
ITEM43	.771	-.235
ITEM41	.671	.271
ITEM40	.633	.274

Extraction Method: Principal Axis Factoring.

a. 2 factors extracted. 9 iterations required.

Reproduced Correlations

		ITEM40	ITEM41	ITEM42	ITEM43
Reproduced Correlation	ITEM40	.476[a]	.499	.450	.424
	ITEM41	.499	.524[a]	.481	.454
	ITEM42	.450	.481	.693[a]	.671
	ITEM43	.424	.454	.671	.650[a]
Residual[b]	ITEM40		.000	-.010	.010
	ITEM41	.000		.010	-.010
	ITEM42	-.010	.010		.000
	ITEM43	.010	-.010	.000	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 0 (.0%) nonredundant residuals with absolute values greater than 0.05.

Pattern Matrix[a]

	Factor	
	1	2
ITEM43	.821	-.019
ITEM42	.814	.024
ITEM41	.015	.712
ITEM40	-.012	.699

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Rotation converged in 8 iterations.

Structure Matrix

	Factor	
	1	2
ITEM42	.832	.658
ITEM43	.806	.620
ITEM41	.570	.724
ITEM40	.532	.690

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Factor Correlation Matrix

Factor	1	2
1	1.000	.779
2	.779	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

6. WARM HEARTEDNESS

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM44	4.26	.698	3912
ITEM45	4.17	.698	3912
ITEM46	4.06	.655	3912
ITEM47	4.28	.590	3912
ITEM48	3.90	.697	3912
ITEM49	3.90	.746	3912
ITEM50	4.03	.642	3912
ITEM51	3.84	.718	3912
ITEM52	4.03	.616	3912
ITEM53	3.89	.714	3912
ITEM54	3.97	.620	3912

Correlation Matrix[a]

		ITEM44	ITEM45	ITEM46	ITEM47	ITEM48	ITEM49	ITEM50	ITEM51	ITEM52	ITEM53	ITEM54
Correlation	ITEM44	1.000	.423	.385	.322	.327	.381	.363	.353	.407	.328	.334
	ITEM45	.423	1.000	.396	.306	.291	.266	.274	.332	.417	.329	.354
	ITEM46	.385	.396	1.000	.342	.314	.305	.323	.316	.402	.321	.363
	ITEM47	.322	.306	.342	1.000	.267	.291	.278	.274	.369	.328	.344
	ITEM48	.327	.291	.314	.267	1.000	.337	.329	.371	.394	.341	.330
	ITEM49	.381	.266	.305	.291	.337	1.000	.361	.340	.402	.346	.339
	ITEM50	.363	.274	.323	.278	.329	.361	1.000	.491	.430	.357	.361
	ITEM51	.353	.332	.316	.274	.371	.340	.491	1.000	.491	.365	.403
	ITEM52	.407	.417	.402	.369	.394	.402	.430	.491	1.000	.451	.457
	ITEM53	.328	.329	.321	.328	.341	.346	.357	.365	.451	1.000	.520
	ITEM54	.334	.354	.363	.344	.330	.339	.361	.403	.457	.520	1.000
Sig. (1-tailed)	ITEM44		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM45	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM46	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM47	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM48	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM49	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM50	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM51	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM52	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM53	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	ITEM54	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .043

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.923
Bartlett's Test of Sphericity	Approx. Chi-Square	12317.307
	df	55
	Sig.	.000

Anti-image Matrices

		ITEM44	ITEM45	ITEM46	ITEM47	ITEM48	ITEM49	ITEM50	ITEM51	ITEM52	ITEM53	ITEM54
Anti-image Covariance	ITEM44	.667	-.142	-.084	-.057	-.048	-.107	-.066	-.031	-.040	-.018	-.010
	ITEM45	-.142	.695	-.116	-.049	-.028	.012	.017	-.041	-.083	-.034	-.049
	ITEM46	-.084	-.116	.701	-.091	-.053	-.032	-.044	-.008	-.057	-.014	-.058
	ITEM47	-.057	-.049	-.091	.764	-.028	-.048	-.023	.001	-.063	-.054	-.062
	ITEM48	-.048	-.028	-.053	-.028	.739	-.079	-.040	-.078	-.063	-.056	-.028
	ITEM49	-.107	.012	-.032	-.048	-.079	.720	-.074	-.030	-.069	-.053	-.036
	ITEM50	-.066	.017	-.044	-.023	-.040	-.074	.659	-.175	-.060	-.044	-.032
	ITEM51	-.031	-.041	-.008	.001	-.078	-.030	-.175	.621	-.116	-.021	-.065
	ITEM52	-.040	-.083	-.057	-.063	-.063	-.069	-.060	-.116	.557	-.077	-.064
	ITEM53	-.018	-.034	-.014	-.054	-.056	-.053	-.044	-.021	-.077	.633	-.191
	ITEM54	-.010	-.049	-.058	-.062	-.028	-.036	-.032	-.065	-.064	-.191	.614
Anti-image Correlation	ITEM44	.922[a]	-.209	-.123	-.079	-.068	-.154	-.100	-.049	-.066	-.028	-.015
	ITEM45	-.209	.916[a]	-.167	-.067	-.040	.016	.026	-.062	-.134	-.051	-.075
	ITEM46	-.123	-.167	.933[a]	-.124	-.073	-.045	-.065	-.012	-.092	-.021	-.089
	ITEM47	-.079	-.067	-.124	.946[a]	-.037	-.064	-.032	.001	-.096	-.077	-.091
	ITEM48	-.068	-.040	-.073	-.037	.949[a]	-.109	-.057	-.115	-.097	-.081	-.041
	ITEM49	-.154	.016	-.045	-.064	-.109	.938[a]	-.108	-.044	-.109	-.078	-.054
	ITEM50	-.100	.026	-.065	-.032	-.057	-.108	.915[a]	-.273	-.099	-.069	-.051
	ITEM51	-.049	-.062	-.012	.001	-.115	-.044	-.273	.907[a]	-.197	-.034	-.105
	ITEM52	-.066	-.134	-.092	-.096	-.097	-.109	-.099	-.197	.928[a]	-.130	-.109
	ITEM53	-.028	-.051	-.021	-.077	-.081	-.078	-.069	-.034	-.130	.909[a]	-.307
	ITEM54	-.015	-.075	-.089	-.091	-.041	-.054	-.051	-.105	-.109	-.307	.910[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

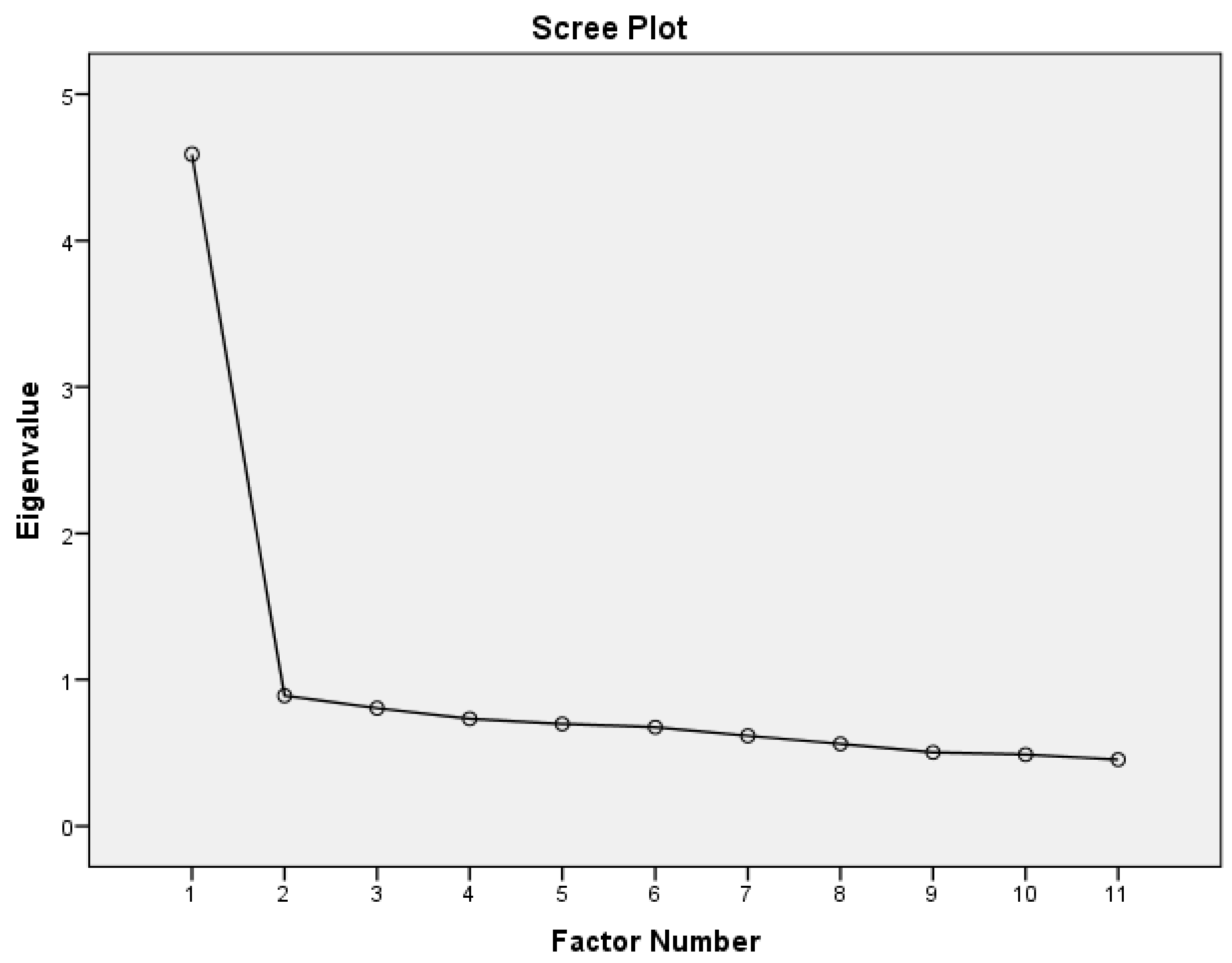
	Initial	Extraction
ITEM44	.333	.363
ITEM45	.305	.318
ITEM46	.299	.331
ITEM47	.236	.264
ITEM48	.261	.300
ITEM49	.280	.313
ITEM50	.341	.358
ITEM51	.379	.398
ITEM52	.443	.520
ITEM53	.367	.385
ITEM54	.386	.413

Extraction Method: Principal Axis Factoring.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.591	41.736	41.736	3.962	36.017	36.017
2	.889	8.084	49.820			
3	.804	7.309	57.129			
4	.732	6.652	63.780			
5	.696	6.327	70.108			
6	.674	6.126	76.234			
7	.615	5.589	81.823			
8	.560	5.088	86.911			
9	.501	4.558	91.469			
10	.486	4.423	95.892			
11	.452	4.108	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM52	.721
ITEM54	.642
ITEM51	.631
ITEM53	.620
ITEM44	.603
ITEM50	.599
ITEM46	.575
ITEM45	.563
ITEM49	.559
ITEM48	.548
ITEM47	.514

Extraction Method:
Principal Axis
Factoring.

a. 1 factors extracted. 4 iterations required.

Reproduced Correlations

		ITEM44	ITEM45	ITEM46	ITEM47	ITEM48	ITEM49	ITEM50	ITEM51	ITEM52	ITEM53	ITEM54
Reproduced Correlation	ITEM44	.363[a]	.340	.346	.310	.330	.337	.361	.380	.434	.374	.387
	ITEM45	.340	.318[a]	.324	.290	.309	.315	.337	.356	.406	.350	.362
	ITEM46	.346	.324	.331[a]	.295	.315	.322	.344	.363	.414	.357	.369
	ITEM47	.310	.290	.295	.264[a]	.282	.287	.308	.324	.371	.319	.330
	ITEM48	.330	.309	.315	.282	.300[a]	.306	.328	.346	.395	.340	.352
	ITEM49	.337	.315	.322	.287	.306	.313[a]	.335	.353	.403	.347	.359
	ITEM50	.361	.337	.344	.308	.328	.335	.358[a]	.378	.431	.371	.384
	ITEM51	.380	.356	.363	.324	.346	.353	.378	.398[a]	.455	.392	.405
	ITEM52	.434	.406	.414	.371	.395	.403	.431	.455	.520[a]	.447	.463
	ITEM53	.374	.350	.357	.319	.340	.347	.371	.392	.447	.385[a]	.399
	ITEM54	.387	.362	.369	.330	.352	.359	.384	.405	.463	.399	.413[a]
Residual[b]	ITEM44		.083	.038	.012	-.003	.044	.002	-.027	-.027	-.046	-.053
	ITEM45	.083		.072	.016	-.017	-.049	-.063	-.023	.011	-.021	-.008
	ITEM46	.038	.072		.046	-.001	-.017	-.021	-.047	-.013	-.036	-.006
	ITEM47	.012	.016	.046		-.015	.003	-.030	-.051	-.002	.009	.014
	ITEM48	-.003	-.017	-.001	-.015		.031	.001	.025	-.001	.001	-.022
	ITEM49	.044	-.049	-.017	.003	.031		.026	-.013	-.002	-.001	-.020
	ITEM50	.002	-.063	-.021	-.030	.001	.026		.113	-.001	-.015	-.023
	ITEM51	-.027	-.023	-.047	-.051	.025	-.013	.113		.036	-.027	-.002
	ITEM52	-.027	.011	-.013	-.002	-.001	-.002	-.001	.036		.004	-.006
	ITEM53	-.046	-.021	-.036	.009	.001	-.001	-.015	-.027	.004		.122
	ITEM54	-.053	-.008	-.006	.014	-.022	-.020	-.023	-.002	-.006	.122	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 7 (12.0%) nonredundant residuals with absolute values greater than 0.05.

7. ARROGANCE

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM55	2.19	.931	3912
ITEM56	1.88	.884	3912
ITEM57	1.90	.848	3912
ITEM58	2.31	1.066	3912
ITEM59	1.87	.892	3912
ITEM60	1.98	.934	3912

Correlation Matrix[a]

		ITEM55	ITEM56	ITEM57	ITEM58	ITEM59	ITEM60
Correlation	ITEM55	1.000	.411	.372	.319	.522	.401
	ITEM56	.411	1.000	.383	.228	.355	.393
	ITEM57	.372	.383	1.000	.217	.346	.342
	ITEM58	.319	.228	.217	1.000	.439	.290
	ITEM59	.522	.355	.346	.439	1.000	.435
	ITEM60	.401	.393	.342	.290	.435	1.000
Sig. (1-tailed)	ITEM55		.000	.000	.000	.000	.000
	ITEM56	.000		.000	.000	.000	.000
	ITEM57	.000	.000		.000	.000	.000
	ITEM58	.000	.000	.000		.000	.000
	ITEM59	.000	.000	.000	.000		.000
	ITEM60	.000	.000	.000	.000	.000	

a. Determinant = .256

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.828
Bartlett's Test of Sphericity	Approx. Chi-Square	5321.378
	df	15
	Sig.	.000

Anti-image Matrices

		ITEM55	ITEM56	ITEM57	ITEM58	ITEM59	ITEM60
Anti-image Covariance	ITEM55	.634	-.130	-.102	-.055	-.195	-.086
	ITEM56	-.130	.725	-.157	-.020	-.047	-.140
	ITEM57	-.102	-.157	.766	-.021	-.068	-.096
	ITEM58	-.055	-.020	-.021	.787	-.200	-.063
	ITEM59	-.195	-.047	-.068	-.200	.595	-.129
	ITEM60	-.086	-.140	-.096	-.063	-.129	.709
Anti-image Correlation	ITEM55	.822[a]	-.192	-.146	-.078	-.318	-.128
	ITEM56	-.192	.838[a]	-.211	-.027	-.072	-.196
	ITEM57	-.146	-.211	.859[a]	-.027	-.101	-.130
	ITEM58	-.078	-.027	-.027	.827[a]	-.292	-.084
	ITEM59	-.318	-.072	-.101	-.292	.789[a]	-.199
	ITEM60	-.128	-.196	-.130	-.084	-.199	.856[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

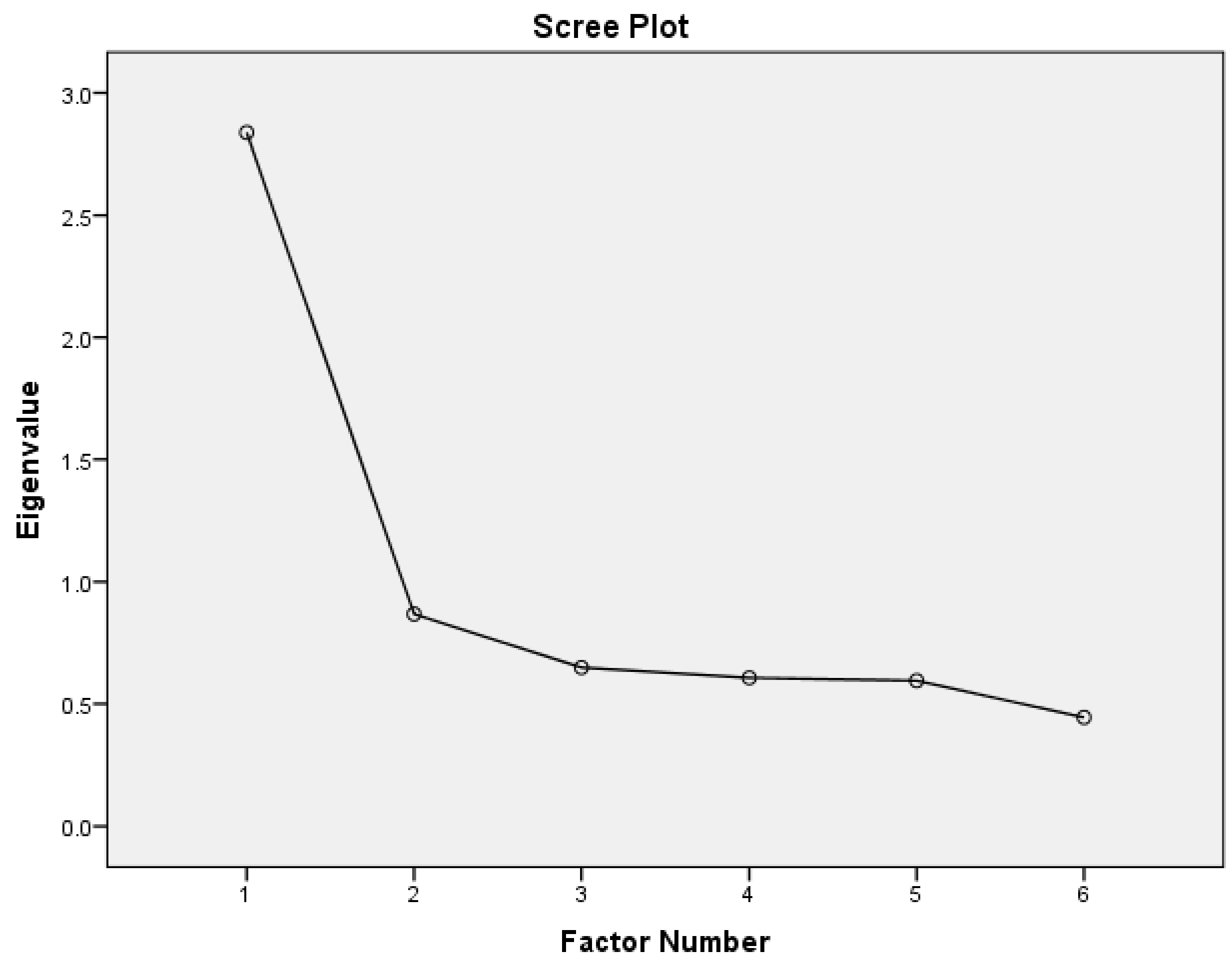
	Initial	Extraction
ITEM55	.366	.479
ITEM56	.275	.335
ITEM57	.234	.288
ITEM58	.213	.233
ITEM59	.405	.516
ITEM60	.291	.380

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.837	47.287	47.287	2.232	37.193	37.193
2	.868	14.468	61.755			
3	.649	10.815	72.570			
4	.607	10.110	82.680			
5	.595	9.914	92.594			
6	.444	7.406	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM59	.718
ITEM55	.692
ITEM60	.616
ITEM56	.579
ITEM57	.537
ITEM58	.482

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 5 iterations required.

Reproduced Correlations

		ITEM55	ITEM56	ITEM57	ITEM58	ITEM59	ITEM60
Reproduced Correlation	ITEM55	.479[a]	.401	.372	.334	.497	.427
	ITEM56	.401	.335[a]	.311	.279	.416	.357
	ITEM57	.372	.311	.288[a]	.259	.386	.331
	ITEM58	.334	.279	.259	.233[a]	.347	.297
	ITEM59	.497	.416	.386	.347	.516[a]	.443
	ITEM60	.427	.357	.331	.297	.443	.380[a]
Residual[b]	ITEM55		.010	.000	-.015	.025	-.026
	ITEM56	.010		.072	-.051	-.060	.036
	ITEM57	.000	.072		-.042	-.040	.011
	ITEM58	-.015	-.051	-.042		.093	-.007
	ITEM59	.025	-.060	-.040	.093		-.007
	ITEM60	-.026	.036	.011	-.007	-.007	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 4 (26.0%) nonredundant residuals with absolute values greater than 0.05.

8. CONFLICT SEEKING

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM61	2.69	1.029	3912
ITEM62	1.60	.706	3912
ITEM63	1.79	.764	3912
ITEM64	2.50	.988	3912
ITEM65	1.84	.854	3912
ITEM66	1.89	.812	3912
ITEM67	2.44	1.000	3912

Correlation Matrix[a]

		ITEM61	ITEM62	ITEM63	ITEM64	ITEM65	ITEM66	ITEM67
Correlation	ITEM61	1.000	.347	.252	.260	.372	.301	.414
	ITEM62	.347	1.000	.364	.171	.481	.325	.408
	ITEM63	.252	.364	1.000	.255	.391	.361	.292
	ITEM64	.260	.171	.255	1.000	.214	.356	.159
	ITEM65	.372	.481	.391	.214	1.000	.334	.488
	ITEM66	.301	.325	.361	.356	.334	1.000	.297
	ITEM67	.414	.408	.292	.159	.488	.297	1.000
Sig. (1-tailed)	ITEM61		.000	.000	.000	.000	.000	.000
	ITEM62	.000		.000	.000	.000	.000	.000
	ITEM63	.000	.000		.000	.000	.000	.000
	ITEM64	.000	.000	.000		.000	.000	.000
	ITEM65	.000	.000	.000	.000		.000	.000
	ITEM66	.000	.000	.000	.000	.000		.000
	ITEM67	.000	.000	.000	.000	.000	.000	

a. Determinant = .224

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.833
Bartlett's Test of Sphericity	Approx. Chi-Square	5848.482
	df	21
	Sig.	.000

Anti-image Matrices

		ITEM61	ITEM62	ITEM63	ITEM64	ITEM65	ITEM66	ITEM67
Anti-image Covariance	ITEM61	.740	-.087	-.013	-.113	-.077	-.066	-.166
	ITEM62	-.087	.680	-.112	.015	-.168	-.078	-.104
	ITEM63	-.013	-.112	.751	-.089	-.121	-.135	-.034
	ITEM64	-.113	.015	-.089	.833	-.030	-.197	.022
	ITEM65	-.077	-.168	-.121	-.030	.617	-.052	-.181
	ITEM66	-.066	-.078	-.135	-.197	-.052	.734	-.055
	ITEM67	-.166	-.104	-.034	.022	-.181	-.055	.670
Anti-image Correlation	ITEM61	.853[a]	-.122	-.018	-.144	-.113	-.090	-.236
	ITEM62	-.122	.846[a]	-.156	.020	-.259	-.110	-.154
	ITEM63	-.018	-.156	.858[a]	-.112	-.178	-.181	-.048
	ITEM64	-.144	.020	-.112	.783[a]	-.042	-.252	.030
	ITEM65	-.113	-.259	-.178	-.042	.822[a]	-.078	-.281
	ITEM66	-.090	-.110	-.181	-.252	-.078	.836[a]	-.079
	ITEM67	-.236	-.154	-.048	.030	-.281	-.079	.822[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

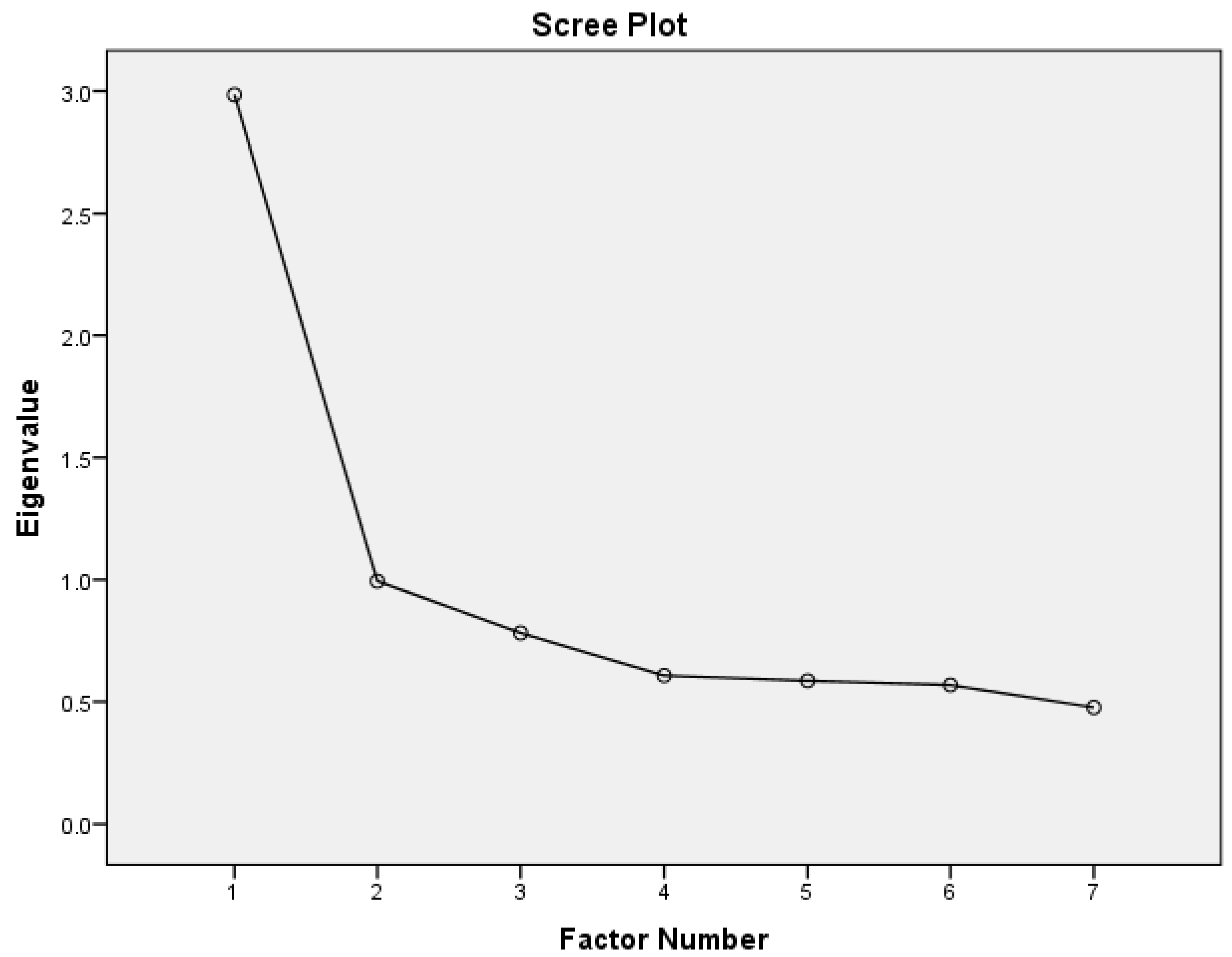
	Initial	Extraction
ITEM61	.260	.317
ITEM62	.320	.400
ITEM63	.249	.302
ITEM64	.167	.146
ITEM65	.383	.488
ITEM66	.266	.306
ITEM67	.330	.386

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.985	42.640	42.640	2.345	33.503	33.503
2	.995	14.207	56.848			
3	.782	11.173	68.020			
4	.607	8.678	76.699			
5	.586	8.377	85.075			
6	.569	8.122	93.197			
7	.476	6.803	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM65	.699
ITEM62	.632
ITEM67	.622
ITEM61	.563
ITEM66	.553
ITEM63	.550
ITEM64	.382

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 5 iterations required.

Reproduced Correlations

		ITEM61	ITEM62	ITEM63	ITEM64	ITEM65	ITEM66	ITEM67
Reproduced Correlation	ITEM61	.317[a]	.356	.310	.215	.393	.311	.350
	ITEM62	.356	.400[a]	.348	.241	.442	.350	.393
	ITEM63	.310	.348	.302[a]	.210	.384	.304	.342
	ITEM64	.215	.241	.210	.146[a]	.267	.211	.237
	ITEM65	.393	.442	.384	.267	.488[a]	.387	.434
	ITEM66	.311	.350	.304	.211	.387	.306[a]	.344
	ITEM67	.350	.393	.342	.237	.434	.344	.386[a]
Residual[b]	ITEM61		-.009	-.058	.045	-.021	-.010	.064
	ITEM62	-.009		.016	-.071	.039	-.024	.015
	ITEM63	-.058	.016		.045	.007	.057	-.049
	ITEM64	.045	-.071	.045		-.052	.145	-.078
	ITEM65	-.021	.039	.007	-.052		-.053	.053
	ITEM66	-.010	-.024	.057	.145	-.053		-.046
	ITEM67	.064	.015	-.049	-.078	.053	-.046	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 9 (42.0%) nonredundant residuals with absolute values greater than 0.05.

TWO FACTORS EXTRACTED

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM61	2.69	1.029	3912
ITEM62	1.60	.706	3912
ITEM63	1.79	.764	3912
ITEM64	2.50	.988	3912
ITEM65	1.84	.854	3912
ITEM66	1.89	.812	3912
ITEM67	2.44	1.000	3912

Correlation Matrix[a]

		ITEM61	ITEM62	ITEM63	ITEM64	ITEM65	ITEM66	ITEM67
Correlation	ITEM61	1.000	.347	.252	.260	.372	.301	.414
	ITEM62	.347	1.000	.364	.171	.481	.325	.408
	ITEM63	.252	.364	1.000	.255	.391	.361	.292
	ITEM64	.260	.171	.255	1.000	.214	.356	.159
	ITEM65	.372	.481	.391	.214	1.000	.334	.488
	ITEM66	.301	.325	.361	.356	.334	1.000	.297
	ITEM67	.414	.408	.292	.159	.488	.297	1.000
Sig. (1-tailed)	ITEM61		.000	.000	.000	.000	.000	.000
	ITEM62	.000		.000	.000	.000	.000	.000
	ITEM63	.000	.000		.000	.000	.000	.000
	ITEM64	.000	.000	.000		.000	.000	.000
	ITEM65	.000	.000	.000	.000		.000	.000
	ITEM66	.000	.000	.000	.000	.000		.000
	ITEM67	.000	.000	.000	.000	.000	.000	

a. Determinant = .224

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.833
Bartlett's Test of Sphericity	Approx. Chi-Square	5848.482
	df	21
	Sig.	.000

Anti-image Matrices

		ITEM61	ITEM62	ITEM63	ITEM64	ITEM65	ITEM66	ITEM67
Anti-image Covariance	ITEM61	.740	-.087	-.013	-.113	-.077	-.066	-.166
	ITEM62	-.087	.680	-.112	.015	-.168	-.078	-.104
	ITEM63	-.013	-.112	.751	-.089	-.121	-.135	-.034
	ITEM64	-.113	.015	-.089	.833	-.030	-.197	.022
	ITEM65	-.077	-.168	-.121	-.030	.617	-.052	-.181
	ITEM66	-.066	-.078	-.135	-.197	-.052	.734	-.055
	ITEM67	-.166	-.104	-.034	.022	-.181	-.055	.670
Anti-image Correlation	ITEM61	.853[a]	-.122	-.018	-.144	-.113	-.090	-.236
	ITEM62	-.122	.846[a]	-.156	.020	-.259	-.110	-.154
	ITEM63	-.018	-.156	.858[a]	-.112	-.178	-.181	-.048
	ITEM64	-.144	.020	-.112	.783[a]	-.042	-.252	.030
	ITEM65	-.113	-.259	-.178	-.042	.822[a]	-.078	-.281
	ITEM66	-.090	-.110	-.181	-.252	-.078	.836[a]	-.079
	ITEM67	-.236	-.154	-.048	.030	-.281	-.079	.822[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM61	.260	.309
ITEM62	.320	.420
ITEM63	.249	.307
ITEM64	.167	.338
ITEM65	.383	.532
ITEM66	.266	.424
ITEM67	.330	.454

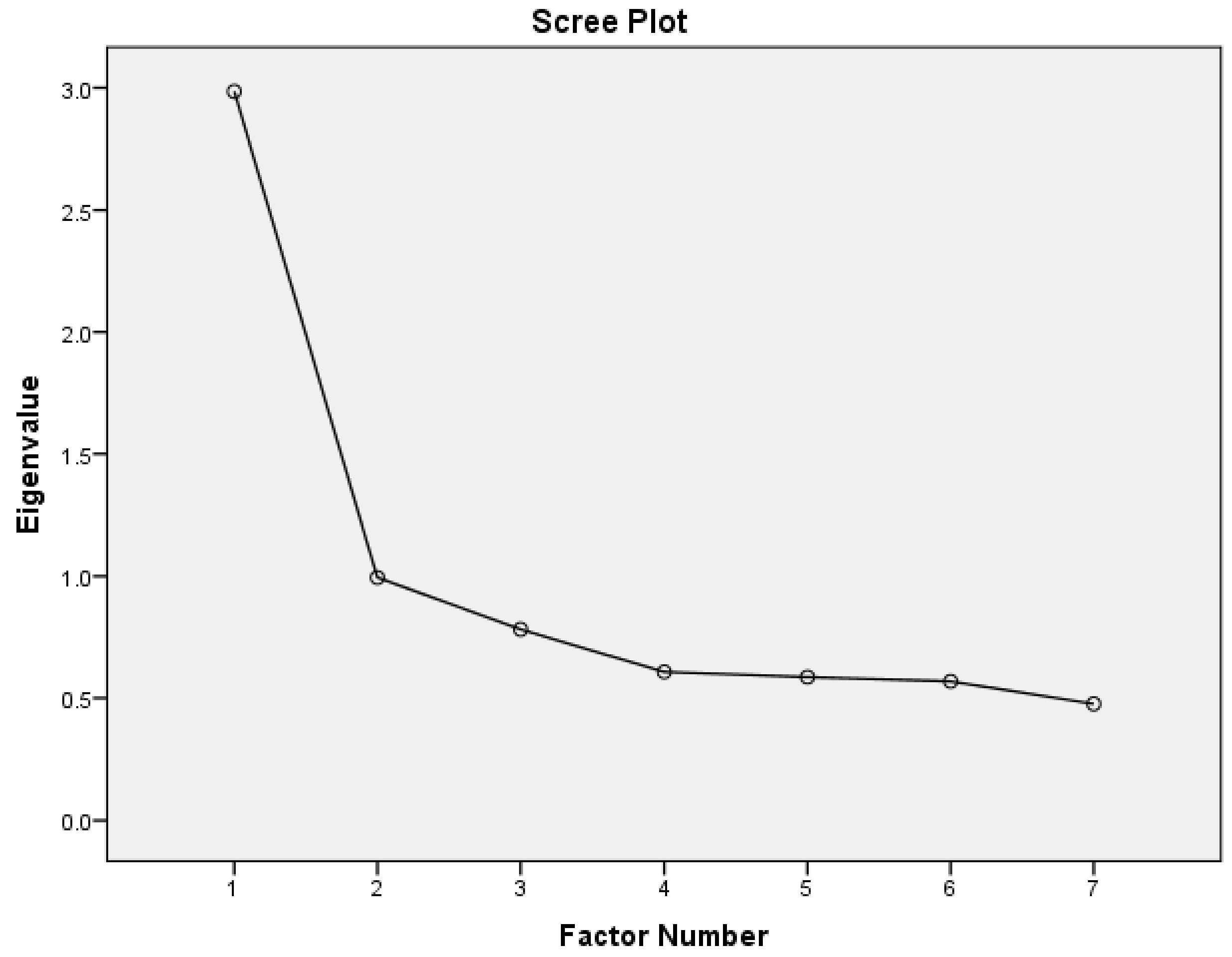
Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	2.985	42.640	42.640	2.397	34.245	34.245	2.271
2	.995	14.207	56.848	.386	5.519	39.764	1.551
3	.782	11.173	68.020				
4	.607	8.678	76.699				
5	.586	8.377	85.075				
6	.569	8.122	93.197				
7	.476	6.803	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor Matrix[a]

	Factor	
	1	2
ITEM65	.703	-.194
ITEM67	.631	-.236
ITEM62	.630	-.154
ITEM66	.577	.302
ITEM61	.556	-.023
ITEM63	.546	.094
ITEM64	.411	.411

Extraction Method: Principal Axis Factoring.

a. 2 factors extracted. 14 iterations required.

Reproduced Correlations

		ITEM61	ITEM62	ITEM63	ITEM64	ITEM65	ITEM66	ITEM67
Reproduced Correlation	ITEM61	.309[a]	.353	.301	.219	.395	.314	.356
	ITEM62	.353	.420[a]	.329	.196	.472	.317	.433
	ITEM63	.301	.329	.307[a]	.263	.366	.343	.322
	ITEM64	.219	.196	.263	.338[a]	.209	.361	.162
	ITEM65	.395	.472	.366	.209	.532[a]	.347	.489
	ITEM66	.314	.317	.343	.361	.347	.424[a]	.293
	ITEM67	.356	.433	.322	.162	.489	.293	.454[a]
Residual[b]	ITEM61		-.006	-.049	.041	-.023	-.012	.058
	ITEM62	-.006		.034	-.025	.009	.008	-.025
	ITEM63	-.049	.034		-.008	.025	.018	-.030
	ITEM64	.041	-.025	-.008		.005	-.006	-.004
	ITEM65	-.023	.009	.025	.005		-.013	-.002
	ITEM66	-.012	.008	.018	-.006	-.013		.005
	ITEM67	.058	-.025	-.030	-.004	-.002	.005	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 1 (4.0%) nonredundant residuals with absolute values greater than 0.05.

Pattern Matrix[a]

	Factor	
	1	2
ITEM65	.737	-.014
ITEM67	.719	-.086
ITEM62	.642	.011
ITEM61	.461	.143
ITEM63	.345	.278
ITEM64	-.056	.612
ITEM66	.176	.534

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.[a]
a. Rotation converged in 5 iterations.

Structure Matrix

	Factor	
	1	2
ITEM65	.729	.409
ITEM67	.670	.327
ITEM62	.648	.379
ITEM61	.544	.408
ITEM63	.505	.476
ITEM66	.483	.635
ITEM64	.295	.579

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Factor Correlation Matrix

Factor	1	2
1	1.000	.574
2	.574	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

9. HOSTILE EGOISM

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM68	2.86	.948	3912
ITEM69	1.80	.832	3912
ITEM70	1.69	.766	3912
ITEM71	2.07	.849	3912
ITEM72	1.74	.727	3912
ITEM73	3.37	.980	3912
ITEM74	2.07	1.046	3912
ITEM75	1.96	.912	3912
ITEM76	2.02	.836	3912
ITEM77	1.76	.801	3912
ITEM80	2.70	.962	3912
ITEM81	2.21	.964	3912
ITEM78	1.86	.803	3912
ITEM79	1.75	.762	3912

Correlation Matrix[a]

		ITEM68	ITEM69	ITEM70	ITEM71	ITEM72	ITEM73	ITEM74	ITEM75	ITEM76	ITEM77	ITEM80	ITEM81	ITEM78	ITEM79
Correlation	ITEM68	1.000	.289	.283	.169	.228	.269	.155	.233	.150	.317	.215	.261	.195	.220
	ITEM69	.289	1.000	.461	.196	.349	.257	.151	.305	.189	.340	.231	.325	.217	.263
	ITEM70	.283	.461	1.000	.193	.359	.302	.182	.342	.197	.376	.224	.345	.247	.286
	ITEM71	.169	.196	.193	1.000	.279	.107	.124	.186	.288	.300	.097	.218	.297	.337
	ITEM72	.228	.349	.359	.279	1.000	.227	.238	.346	.296	.408	.294	.378	.341	.324
	ITEM73	.269	.257	.302	.107	.227	1.000	.271	.413	.090	.271	.207	.410	.128	.134
	ITEM74	.155	.151	.182	.124	.238	.271	1.000	.453	.185	.257	.226	.362	.211	.176
	ITEM75	.233	.305	.342	.186	.346	.413	.453	1.000	.255	.391	.213	.461	.311	.298
	ITEM76	.150	.189	.197	.288	.296	.090	.185	.255	1.000	.342	.198	.221	.549	.394
	ITEM77	.317	.340	.376	.300	.408	.271	.257	.391	.342	1.000	.274	.463	.413	.401
	ITEM80	.215	.231	.224	.097	.294	.207	.226	.213	.198	.274	1.000	.317	.228	.161
	ITEM81	.261	.325	.345	.218	.378	.410	.362	.461	.221	.463	.317	1.000	.298	.287
	ITEM78	.195	.217	.247	.297	.341	.128	.211	.311	.549	.413	.228	.298	1.000	.439
	ITEM79	.220	.263	.286	.337	.324	.134	.176	.298	.394	.401	.161	.287	.439	1.000
Sig. (1-tailed)	ITEM68		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM69	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM70	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM71	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM72	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM73	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM74	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM75	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM76	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM77	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM80	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM81	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM78	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	ITEM79	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .029

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.897
Bartlett's Test of Sphericity	Approx. Chi-Square	13854.390
	df	91
	Sig.	.000

Anti-image Matrices

		ITEM68	ITEM69	ITEM70	ITEM71	ITEM72	ITEM73	ITEM74	ITEM75	ITEM76	ITEM77	ITEM80	ITEM81	ITEM78	ITEM79
Anti-image Covariance	ITEM68	.818	-.083	-.056	-.032	-.005	-.099	-.006	-.002	.009	-.082	-.065	-.010	-.012	-.037
	ITEM69	-.083	.703	-.198	-.024	-.080	-.029	.035	-.039	-.006	-.036	-.045	-.038	.013	-.033
	ITEM70	-.056	-.198	.677	-.006	-.074	-.069	.018	-.050	.007	-.061	-.020	-.029	-.010	-.043
	ITEM71	-.032	-.024	-.006	.815	-.077	.004	-.002	.011	-.069	-.057	.045	-.024	-.044	-.116
	ITEM72	-.005	-.080	-.074	-.077	.685	.001	-.022	-.045	-.035	-.068	-.092	-.059	-.044	-.038
	ITEM73	-.099	-.029	-.069	.004	.001	.727	-.040	-.143	.026	-.011	-.033	-.132	.030	.033
	ITEM74	-.006	.035	.018	-.002	-.022	-.040	.750	-.200	-.024	-.007	-.073	-.090	-.010	.005
	ITEM75	-.002	-.039	-.050	.011	-.045	-.143	-.200	.597	-.022	-.045	.030	-.090	-.039	-.042
	ITEM76	.009	-.006	.007	-.069	-.035	.026	-.024	-.022	.648	-.040	-.039	.020	-.241	-.093
	ITEM77	-.082	-.036	-.061	-.057	-.068	-.011	-.007	-.045	-.040	.598	-.035	-.117	-.074	-.079
	ITEM80	-.065	-.045	-.020	.045	-.092	-.033	-.073	.030	-.039	-.035	.823	-.088	-.039	.022
	ITEM81	-.010	-.038	-.029	-.024	-.059	-.132	-.090	-.090	.020	-.117	-.088	.601	-.024	-.020
	ITEM78	-.012	.013	-.010	-.044	-.044	.030	-.010	-.039	-.241	-.074	-.039	-.024	.591	-.113
	ITEM79	-.037	-.033	-.043	-.116	-.038	.033	.005	-.042	-.093	-.079	.022	-.020	-.113	.681
Anti-image Correlation	ITEM68	.924[a]	-.109	-.075	-.039	-.006	-.128	-.007	-.002	.013	-.118	-.080	-.014	-.017	-.049
	ITEM69	-.109	.892[a]	-.287	-.032	-.115	-.040	.048	-.061	-.009	-.055	-.059	-.059	.020	-.047
	ITEM70	-.075	-.287	.900[a]	-.008	-.109	-.099	.025	-.079	.010	-.096	-.027	-.045	-.015	-.064
	ITEM71	-.039	-.032	-.008	.916[a]	-.103	.006	-.002	.016	-.095	-.082	.055	-.034	-.064	-.156
	ITEM72	-.006	-.115	-.109	-.103	.938[a]	.002	-.031	-.071	-.053	-.106	-.122	-.092	-.069	-.056
	ITEM73	-.128	-.040	-.099	.006	.002	.873[a]	-.055	-.217	.038	-.016	-.042	-.199	.046	.047
	ITEM74	-.007	.048	.025	-.002	-.031	-.055	.863[a]	-.299	-.034	-.010	-.093	-.135	-.015	.007
	ITEM75	-.002	-.061	-.079	.016	-.071	-.217	-.299	.884[a]	-.036	-.075	.043	-.150	-.067	-.066
	ITEM76	.013	-.009	.010	-.095	-.053	.038	-.034	-.036	.842[a]	-.065	-.053	.033	-.389	-.140
	ITEM77	-.118	-.055	-.096	-.082	-.106	-.016	-.010	-.075	-.065	.929[a]	-.050	-.195	-.125	-.124
	ITEM80	-.080	-.059	-.027	.055	-.122	-.042	-.093	.043	-.053	-.050	.912[a]	-.125	-.055	.030
	ITEM81	-.014	-.059	-.045	-.034	-.092	-.199	-.135	-.150	.033	-.195	-.125	.909[a]	-.040	-.031
	ITEM78	-.017	.020	-.015	-.064	-.069	.046	-.015	-.067	-.389	-.125	-.055	-.040	.857[a]	-.179
	ITEM79	-.049	-.047	-.064	-.156	-.056	.047	.007	-.066	-.140	-.124	.030	-.031	-.179	.913[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM68	.182	.212
ITEM69	.297	.426
ITEM70	.323	.435
ITEM71	.185	.215
ITEM72	.315	.358
ITEM73	.273	.353
ITEM74	.250	.371
ITEM75	.403	.515
ITEM76	.352	.482
ITEM77	.402	.457
ITEM80	.177	.174
ITEM81	.399	.480
ITEM78	.409	.558
ITEM79	.319	.391

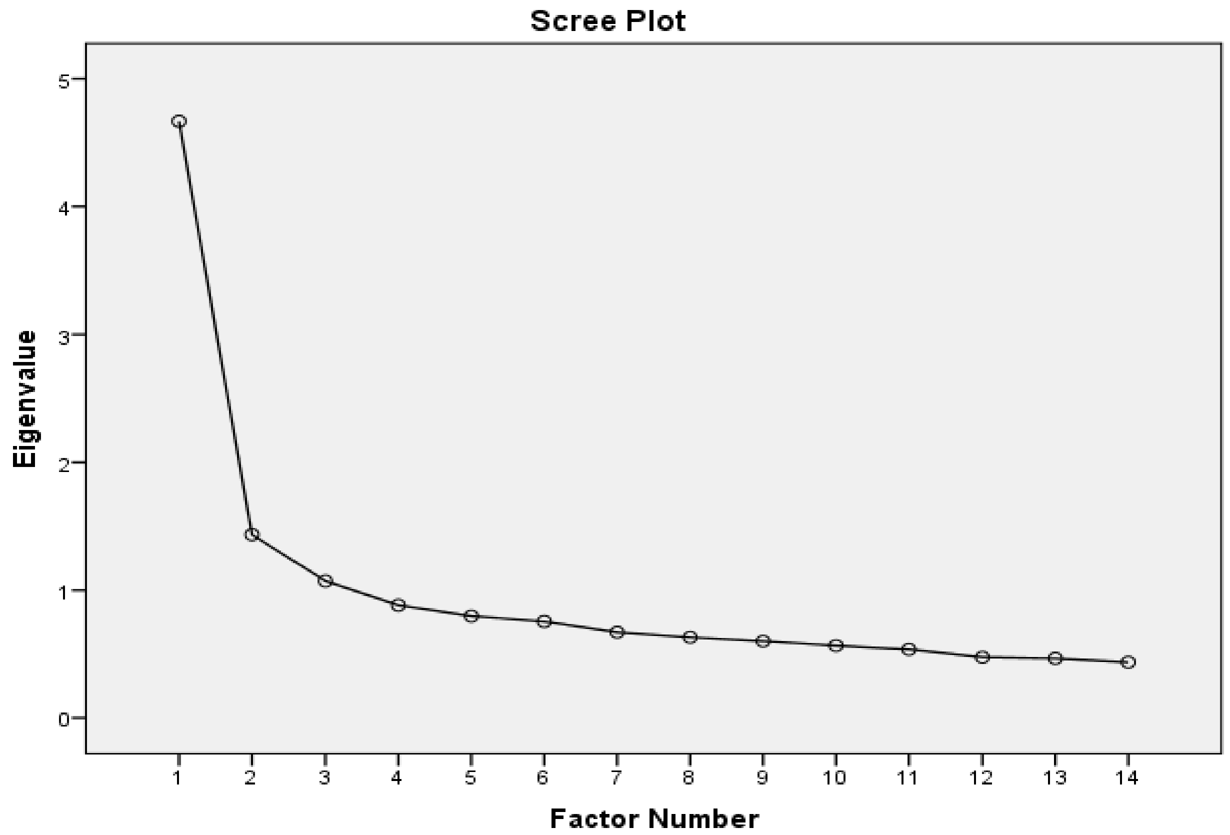
Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4.669	33.347	33.347	4.082	29.158	29.158	2.900
2	1.435	10.248	43.595	.865	6.178	35.336	2.912
3	1.072	7.655	51.250	.480	3.432	38.768	2.862
4	.883	6.304	57.554				
5	.798	5.702	63.257				
6	.756	5.402	68.658				
7	.672	4.801	73.460				
8	.632	4.514	77.973				
9	.602	4.299	82.272				
10	.566	4.046	86.318				
11	.537	3.833	90.152				
12	.475	3.396	93.548				
13	.467	3.332	96.880				
14	.437	3.120	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor Matrix[a]

	Factor		
	1	2	3
ITEM77	.672	-.049	.051
ITEM81	.646	.225	-.109
ITEM75	.633	.224	-.253
ITEM78	.596	-.436	-.111
ITEM72	.592	-.022	.086
ITEM70	.568	.156	.297
ITEM79	.553	-.289	.047
ITEM69	.535	.144	.346
ITEM76	.515	-.453	-.108
ITEM73	.460	.369	-.070
ITEM74	.450	.193	-.362
ITEM68	.425	.106	.144
ITEM80	.410	.078	-.006
ITEM71	.405	-.216	.062

Extraction Method: Principal Axis Factoring.

a. 3 factors extracted. 7 iterations required.

Reproduced Correlations

		ITEM68	ITEM69	ITEM70	ITEM71	ITEM72	ITEM73	ITEM74	ITEM75	ITEM76	ITEM77	ITEM80	ITEM81	ITEM78	ITEM79
Reproduced Correlation	ITEM68	.212[a]	.292	.300	.158	.262	.224	.160	.256	.155	.288	.182	.283	.191	.211
	ITEM69	.292	.426[a]	.429	.207	.343	.275	.143	.283	.173	.370	.229	.340	.217	.270
	ITEM70	.300	.429	.435[a]	.215	.358	.298	.178	.319	.190	.389	.243	.369	.237	.283
	ITEM71	.158	.207	.215	.215[a]	.250	.102	.119	.193	.300	.286	.149	.207	.329	.289
	ITEM72	.262	.343	.358	.250	.358[a]	.258	.231	.348	.306	.403	.241	.368	.353	.337
	ITEM73	.224	.275	.298	.102	.258	.353[a]	.304	.392	.077	.287	.218	.388	.121	.144
	ITEM74	.160	.143	.178	.119	.231	.304	.371[a]	.420	.183	.275	.202	.374	.224	.176
	ITEM75	.256	.283	.319	.193	.348	.392	.420	.515[a]	.252	.402	.279	.487	.308	.274
	ITEM76	.155	.173	.190	.300	.306	.077	.183	.252	.482[a]	.363	.177	.243	.517	.410
	ITEM77	.288	.370	.389	.286	.403	.287	.275	.402	.363	.457[a]	.272	.418	.417	.388
	ITEM80	.182	.229	.243	.149	.241	.218	.202	.279	.177	.272	.174[a]	.283	.211	.204
	ITEM81	.283	.340	.369	.207	.368	.388	.374	.487	.243	.418	.283	.480[a]	.299	.287
	ITEM78	.191	.217	.237	.329	.353	.121	.224	.308	.517	.417	.211	.299	.558[a]	.450
	ITEM79	.211	.270	.283	.289	.337	.144	.176	.274	.410	.388	.204	.287	.450	.391[a]
Residual[b]	ITEM68		-.003	-.018	.010	-.034	.045	-.005	-.024	-.005	.030	.033	-.021	.004	.009
	ITEM69	-.003		.032	-.011	.006	-.017	.007	.021	.016	-.029	.003	-.015	-.001	-.007
	ITEM70	-.018	.032		-.021	.001	.005	.004	.023	.008	-.013	-.019	-.024	.010	.003
	ITEM71	.010	-.011	-.021		.029	.005	.005	-.007	-.012	.014	-.053	.011	-.032	.048
	ITEM72	-.034	.006	.001	.029		-.031	.007	-.002	-.010	.004	.053	.009	-.012	-.014
	ITEM73	.045	-.017	.005	.005	-.031		-.033	.022	.013	-.016	-.011	.022	.007	-.010
	ITEM74	-.005	.007	.004	.005	.007	-.033		.033	.002	-.017	.025	-.012	-.013	-2.376E-5
	ITEM75	-.024	.021	.023	-.007	-.002	.022	.033		.003	-.011	-.066	-.026	.003	.024
	ITEM76	-.005	.016	.008	-.012	-.010	.013	.002	.003		-.021	.021	-.022	.032	-.016
	ITEM77	.030	-.029	-.013	.014	.004	-.016	-.017	-.011	-.021		.003	.045	-.004	.013
	ITEM80	.033	.003	-.019	-.053	.053	-.011	.025	-.066	.021	.003		.034	.017	-.043
	ITEM81	-.021	-.015	-.024	.011	.009	.022	-.012	-.026	-.022	.045	.034		-.001	.000
	ITEM78	.004	-.001	.010	-.032	-.012	.007	-.013	.003	.032	-.004	.017	-.001		-.011
	ITEM79	.009	-.007	.003	.048	-.014	-.010	-2.376E-5	.024	-.016	.013	-.043	.000	-.011	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 3 (3.0%) nonredundant residuals with absolute values greater than 0.05.

Pattern Matrix[a]

	Factor		
	1	2	3
ITEM69	.653	-.033	.029
ITEM70	.617	-.043	-.038
ITEM68	.370	-.057	-.098
ITEM72	.319	-.276	-.139
ITEM78	-.065	-.745	-.068
ITEM76	-.099	-.726	-.021
ITEM79	.153	-.545	.009
ITEM71	.141	-.399	.035
ITEM77	.301	-.347	-.187
ITEM74	-.147	-.059	-.652
ITEM75	.058	-.091	-.640
ITEM81	.223	-.073	-.506
ITEM73	.252	.170	-.486
ITEM80	.187	-.104	-.219

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Rotation converged in 10 iterations.

Structure Matrix

	Factor		
	1	2	3
ITEM70	.657	-.340	-.391
ITEM69	.652	-.318	-.338
ITEM72	.521	-.480	-.429
ITEM68	.448	-.266	-.322
ITEM78	.311	-.744	-.347
ITEM76	.242	-.690	-.273
ITEM79	.397	-.611	-.304
ITEM77	.561	-.563	-.497
ITEM71	.304	-.449	-.210
ITEM75	.447	-.388	-.710
ITEM81	.531	-.388	-.658
ITEM74	.233	-.267	-.597
ITEM73	.438	-.150	-.551
ITEM80	.352	-.281	-.364

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Factor Correlation Matrix

Factor	1	2	3
1	1.000	-.455	-.542
2	-.455	1.000	.422
3	-.542	.422	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

FACTOR MATRIX WHEN FORCING THE EXTRACTION OF A SINGLE FACTOR

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM68	2.86	.948	3912
ITEM69	1.80	.832	3912
ITEM70	1.69	.766	3912
ITEM71	2.07	.849	3912
ITEM72	1.74	.727	3912
ITEM73	3.37	.980	3912
ITEM74	2.07	1.046	3912
ITEM75	1.96	.912	3912
ITEM76	2.02	.836	3912
ITEM77	1.76	.801	3912
ITEM78	1.86	.803	3912
ITEM79	1.75	.762	3912
ITEM80	2.70	.962	3912
ITEM81	2.21	.964	3912

Correlation Matrix[a]

		ITEM68	ITEM69	ITEM70	ITEM71	ITEM72	ITEM73	ITEM74	ITEM75	ITEM76	ITEM77	ITEM78	ITEM79	ITEM80	ITEM81
Correlation	ITEM68	1.000	.289	.283	.169	.228	.269	.155	.233	.150	.317	.195	.220	.215	.261
	ITEM69	.289	1.000	.461	.196	.349	.257	.151	.305	.189	.340	.217	.263	.231	.325
	ITEM70	.283	.461	1.000	.193	.359	.302	.182	.342	.197	.376	.247	.286	.224	.345
	ITEM71	.169	.196	.193	1.000	.279	.107	.124	.186	.288	.300	.297	.337	.097	.218
	ITEM72	.228	.349	.359	.279	1.000	.227	.238	.346	.296	.408	.341	.324	.294	.378
	ITEM73	.269	.257	.302	.107	.227	1.000	.271	.413	.090	.271	.128	.134	.207	.410
	ITEM74	.155	.151	.182	.124	.238	.271	1.000	.453	.185	.257	.211	.176	.226	.362
	ITEM75	.233	.305	.342	.186	.346	.413	.453	1.000	.255	.391	.311	.298	.213	.461
	ITEM76	.150	.189	.197	.288	.296	.090	.185	.255	1.000	.342	.549	.394	.198	.221
	ITEM77	.317	.340	.376	.300	.408	.271	.257	.391	.342	1.000	.413	.401	.274	.463
	ITEM78	.195	.217	.247	.297	.341	.128	.211	.311	.549	.413	1.000	.439	.228	.298
	ITEM79	.220	.263	.286	.337	.324	.134	.176	.298	.394	.401	.439	1.000	.161	.287
	ITEM80	.215	.231	.224	.097	.294	.207	.226	.213	.198	.274	.228	.161	1.000	.317
	ITEM81	.261	.325	.345	.218	.378	.410	.362	.461	.221	.463	.298	.287	.317	1.000
Sig. (1-tailed)	ITEM68		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM69	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM70	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM71	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM72	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM73	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM74	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM75	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM76	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM77	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM78	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM79	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM80	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	ITEM81	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .029

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.897
Bartlett's Test of Sphericity	Approx. Chi-Square	13854.390
	df	91
	Sig.	.000

Anti-image Matrices

		ITEM68	ITEM69	ITEM70	ITEM71	ITEM72	ITEM73	ITEM74	ITEM75	ITEM76	ITEM77	ITEM78	ITEM79	ITEM80	ITEM81
Anti-image Covariance	ITEM68	.818	-.083	-.056	-.032	-.005	-.099	-.006	-.002	.009	-.082	-.012	-.037	-.065	-.010
	ITEM69	-.083	.703	-.198	-.024	-.080	-.029	.035	-.039	-.006	-.036	.013	-.033	-.045	-.038
	ITEM70	-.056	-.198	.677	-.006	-.074	-.069	.018	-.050	.007	-.061	-.010	-.043	-.020	-.029
	ITEM71	-.032	-.024	-.006	.815	-.077	.004	-.002	.011	-.069	-.057	-.044	-.116	.045	-.024
	ITEM72	-.005	-.080	-.074	-.077	.685	.001	-.022	-.045	-.035	-.068	-.044	-.038	-.092	-.059
	ITEM73	-.099	-.029	-.069	.004	.001	.727	-.040	-.143	.026	-.011	.030	.033	-.033	-.132
	ITEM74	-.006	.035	.018	-.002	-.022	-.040	.750	-.200	-.024	-.007	-.010	.005	-.073	-.090
	ITEM75	-.002	-.039	-.050	.011	-.045	-.143	-.200	.597	-.022	-.045	-.039	-.042	.030	-.090
	ITEM76	.009	-.006	.007	-.069	-.035	.026	-.024	-.022	.648	-.040	-.241	-.093	-.039	.020
	ITEM77	-.082	-.036	-.061	-.057	-.068	-.011	-.007	-.045	-.040	.598	-.074	-.079	-.035	-.117
	ITEM78	-.012	.013	-.010	-.044	-.044	.030	-.010	-.039	-.241	-.074	.591	-.113	-.039	-.024
	ITEM79	-.037	-.033	-.043	-.116	-.038	.033	.005	-.042	-.093	-.079	-.113	.681	.022	-.020
	ITEM80	-.065	-.045	-.020	.045	-.092	-.033	-.073	.030	-.039	-.035	-.039	.022	.823	-.088
	ITEM81	-.010	-.038	-.029	-.024	-.059	-.132	-.090	-.090	.020	-.117	-.024	-.020	-.088	.601
Anti-image Correlation	ITEM68	.924[a]	-.109	-.075	-.039	-.006	-.128	-.007	-.002	.013	-.118	-.017	-.049	-.080	-.014
	ITEM69	-.109	.892[a]	-.287	-.032	-.115	-.040	.048	-.061	-.009	-.055	.020	-.047	-.059	-.059
	ITEM70	-.075	-.287	.900[a]	-.008	-.109	-.099	.025	-.079	.010	-.096	-.015	-.064	-.027	-.045
	ITEM71	-.039	-.032	-.008	.916[a]	-.103	.006	-.002	.016	-.095	-.082	-.064	-.156	.055	-.034
	ITEM72	-.006	-.115	-.109	-.103	.938[a]	.002	-.031	-.071	-.053	-.106	-.069	-.056	-.122	-.092
	ITEM73	-.128	-.040	-.099	.006	.002	.873[a]	-.055	-.217	.038	-.016	.046	.047	-.042	-.199
	ITEM74	-.007	.048	.025	-.002	-.031	-.055	.863[a]	-.299	-.034	-.010	-.015	.007	-.093	-.135
	ITEM75	-.002	-.061	-.079	.016	-.071	-.217	-.299	.884[a]	-.036	-.075	-.067	-.066	.043	-.150
	ITEM76	.013	-.009	.010	-.095	-.053	.038	-.034	-.036	.842[a]	-.065	-.389	-.140	-.053	.033
	ITEM77	-.118	-.055	-.096	-.082	-.106	-.016	-.010	-.075	-.065	.929[a]	-.125	-.124	-.050	-.195
	ITEM78	-.017	.020	-.015	-.064	-.069	.046	-.015	-.067	-.389	-.125	.857[a]	-.179	-.055	-.040
	ITEM79	-.049	-.047	-.064	-.156	-.056	.047	.007	-.066	-.140	-.124	-.179	.913[a]	.030	-.031
	ITEM80	-.080	-.059	-.027	.055	-.122	-.042	-.093	.043	-.053	-.050	-.055	.030	.912[a]	-.125
	ITEM81	-.014	-.059	-.045	-.034	-.092	-.199	-.135	-.150	.033	-.195	-.040	-.031	-.125	.909[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

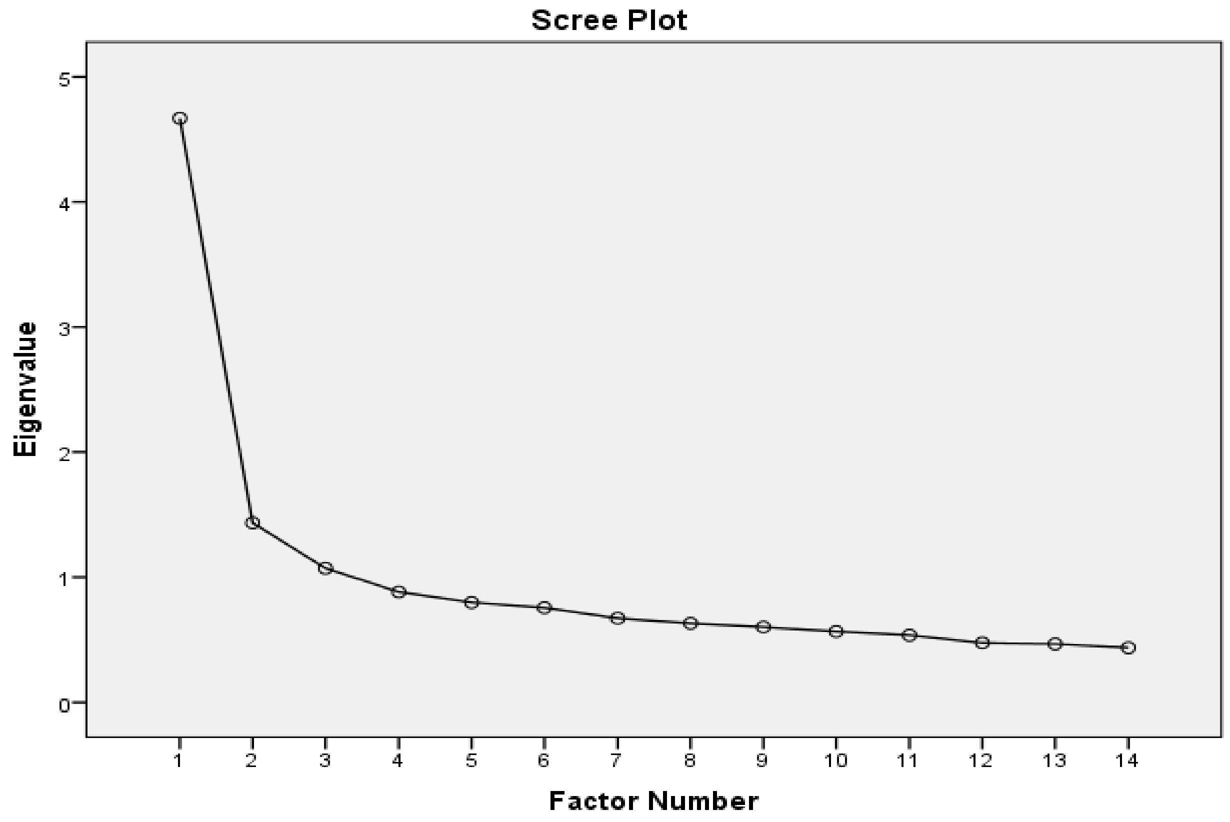
	Initial	Extraction
ITEM68	.182	.183
ITEM69	.297	.273
ITEM70	.323	.311
ITEM71	.185	.164
ITEM72	.315	.360
ITEM73	.273	.202
ITEM74	.250	.190
ITEM75	.403	.385
ITEM76	.352	.240
ITEM77	.402	.466
ITEM78	.409	.323
ITEM79	.319	.298
ITEM80	.177	.173
ITEM81	.399	.415

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.669	33.347	33.347	3.982	28.441	28.441
2	1.435	10.248	43.595			
3	1.072	7.655	51.250			
4	.883	6.304	57.554			
5	.798	5.702	63.257			
6	.756	5.402	68.658			
7	.672	4.801	73.460			
8	.632	4.514	77.973			
9	.602	4.299	82.272			
10	.566	4.046	86.318			
11	.537	3.833	90.152			
12	.475	3.396	93.548			
13	.467	3.332	96.880			
14	.437	3.120	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM77	.682
ITEM81	.644
ITEM75	.620
ITEM72	.600
ITEM78	.568
ITEM70	.558
ITEM79	.546
ITEM69	.522
ITEM76	.490
ITEM73	.449
ITEM74	.436
ITEM68	.428
ITEM80	.415
ITEM71	.405

Extraction Method: Principal Axis Factoring.

a. 1 factors

extracted. 4
iterations
required.

Reproduced Correlations

		ITEM68	ITEM69	ITEM70	ITEM71	ITEM72	ITEM73	ITEM74	ITEM75	ITEM76	ITEM77	ITEM78	ITEM79	ITEM80	ITEM81
Reproduced Correlation	ITEM68	.183[a]	.223	.239	.173	.257	.192	.186	.265	.209	.292	.243	.233	.178	.276
	ITEM69	.223	.273[a]	.291	.212	.313	.235	.227	.324	.256	.356	.297	.285	.217	.336
	ITEM70	.239	.291	.311[a]	.226	.335	.251	.243	.346	.273	.381	.317	.305	.232	.360
	ITEM71	.173	.212	.226	.164[a]	.243	.182	.176	.251	.198	.276	.230	.221	.168	.261
	ITEM72	.257	.313	.335	.243	.360[a]	.269	.261	.372	.294	.409	.341	.328	.249	.387
	ITEM73	.192	.235	.251	.182	.269	.202[a]	.196	.279	.220	.306	.255	.245	.187	.289
	ITEM74	.186	.227	.243	.176	.261	.196	.190[a]	.270	.213	.297	.248	.238	.181	.281
	ITEM75	.265	.324	.346	.251	.372	.279	.270	.385[a]	.304	.423	.353	.339	.258	.400
	ITEM76	.209	.256	.273	.198	.294	.220	.213	.304	.240[a]	.334	.278	.267	.203	.316
	ITEM77	.292	.356	.381	.276	.409	.306	.297	.423	.334	.466[a]	.388	.373	.283	.440
	ITEM78	.243	.297	.317	.230	.341	.255	.248	.353	.278	.388	.323[a]	.310	.236	.366
	ITEM79	.233	.285	.305	.221	.328	.245	.238	.339	.267	.373	.310	.298[a]	.227	.352
	ITEM80	.178	.217	.232	.168	.249	.187	.181	.258	.203	.283	.236	.227	.173[a]	.268
	ITEM81	.276	.336	.360	.261	.387	.289	.281	.400	.316	.440	.366	.352	.268	.415[a]
Residual[b]	ITEM68		.066	.044	-.005	-.029	.077	-.031	-.033	-.059	.025	-.048	-.014	.037	-.015
	ITEM69	.066		.170	-.016	.035	.023	-.077	-.019	-.067	-.016	-.080	-.022	.014	-.011
	ITEM70	.044	.170		-.033	.024	.051	-.061	-.004	-.076	-.005	-.070	-.019	-.008	-.015
	ITEM71	-.005	-.016	-.033		.036	-.075	-.053	-.065	.090	.024	.066	.116	-.072	-.043
	ITEM72	-.029	.035	.024	.036		-.042	-.023	-.026	.002	-.001	-3.559E-5	-.004	.045	-.009
	ITEM73	.077	.023	.051	-.075	-.042		.075	.135	-.130	-.035	-.127	-.111	.020	.120
	ITEM74	-.031	-.077	-.061	-.053	-.023	.075		.182	-.028	-.040	-.037	-.062	.046	.081
	ITEM75	-.033	-.019	-.004	-.065	-.026	.135	.182		-.049	-.033	-.042	-.041	-.045	.061
	ITEM76	-.059	-.067	-.076	.090	.002	-.130	-.028	-.049		.008	.271	.127	-.006	-.094
	ITEM77	.025	-.016	-.005	.024	-.001	-.035	-.040	-.033	.008		.025	.029	-.009	.023
	ITEM78	-.048	-.080	-.070	.066	-3.559E-5	-.127	-.037	-.042	.271	.025		.129	-.008	-.068
	ITEM79	-.014	-.022	-.019	.116	-.004	-.111	-.062	-.041	.127	.029	.129		-.066	-.065
	ITEM80	.037	.014	-.008	-.072	.045	.020	.046	-.045	-.006	-.009	-.008	-.066		.049
	ITEM81	-.015	-.011	-.015	-.043	-.009	.120	.081	.061	-.094	.023	-.068	-.065	.049	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 35 (38.0%) nonredundant residuals with absolute values greater than 0.05.

10. DECEITFUL

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM82	1.67	.796	3912
ITEM83	2.81	1.004	3912
ITEM84	2.65	1.140	3912
ITEM85	2.31	.975	3912
ITEM86	1.81	.827	3912
ITEM87	1.84	.929	3912
ITEM88	2.38	.903	3912

Correlation Matrix[a]

		ITEM82	ITEM83	ITEM84	ITEM85	ITEM86	ITEM87	ITEM88
Correlation	ITEM82	1.000	.183	.268	.299	.468	.391	.320
	ITEM83	.183	1.000	.294	.266	.202	.098	.143
	ITEM84	.268	.294	1.000	.603	.310	.211	.327
	ITEM85	.299	.266	.603	1.000	.386	.237	.374
	ITEM86	.468	.202	.310	.386	1.000	.369	.335
	ITEM87	.391	.098	.211	.237	.369	1.000	.350
	ITEM88	.320	.143	.327	.374	.335	.350	1.000
Sig. (1-tailed)	ITEM82		.000	.000	.000	.000	.000	.000
	ITEM83	.000		.000	.000	.000	.000	.000
	ITEM84	.000	.000		.000	.000	.000	.000
	ITEM85	.000	.000	.000		.000	.000	.000
	ITEM86	.000	.000	.000	.000		.000	.000
	ITEM87	.000	.000	.000	.000	.000		.000
	ITEM88	.000	.000	.000	.000	.000	.000	

a. Determinant = .217

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.791
Bartlett's Test of Sphericity	Approx. Chi-Square	5966.058
	df	21
	Sig.	.000

Anti-image Matrices

		ITEM82	ITEM83	ITEM84	ITEM85	ITEM86	ITEM87	ITEM88
Anti-image Covariance	ITEM82	.701	-.051	-.029	-.027	-.210	-.164	-.074
	ITEM83	-.051	.889	-.116	-.059	-.052	.019	-.001
	ITEM84	-.029	-.116	.603	-.287	-.021	-.015	-.066
	ITEM85	-.027	-.059	-.287	.568	-.106	-.006	-.107
	ITEM86	-.210	-.052	-.021	-.106	.674	-.124	-.070
	ITEM87	-.164	.019	-.015	-.006	-.124	.763	-.154
	ITEM88	-.074	-.001	-.066	-.107	-.070	-.154	.754
Anti-image Correlation	ITEM82	.805[a]	-.065	-.045	-.042	-.305	-.224	-.102
	ITEM83	-.065	.863[a]	-.159	-.082	-.068	.024	-.001
	ITEM84	-.045	-.159	.733[a]	-.491	-.033	-.023	-.098
	ITEM85	-.042	-.082	-.491	.740[a]	-.171	-.009	-.164
	ITEM86	-.305	-.068	-.033	-.171	.818[a]	-.173	-.098
	ITEM87	-.224	.024	-.023	-.009	-.173	.810[a]	-.203
	ITEM88	-.102	-.001	-.098	-.164	-.098	-.203	.861[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM82	.299	.449
ITEM83	.111	.130
ITEM84	.397	.610
ITEM85	.432	.609
ITEM86	.326	.443
ITEM87	.237	.360
ITEM88	.246	.300

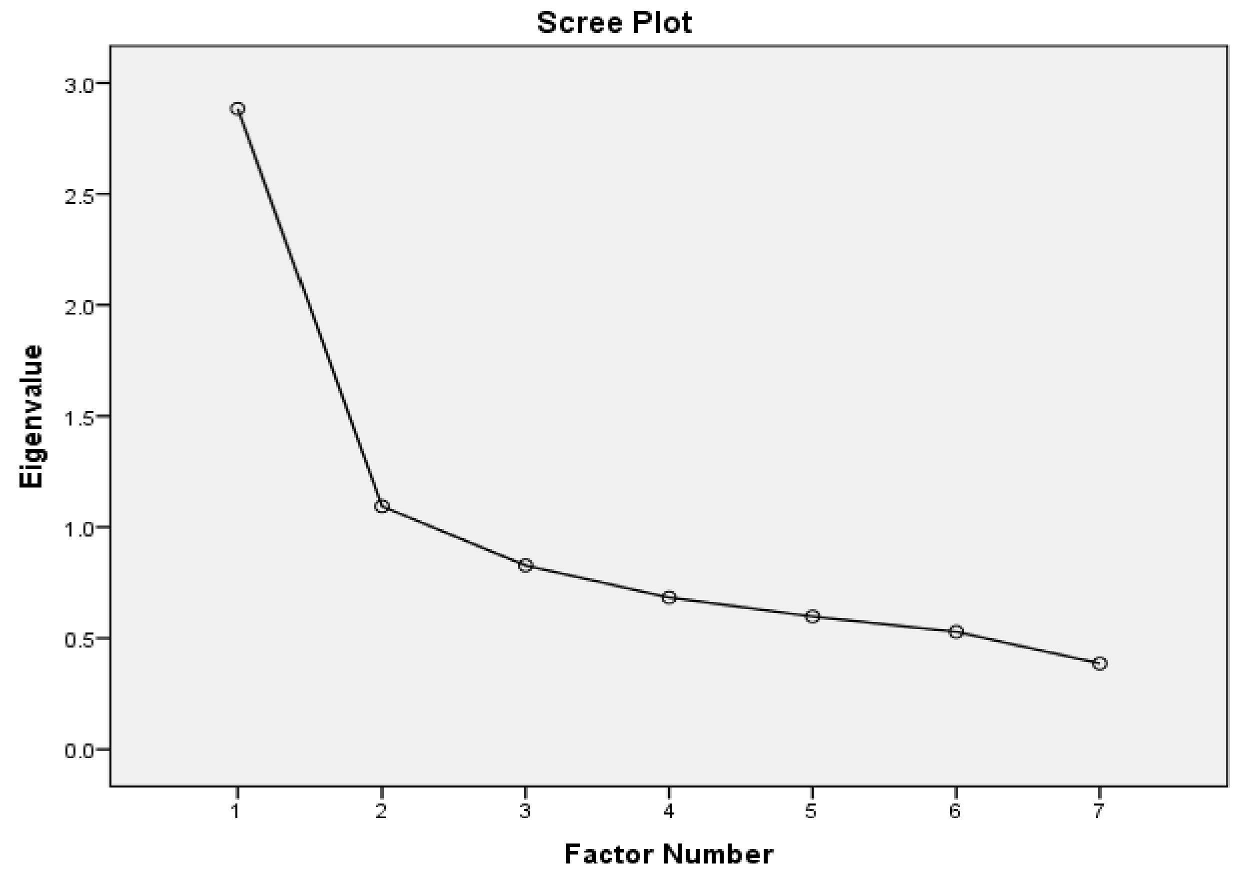
Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	2.884	41.200	41.200	2.345	33.498	33.498	1.963
2	1.094	15.622	56.822	.557	7.958	41.456	1.978
3	.827	11.821	68.642				
4	.683	9.759	78.401				
5	.597	8.535	86.937				
6	.528	7.549	94.485				
7	.386	5.515	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor Matrix[a]

	Factor	
	1	2
ITEM85	.710	-.325
ITEM84	.669	-.403
ITEM86	.626	.227
ITEM82	.588	.321
ITEM88	.541	.088
ITEM87	.500	.331
ITEM83	.337	-.130

Extraction Method: Principal Axis Factoring.

a. 2 factors extracted. 13 iterations required.

Reproduced Correlations

		ITEM82	ITEM83	ITEM84	ITEM85	ITEM86	ITEM87	ITEM88
Reproduced Correlation	ITEM82	.449[a]	.156	.264	.313	.441	.401	.346
	ITEM83	.156	.130[a]	.278	.281	.181	.125	.171
	ITEM84	.264	.278	.610[a]	.606	.327	.201	.326
	ITEM85	.313	.281	.606	.609[a]	.371	.248	.355
	ITEM86	.441	.181	.327	.371	.443[a]	.388	.358
	ITEM87	.401	.125	.201	.248	.388	.360[a]	.300
	ITEM88	.346	.171	.326	.355	.358	.300	.300[a]
Residual[b]	ITEM82		.026	.004	-.014	.027	-.009	-.026
	ITEM83	.026		.016	-.015	.021	-.028	-.027
	ITEM84	.004	.016		-.003	-.018	.010	.001
	ITEM85	-.014	-.015	-.003		.015	-.011	.019
	ITEM86	.027	.021	-.018	.015		-.019	-.023
	ITEM87	-.009	-.028	.010	-.011	-.019		.050
	ITEM88	-.026	-.027	.001	.019	-.023	.050	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 1 (4.0%) nonredundant residuals with absolute values greater than 0.05.

Pattern Matrix[a]

	Factor	
	1	2
ITEM82	.680	.017
ITEM87	.641	.077
ITEM86	.597	-.108
ITEM88	.397	-.211
ITEM84	-.070	-.819
ITEM85	.039	-.757
ITEM83	.045	-.333

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.[a]
a. Rotation converged in 7 iterations.

Structure Matrix

	Factor	
	1	2
ITEM82	.670	-.379
ITEM86	.660	-.456
ITEM87	.597	-.296
ITEM88	.520	-.442
ITEM85	.480	-.780
ITEM84	.407	-.779
ITEM83	.239	-.359

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Factor Correlation Matrix

Factor	1	2
1	1.000	-.582
2	-.582	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

FACTOR MATRIX WHEN FORCING THE EXTRACTION OF A SINGLE FACTOR

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM82	1.67	.796	3912
ITEM83	2.81	1.004	3912
ITEM84	2.65	1.140	3912
ITEM85	2.31	.975	3912
ITEM86	1.81	.827	3912
ITEM87	1.84	.929	3912
ITEM88	2.38	.903	3912

Correlation Matrix[a]

		ITEM82	ITEM83	ITEM84	ITEM85	ITEM86	ITEM87	ITEM88
Correlation	ITEM82	1.000	.183	.268	.299	.468	.391	.320
	ITEM83	.183	1.000	.294	.266	.202	.098	.143
	ITEM84	.268	.294	1.000	.603	.310	.211	.327
	ITEM85	.299	.266	.603	1.000	.386	.237	.374
	ITEM86	.468	.202	.310	.386	1.000	.369	.335
	ITEM87	.391	.098	.211	.237	.369	1.000	.350
	ITEM88	.320	.143	.327	.374	.335	.350	1.000
Sig. (1-tailed)	ITEM82		.000	.000	.000	.000	.000	.000
	ITEM83	.000		.000	.000	.000	.000	.000
	ITEM84	.000	.000		.000	.000	.000	.000
	ITEM85	.000	.000	.000		.000	.000	.000
	ITEM86	.000	.000	.000	.000		.000	.000
	ITEM87	.000	.000	.000	.000	.000		.000
	ITEM88	.000	.000	.000	.000	.000	.000	

a. Determinant = .217

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.791
Bartlett's Test of Sphericity	Approx. Chi-Square	5966.058
	df	21
	Sig.	.000

Anti-image Matrices

		ITEM82	ITEM83	ITEM84	ITEM85	ITEM86	ITEM87	ITEM88
Anti-image Covariance	ITEM82	.701	-.051	-.029	-.027	-.210	-.164	-.074
	ITEM83	-.051	.889	-.116	-.059	-.052	.019	-.001
	ITEM84	-.029	-.116	.603	-.287	-.021	-.015	-.066
	ITEM85	-.027	-.059	-.287	.568	-.106	-.006	-.107
	ITEM86	-.210	-.052	-.021	-.106	.674	-.124	-.070
	ITEM87	-.164	.019	-.015	-.006	-.124	.763	-.154
	ITEM88	-.074	-.001	-.066	-.107	-.070	-.154	.754
Anti-image Correlation	ITEM82	.805[a]	-.065	-.045	-.042	-.305	-.224	-.102
	ITEM83	-.065	.863[a]	-.159	-.082	-.068	.024	-.001
	ITEM84	-.045	-.159	.733[a]	-.491	-.033	-.023	-.098
	ITEM85	-.042	-.082	-.491	.740[a]	-.171	-.009	-.164
	ITEM86	-.305	-.068	-.033	-.171	.818[a]	-.173	-.098
	ITEM87	-.224	.024	-.023	-.009	-.173	.810[a]	-.203
	ITEM88	-.102	-.001	-.098	-.164	-.098	-.203	.861[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

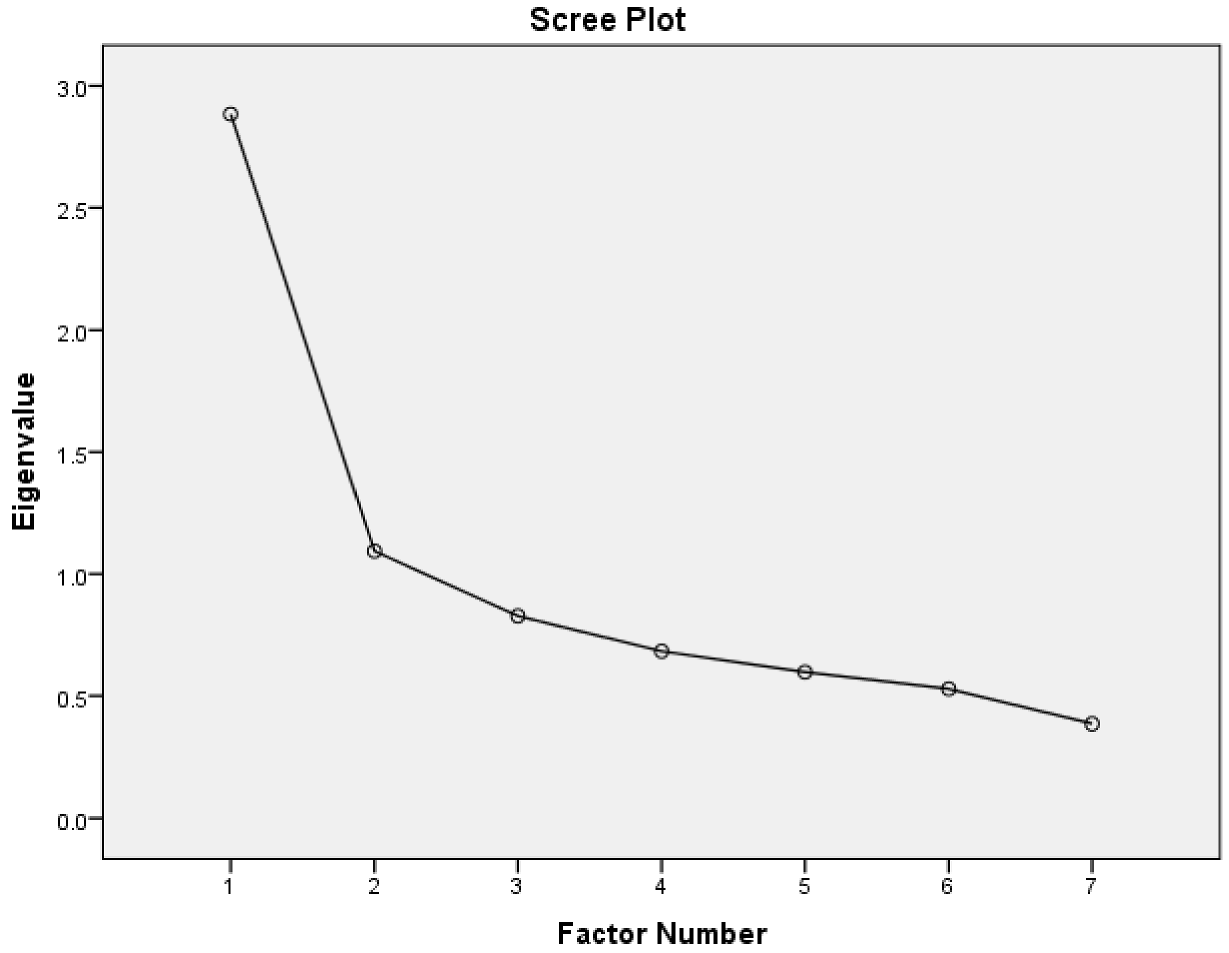
	Initial	Extraction
ITEM82	.299	.331
ITEM83	.111	.116
ITEM84	.397	.381
ITEM85	.432	.459
ITEM86	.326	.397
ITEM87	.237	.240
ITEM88	.246	.310

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.884	41.200	41.200	2.234	31.918	31.918
2	1.094	15.622	56.822			
3	.827	11.821	68.642			
4	.683	9.759	78.401			
5	.597	8.535	86.937			
6	.528	7.549	94.485			
7	.386	5.515	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM85	.678
ITEM86	.630
ITEM84	.617
ITEM82	.575
ITEM88	.556
ITEM87	.490
ITEM83	.341

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 5 iterations required.

Reproduced Correlations

		ITEM82	ITEM83	ITEM84	ITEM85	ITEM86	ITEM87	ITEM88
Reproduced Correlation	ITEM82	.331[a]	.196	.355	.390	.363	.282	.320
	ITEM83	.196	.116[a]	.210	.231	.215	.167	.190
	ITEM84	.355	.210	.381[a]	.418	.389	.302	.343
	ITEM85	.390	.231	.418	.459[a]	.427	.332	.377
	ITEM86	.363	.215	.389	.427	.397[a]	.309	.351
	ITEM87	.282	.167	.302	.332	.309	.240[a]	.273
	ITEM88	.320	.190	.343	.377	.351	.273	.310[a]
Residual[b]	ITEM82		-.014	-.087	-.091	.105	.109	.000
	ITEM83	-.014		.084	.035	-.012	-.069	-.046
	ITEM84	-.087	.084		.185	-.079	-.091	-.017
	ITEM85	-.091	.035	.185		-.041	-.095	-.003
	ITEM86	.105	-.012	-.079	-.041		.061	-.016
	ITEM87	.109	-.069	-.091	-.095	.061		.077
	ITEM88	.000	-.046	-.017	-.003	-.016	.077	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 12 (57.0%) nonredundant residuals with absolute values greater than 0.05.

11. EMOTIONALLY BALANCED

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM89	4.30	.769	3912
ITEM90	3.82	.829	3912
ITEM91	3.61	.961	3912
ITEM92	4.04	.697	3912
ITEM93	3.66	.890	3912
ITEM94	3.99	.761	3912
ITEM95	3.66	.858	3912
ITEM96	3.99	.854	3912

Correlation Matrix[a]

		ITEM89	ITEM90	ITEM91	ITEM92	ITEM93	ITEM94	ITEM95	ITEM96
Correlation	ITEM89	1.000	.219	.217	.278	.283	.316	.208	.556
	ITEM90	.219	1.000	.408	.311	.441	.316	.287	.262
	ITEM91	.217	.408	1.000	.276	.407	.291	.326	.289
	ITEM92	.278	.311	.276	1.000	.307	.498	.305	.343
	ITEM93	.283	.441	.407	.307	1.000	.377	.312	.376
	ITEM94	.316	.316	.291	.498	.377	1.000	.344	.423
	ITEM95	.208	.287	.326	.305	.312	.344	1.000	.341
	ITEM96	.556	.262	.289	.343	.376	.423	.341	1.000
Sig. (1-tailed)	ITEM89		.000	.000	.000	.000	.000	.000	.000
	ITEM90	.000		.000	.000	.000	.000	.000	.000
	ITEM91	.000	.000		.000	.000	.000	.000	.000
	ITEM92	.000	.000	.000		.000	.000	.000	.000
	ITEM93	.000	.000	.000	.000		.000	.000	.000
	ITEM94	.000	.000	.000	.000	.000		.000	.000
	ITEM95	.000	.000	.000	.000	.000	.000		.000
	ITEM96	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .141

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.834
Bartlett's Test of Sphericity	Approx. Chi-Square	7641.317
	df	28
	Sig.	.000

Anti-image Matrices

		ITEM89	ITEM90	ITEM91	ITEM92	ITEM93	ITEM94	ITEM95	ITEM96
Anti-image Covariance	ITEM89	.675	-.025	-.014	-.043	-.030	-.035	.021	-.283
	ITEM90	-.025	.713	-.163	-.074	-.176	-.042	-.057	.006
	ITEM91	-.014	-.163	.731	-.039	-.136	-.021	-.111	-.034
	ITEM92	-.043	-.074	-.039	.696	-.023	-.227	-.067	-.042
	ITEM93	-.030	-.176	-.136	-.023	.669	-.083	-.052	-.083
	ITEM94	-.035	-.042	-.021	-.227	-.083	.636	-.085	-.101
	ITEM95	.021	-.057	-.111	-.067	-.052	-.085	.775	-.101
	ITEM96	-.283	.006	-.034	-.042	-.083	-.101	-.101	.578
Anti-image Correlation	ITEM89	.765[a]	-.035	-.021	-.062	-.044	-.053	.028	-.453
	ITEM90	-.035	.845[a]	-.226	-.105	-.255	-.063	-.076	.010
	ITEM91	-.021	-.226	.861[a]	-.054	-.194	-.031	-.148	-.052
	ITEM92	-.062	-.105	-.054	.844[a]	-.033	-.341	-.091	-.066
	ITEM93	-.044	-.255	-.194	-.033	.863[a]	-.127	-.072	-.134
	ITEM94	-.053	-.063	-.031	-.341	-.127	.842[a]	-.121	-.166
	ITEM95	.028	-.076	-.148	-.091	-.072	-.121	.892[a]	-.151
	ITEM96	-.453	.010	-.052	-.066	-.134	-.166	-.151	.784[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM89	.325	.415
ITEM90	.287	.414
ITEM91	.269	.364
ITEM92	.304	.318
ITEM93	.331	.422
ITEM94	.364	.399
ITEM95	.225	.268
ITEM96	.422	.683

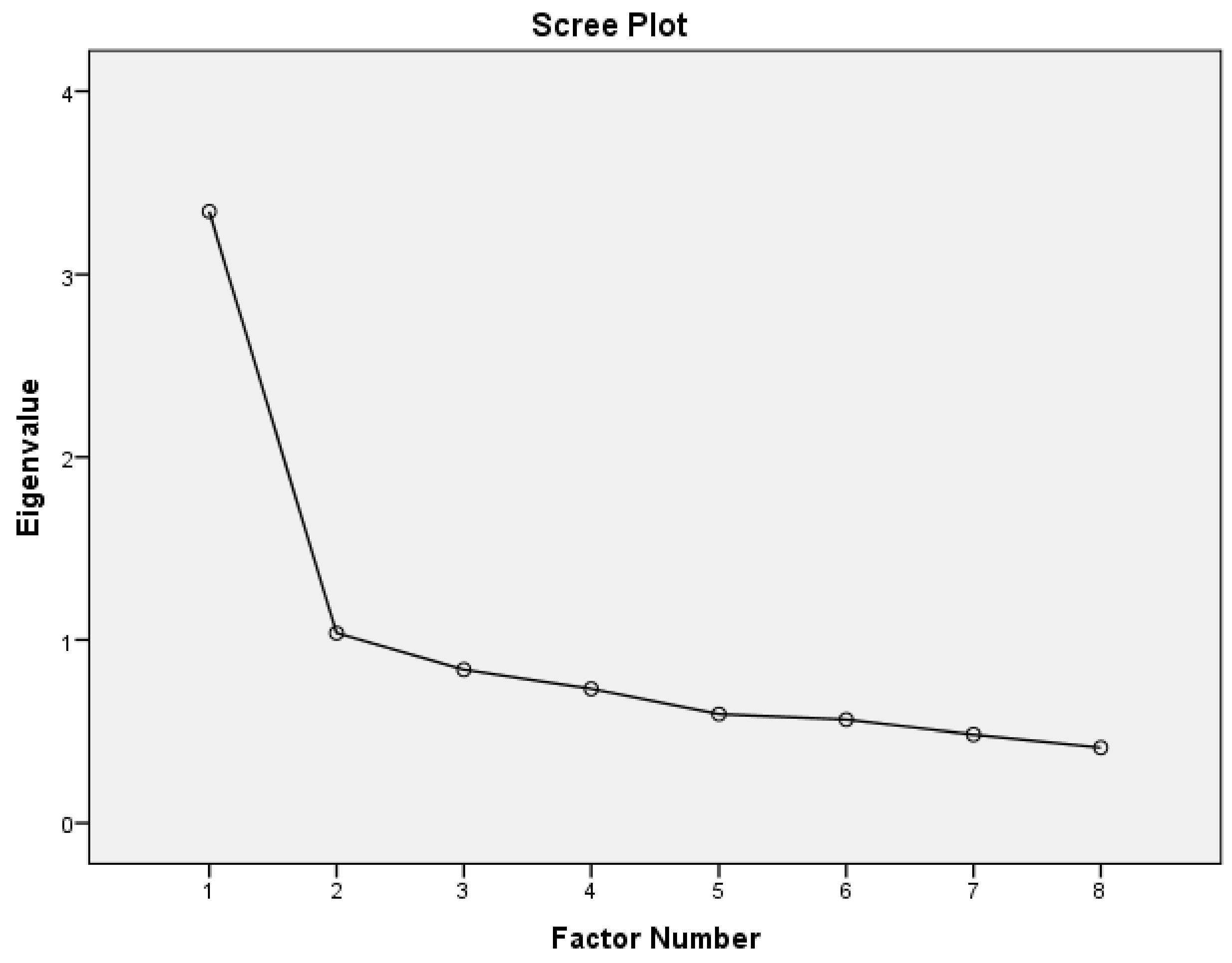
Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3.341	41.768	41.768	2.767	34.585	34.585	2.478
2	1.037	12.964	54.732	.516	6.450	41.036	2.091
3	.837	10.463	65.194				
4	.732	9.147	74.341				
5	.593	7.417	81.758				
6	.564	7.047	88.805				
7	.483	6.038	94.843				
8	.413	5.157	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor Matrix[a]

	Factor	
	1	2
ITEM96	.707	-.428
ITEM94	.631	-.007
ITEM93	.622	.188
ITEM92	.563	.030
ITEM90	.561	.314
ITEM91	.545	.260
ITEM89	.541	-.350
ITEM95	.510	.087

Extraction Method: Principal Axis Factoring.

a. 2 factors extracted. 21 iterations required.

Reproduced Correlations

		ITEM89	ITEM90	ITEM91	ITEM92	ITEM93	ITEM94	ITEM95	ITEM96
Reproduced Correlation	ITEM89	.415[a]	.194	.204	.294	.271	.344	.246	.532
	ITEM90	.194	.414[a]	.387	.326	.408	.352	.314	.262
	ITEM91	.204	.387	.364[a]	.314	.388	.342	.300	.274
	ITEM92	.294	.326	.314	.318[a]	.356	.355	.290	.385
	ITEM93	.271	.408	.388	.356	.422[a]	.391	.334	.359
	ITEM94	.344	.352	.342	.355	.391	.399[a]	.322	.449
	ITEM95	.246	.314	.300	.290	.334	.322	.268[a]	.324
	ITEM96	.532	.262	.274	.385	.359	.449	.324	.683[a]
Residual[b]	ITEM89		.025	.014	-.016	.012	-.028	-.038	.023
	ITEM90	.025		.020	-.015	.032	-.037	-.026	.000
	ITEM91	.014	.020		-.039	.019	-.051	.025	.015
	ITEM92	-.016	-.015	-.039		-.048	.143	.015	-.042
	ITEM93	.012	.032	.019	-.048		-.015	-.022	.018
	ITEM94	-.028	-.037	-.051	.143	-.015		.023	-.027
	ITEM95	-.038	-.026	.025	.015	-.022	.023		.018
	ITEM96	.023	.000	.015	-.042	.018	-.027	.018	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 2 (7.0%) nonredundant residuals with absolute values greater than 0.05.

Pattern Matrix[a]

	Factor	
	1	2
ITEM90	.703	.114
ITEM91	.636	.058
ITEM93	.614	-.058
ITEM95	.434	-.126
ITEM94	.419	-.287
ITEM92	.412	-.214
ITEM96	.036	-.805
ITEM89	.005	-.641

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Rotation converged in 6 iterations.

Structure Matrix

	Factor	
	1	2
ITEM93	.648	-.417
ITEM90	.637	-.297
ITEM91	.602	-.313
ITEM94	.587	-.532
ITEM92	.536	-.454
ITEM95	.508	-.379
ITEM96	.506	-.826
ITEM89	.380	-.644

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Factor Correlation Matrix

Factor	1	2
1	1.000	-.585
2	-.585	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

FACTOR MATRIX WHEN FORCING THE EXTRACTION OF A SINGLE FACTOR

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM89	4.30	.769	3912
ITEM90	3.82	.829	3912
ITEM91	3.61	.961	3912
ITEM92	4.04	.697	3912
ITEM93	3.66	.890	3912
ITEM94	3.99	.761	3912
ITEM95	3.66	.858	3912
ITEM96	3.99	.854	3912

Correlation Matrix[a]

		ITEM89	ITEM90	ITEM91	ITEM92	ITEM93	ITEM94	ITEM95	ITEM96
Correlation	ITEM89	1.000	.219	.217	.278	.283	.316	.208	.556
	ITEM90	.219	1.000	.408	.311	.441	.316	.287	.262
	ITEM91	.217	.408	1.000	.276	.407	.291	.326	.289
	ITEM92	.278	.311	.276	1.000	.307	.498	.305	.343
	ITEM93	.283	.441	.407	.307	1.000	.377	.312	.376
	ITEM94	.316	.316	.291	.498	.377	1.000	.344	.423
	ITEM95	.208	.287	.326	.305	.312	.344	1.000	.341
	ITEM96	.556	.262	.289	.343	.376	.423	.341	1.000
Sig. (1-tailed)	ITEM89		.000	.000	.000	.000	.000	.000	.000
	ITEM90	.000		.000	.000	.000	.000	.000	.000
	ITEM91	.000	.000		.000	.000	.000	.000	.000
	ITEM92	.000	.000	.000		.000	.000	.000	.000
	ITEM93	.000	.000	.000	.000		.000	.000	.000
	ITEM94	.000	.000	.000	.000	.000		.000	.000
	ITEM95	.000	.000	.000	.000	.000	.000		.000
	ITEM96	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .141

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.834
Bartlett's Test of Sphericity	Approx. Chi-Square	7641.317
	df	28
	Sig.	.000

Anti-image Matrices

		ITEM89	ITEM90	ITEM91	ITEM92	ITEM93	ITEM94	ITEM95	ITEM96
Anti-image Covariance	ITEM89	.675	-.025	-.014	-.043	-.030	-.035	.021	-.283
	ITEM90	-.025	.713	-.163	-.074	-.176	-.042	-.057	.006
	ITEM91	-.014	-.163	.731	-.039	-.136	-.021	-.111	-.034
	ITEM92	-.043	-.074	-.039	.696	-.023	-.227	-.067	-.042
	ITEM93	-.030	-.176	-.136	-.023	.669	-.083	-.052	-.083
	ITEM94	-.035	-.042	-.021	-.227	-.083	.636	-.085	-.101
	ITEM95	.021	-.057	-.111	-.067	-.052	-.085	.775	-.101
	ITEM96	-.283	.006	-.034	-.042	-.083	-.101	-.101	.578
Anti-image Correlation	ITEM89	.765[a]	-.035	-.021	-.062	-.044	-.053	.028	-.453
	ITEM90	-.035	.845[a]	-.226	-.105	-.255	-.063	-.076	.010
	ITEM91	-.021	-.226	.861[a]	-.054	-.194	-.031	-.148	-.052
	ITEM92	-.062	-.105	-.054	.844[a]	-.033	-.341	-.091	-.066
	ITEM93	-.044	-.255	-.194	-.033	.863[a]	-.127	-.072	-.134
	ITEM94	-.053	-.063	-.031	-.341	-.127	.842[a]	-.121	-.166
	ITEM95	.028	-.076	-.148	-.091	-.072	-.121	.892[a]	-.151
	ITEM96	-.453	.010	-.052	-.066	-.134	-.166	-.151	.784[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

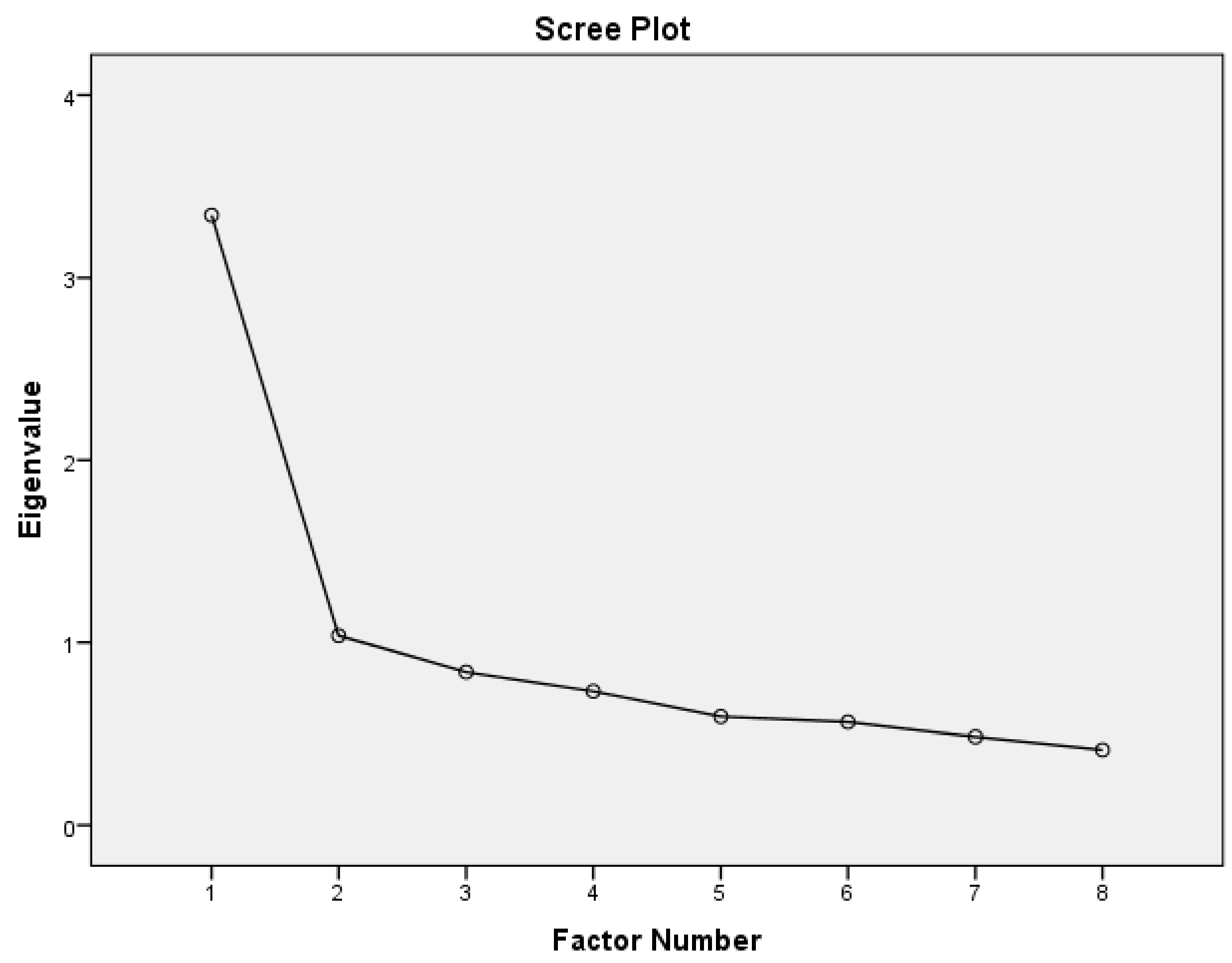
	Initial	Extraction
ITEM89	.325	.265
ITEM90	.287	.302
ITEM91	.269	.291
ITEM92	.304	.332
ITEM93	.331	.389
ITEM94	.364	.418
ITEM95	.225	.269
ITEM96	.422	.420

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.341	41.768	41.768	2.687	33.584	33.584
2	1.037	12.964	54.732			
3	.837	10.463	65.194			
4	.732	9.147	74.341			
5	.593	7.417	81.758			
6	.564	7.047	88.805			
7	.483	6.038	94.843			
8	.413	5.157	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM96	.648
ITEM94	.647
ITEM93	.624
ITEM92	.576
ITEM90	.549
ITEM91	.540
ITEM95	.519
ITEM89	.515

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 4 iterations required.

Reproduced Correlations

		ITEM89	ITEM90	ITEM91	ITEM92	ITEM93	ITEM94	ITEM95	ITEM96
Reproduced Correlation	ITEM89	.265[a]	.283	.278	.297	.321	.333	.267	.334
	ITEM90	.283	.302[a]	.296	.316	.343	.355	.285	.356
	ITEM91	.278	.296	.291[a]	.311	.337	.349	.280	.350
	ITEM92	.297	.316	.311	.332[a]	.359	.373	.299	.374
	ITEM93	.321	.343	.337	.359	.389[a]	.403	.324	.404
	ITEM94	.333	.355	.349	.373	.403	.418[a]	.336	.419
	ITEM95	.267	.285	.280	.299	.324	.336	.269[a]	.336
	ITEM96	.334	.356	.350	.374	.404	.419	.336	.420[a]
Residual[b]	ITEM89		-.064	-.061	-.019	-.038	-.017	-.059	.222
	ITEM90	-.064		.111	-.006	.098	-.039	.002	-.094
	ITEM91	-.061	.111		-.035	.070	-.058	.046	-.061
	ITEM92	-.019	-.006	-.035		-.052	.125	.006	-.031
	ITEM93	-.038	.098	.070	-.052		-.027	-.012	-.028
	ITEM94	-.017	-.039	-.058	.125	-.027		.009	.003
	ITEM95	-.059	.002	.046	.006	-.012	.009		.005
	ITEM96	.222	-.094	-.061	-.031	-.028	.003	.005	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 12 (42.0%) nonredundant residuals with absolute values greater than 0.05.

12. NEGATIVE EMOTIONALITY

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM97	2.74	1.233	3912
ITEM98	3.16	1.160	3912
ITEM99	3.41	1.092	3912
ITEM100	3.31	1.069	3912
ITEM101	2.11	.869	3912
ITEM102	2.38	1.061	3912
ITEM103	3.75	1.003	3912
ITEM104	3.11	1.083	3912
ITEM105	2.85	.965	3912
ITEM106	2.66	1.071	3912

Correlation Matrix[a]

		ITEM97	ITEM98	ITEM99	ITEM100	ITEM101	ITEM102	ITEM103	ITEM104	ITEM105	ITEM106
Correlation	ITEM97	1.000	.291	.285	.241	.196	.215	.404	.330	.158	.231
	ITEM98	.291	1.000	.440	.431	.274	.270	.235	.412	.280	.232
	ITEM99	.285	.440	1.000	.539	.328	.312	.310	.500	.298	.320
	ITEM100	.241	.431	.539	1.000	.323	.307	.238	.439	.339	.314
	ITEM101	.196	.274	.328	.323	1.000	.415	.129	.308	.353	.381
	ITEM102	.215	.270	.312	.307	.415	1.000	.177	.316	.366	.636
	ITEM103	.404	.235	.310	.238	.129	.177	1.000	.297	.167	.192
	ITEM104	.330	.412	.500	.439	.308	.316	.297	1.000	.308	.309
	ITEM105	.158	.280	.298	.339	.353	.366	.167	.308	1.000	.349
	ITEM106	.231	.232	.320	.314	.381	.636	.192	.309	.349	1.000
Sig. (1-tailed)	ITEM97		.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM98	.000		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM99	.000	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM100	.000	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM101	.000	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM102	.000	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM103	.000	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM104	.000	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM105	.000	.000	.000	.000	.000	.000	.000	.000		.000
	ITEM106	.000	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .066

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.858
Bartlett's Test of Sphericity	Approx. Chi-Square	10621.267
	df	45
	Sig.	.000

Anti-image Matrices

		ITEM97	ITEM98	ITEM99	ITEM100	ITEM101	ITEM102	ITEM103	ITEM104	ITEM105	ITEM106
Anti-image Covariance	ITEM97	.761	-.084	-.017	-.004	-.032	-.011	-.239	-.088	.021	-.039
	ITEM98	-.084	.699	-.104	-.117	-.035	-.033	-.019	-.097	-.053	.025
	ITEM99	-.017	-.104	.574	-.182	-.052	-.010	-.081	-.140	-.012	-.030
	ITEM100	-.004	-.117	-.182	.615	-.047	-.009	-.015	-.082	-.079	-.032
	ITEM101	-.032	-.035	-.052	-.047	.729	-.108	.038	-.040	-.117	-.065
	ITEM102	-.011	-.033	-.010	-.009	-.108	.540	-.005	-.027	-.074	-.281
	ITEM103	-.239	-.019	-.081	-.015	.038	-.005	.782	-.059	-.026	-.018
	ITEM104	-.088	-.097	-.140	-.082	-.040	-.027	-.059	.636	-.052	-.022
	ITEM105	.021	-.053	-.012	-.079	-.117	-.074	-.026	-.052	.757	-.061
	ITEM106	-.039	.025	-.030	-.032	-.065	-.281	-.018	-.022	-.061	.555
Anti-image Correlation	ITEM97	.833[a]	-.116	-.026	-.006	-.043	-.018	-.310	-.126	.028	-.059
	ITEM98	-.116	.901[a]	-.164	-.178	-.050	-.054	-.025	-.146	-.073	.040
	ITEM99	-.026	-.164	.867[a]	-.307	-.081	-.017	-.121	-.232	-.019	-.054
	ITEM100	-.006	-.178	-.307	.879[a]	-.070	-.015	-.022	-.131	-.116	-.055
	ITEM101	-.043	-.050	-.081	-.070	.911[a]	-.171	.050	-.059	-.158	-.101
	ITEM102	-.018	-.054	-.017	-.015	-.171	.787[a]	-.008	-.047	-.116	-.514
	ITEM103	-.310	-.025	-.121	-.022	.050	-.008	.822[a]	-.084	-.034	-.028
	ITEM104	-.126	-.146	-.232	-.131	-.059	-.047	-.084	.903[a]	-.075	-.036
	ITEM105	.028	-.073	-.019	-.116	-.158	-.116	-.034	-.075	.917[a]	-.095
	ITEM106	-.059	.040	-.054	-.055	-.101	-.514	-.028	-.036	-.095	.790[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM97	.239	.223
ITEM98	.301	.373
ITEM99	.426	.527
ITEM100	.385	.442
ITEM101	.271	.311
ITEM102	.460	.665
ITEM103	.218	.204
ITEM104	.364	.460
ITEM105	.243	.272
ITEM106	.445	.573

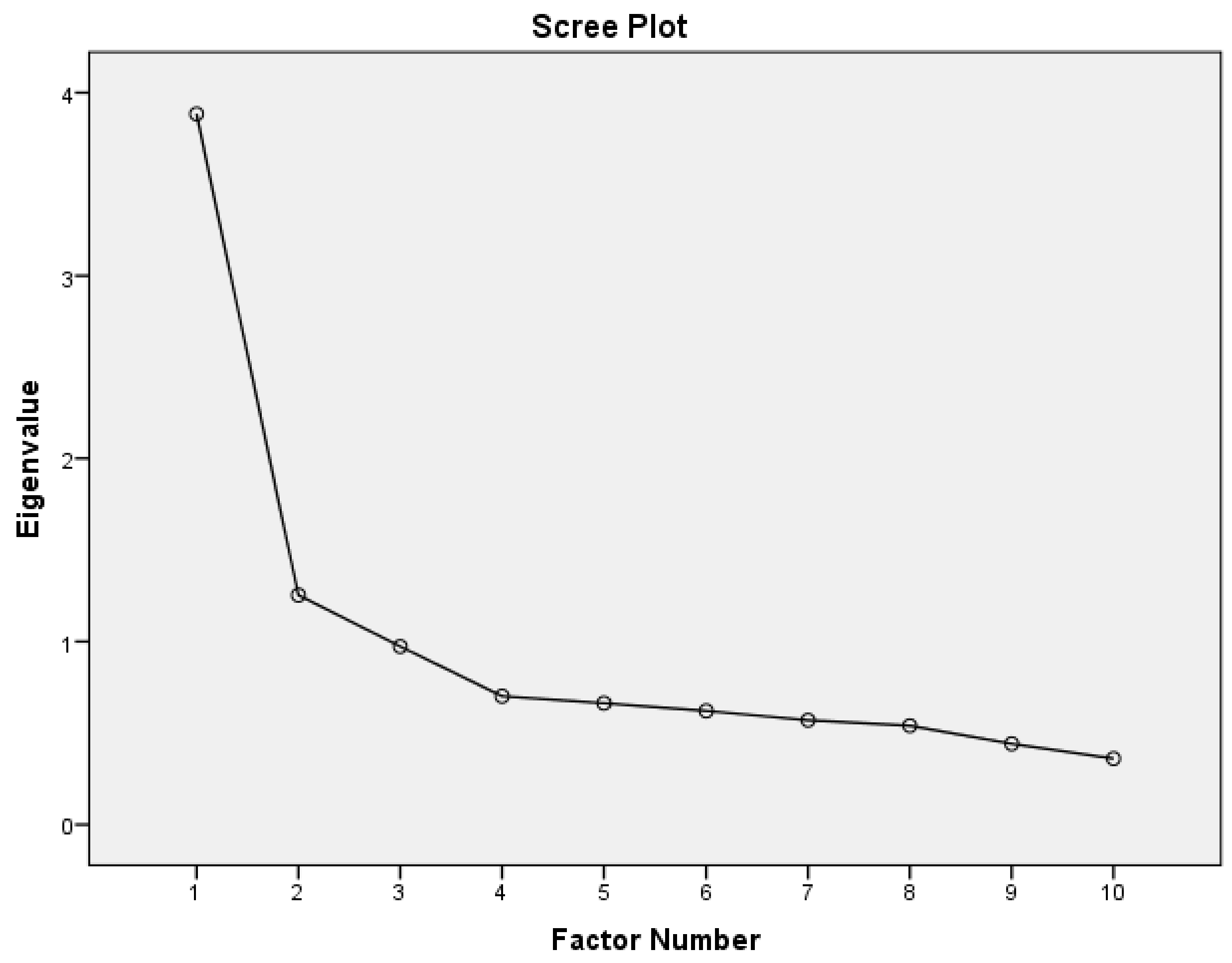
Extraction Method: Principal Axis Factoring.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3.884	38.836	38.836	3.322	33.219	33.219	2.962
2	1.254	12.543	51.379	.728	7.285	40.504	2.597
3	.973	9.727	61.105				
4	.701	7.006	68.111				
5	.662	6.623	74.734				
6	.620	6.200	80.934				
7	.569	5.690	86.624				
8	.539	5.390	92.014				
9	.440	4.399	96.412				
10	.359	3.588	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor Matrix[a]

	Factor	
	1	2
ITEM99	.678	.259
ITEM102	.654	-.487
ITEM104	.643	.217
ITEM100	.638	.188
ITEM106	.627	-.424
ITEM98	.567	.227
ITEM101	.535	-.158
ITEM105	.511	-.107
ITEM97	.438	.177
ITEM103	.402	.206

Extraction Method: Principal Axis Factoring.

a. 2 factors extracted. 13 iterations required.

Reproduced Correlations

		ITEM97	ITEM98	ITEM99	ITEM100	ITEM101	ITEM102	ITEM103	ITEM104	ITEM105	ITEM106
Reproduced Correlation	ITEM97	.223[a]	.289	.343	.313	.206	.200	.213	.320	.205	.199
	ITEM98	.289	.373[a]	.444	.404	.267	.260	.275	.414	.265	.259
	ITEM99	.343	.444	.527[a]	.481	.322	.317	.326	.492	.319	.316
	ITEM100	.313	.404	.481	.442[a]	.311	.325	.295	.450	.306	.320
	ITEM101	.206	.267	.322	.311	.311[a]	.427	.182	.309	.290	.402
	ITEM102	.200	.260	.317	.325	.427	.665[a]	.162	.314	.386	.617
	ITEM103	.213	.275	.326	.295	.182	.162	.204[a]	.303	.183	.164
	ITEM104	.320	.414	.492	.450	.309	.314	.303	.460[a]	.305	.311
	ITEM105	.205	.265	.319	.306	.290	.386	.183	.305	.272[a]	.366
	ITEM106	.199	.259	.316	.320	.402	.617	.164	.311	.366	.573[a]
Residual[b]	ITEM97		.003	-.058	-.071	-.010	.015	.191	.010	-.047	.031
	ITEM98	.003		-.003	.027	.007	.010	-.040	-.001	.015	-.027
	ITEM99	-.058	-.003		.058	.006	-.005	-.016	.008	-.021	.004
	ITEM100	-.071	.027	.058		.012	-.018	-.057	-.011	.033	-.006
	ITEM101	-.010	.007	.006	.012		-.011	-.054	-.001	.063	-.021
	ITEM102	.015	.010	-.005	-.018	-.011		.015	.002	-.020	.019
	ITEM103	.191	-.040	-.016	-.057	-.054	.015		-.006	-.016	.027
	ITEM104	.010	-.001	.008	-.011	-.001	.002	-.006		.002	-.002
	ITEM105	-.047	.015	-.021	.033	.063	-.020	-.016	.002		-.017
	ITEM106	.031	-.027	.004	-.006	-.021	.019	.027	-.002	-.017	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 7 (15.0%) nonredundant residuals with absolute values greater than 0.05.

Pattern Matrix[a]

	Factor	
	1	2
ITEM99	.717	-.016
ITEM104	.649	-.048
ITEM100	.615	-.079
ITEM98	.610	-.001
ITEM103	.480	.052
ITEM97	.473	.002
ITEM102	-.084	-.862
ITEM106	-.035	-.777
ITEM101	.184	-.429
ITEM105	.222	-.359

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.[a]
a. Rotation converged in 5 iterations.

Structure Matrix

	Factor	
	1	2
ITEM99	.726	-.439
ITEM104	.677	-.431
ITEM100	.662	-.442
ITEM98	.611	-.361
ITEM97	.472	-.278
ITEM103	.450	-.232
ITEM102	.425	-.813
ITEM106	.424	-.756
ITEM101	.437	-.537
ITEM105	.434	-.490

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Factor Correlation Matrix

Factor	1	2
1	1.000	-.591
2	-.591	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

FACTOR MATRIX WHEN FORCING THE EXTRACTION OF A SINGLE FACTOR

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM97	2.74	1.233	3912
ITEM98	3.16	1.160	3912
ITEM99	3.41	1.092	3912
ITEM100	3.31	1.069	3912
ITEM101	2.11	.869	3912
ITEM102	2.38	1.061	3912
ITEM103	3.75	1.003	3912
ITEM104	3.11	1.083	3912
ITEM105	2.85	.965	3912
ITEM106	2.66	1.071	3912

Correlation Matrix[a]

		ITEM97	ITEM98	ITEM99	ITEM100	ITEM101	ITEM102	ITEM103	ITEM104	ITEM105	ITEM106
Correlation	ITEM97	1.000	.291	.285	.241	.196	.215	.404	.330	.158	.231
	ITEM98	.291	1.000	.440	.431	.274	.270	.235	.412	.280	.232
	ITEM99	.285	.440	1.000	.539	.328	.312	.310	.500	.298	.320
	ITEM100	.241	.431	.539	1.000	.323	.307	.238	.439	.339	.314
	ITEM101	.196	.274	.328	.323	1.000	.415	.129	.308	.353	.381
	ITEM102	.215	.270	.312	.307	.415	1.000	.177	.316	.366	.636
	ITEM103	.404	.235	.310	.238	.129	.177	1.000	.297	.167	.192
	ITEM104	.330	.412	.500	.439	.308	.316	.297	1.000	.308	.309
	ITEM105	.158	.280	.298	.339	.353	.366	.167	.308	1.000	.349
	ITEM106	.231	.232	.320	.314	.381	.636	.192	.309	.349	1.000
Sig. (1-tailed)	ITEM97		.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM98	.000		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM99	.000	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM100	.000	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM101	.000	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM102	.000	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM103	.000	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM104	.000	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM105	.000	.000	.000	.000	.000	.000	.000	.000		.000
	ITEM106	.000	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .066

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.858
Bartlett's Test of Sphericity	Approx. Chi-Square	10621.267
	df	45
	Sig.	.000

Anti-image Matrices

		ITEM97	ITEM98	ITEM99	ITEM100	ITEM101	ITEM102	ITEM103	ITEM104	ITEM105	ITEM106
Anti-image Covariance	ITEM97	.761	-.084	-.017	-.004	-.032	-.011	-.239	-.088	.021	-.039
	ITEM98	-.084	.699	-.104	-.117	-.035	-.033	-.019	-.097	-.053	.025
	ITEM99	-.017	-.104	.574	-.182	-.052	-.010	-.081	-.140	-.012	-.030
	ITEM100	-.004	-.117	-.182	.615	-.047	-.009	-.015	-.082	-.079	-.032
	ITEM101	-.032	-.035	-.052	-.047	.729	-.108	.038	-.040	-.117	-.065
	ITEM102	-.011	-.033	-.010	-.009	-.108	.540	-.005	-.027	-.074	-.281
	ITEM103	-.239	-.019	-.081	-.015	.038	-.005	.782	-.059	-.026	-.018
	ITEM104	-.088	-.097	-.140	-.082	-.040	-.027	-.059	.636	-.052	-.022
	ITEM105	.021	-.053	-.012	-.079	-.117	-.074	-.026	-.052	.757	-.061
	ITEM106	-.039	.025	-.030	-.032	-.065	-.281	-.018	-.022	-.061	.555
Anti-image Correlation	ITEM97	.833[a]	-.116	-.026	-.006	-.043	-.018	-.310	-.126	.028	-.059
	ITEM98	-.116	.901[a]	-.164	-.178	-.050	-.054	-.025	-.146	-.073	.040
	ITEM99	-.026	-.164	.867[a]	-.307	-.081	-.017	-.121	-.232	-.019	-.054
	ITEM100	-.006	-.178	-.307	.879[a]	-.070	-.015	-.022	-.131	-.116	-.055
	ITEM101	-.043	-.050	-.081	-.070	.911[a]	-.171	.050	-.059	-.158	-.101
	ITEM102	-.018	-.054	-.017	-.015	-.171	.787[a]	-.008	-.047	-.116	-.514
	ITEM103	-.310	-.025	-.121	-.022	.050	-.008	.822[a]	-.084	-.034	-.028
	ITEM104	-.126	-.146	-.232	-.131	-.059	-.047	-.084	.903[a]	-.075	-.036
	ITEM105	.028	-.073	-.019	-.116	-.158	-.116	-.034	-.075	.917[a]	-.095
	ITEM106	-.059	.040	-.054	-.055	-.101	-.514	-.028	-.036	-.095	.790[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM97	.239	.195
ITEM98	.301	.324
ITEM99	.426	.458
ITEM100	.385	.414
ITEM101	.271	.287
ITEM102	.460	.359
ITEM103	.218	.164
ITEM104	.364	.417
ITEM105	.243	.266
ITEM106	.445	.345

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.884	38.836	38.836	3.230	32.301	32.301
2	1.254	12.543	51.379			
3	.973	9.727	61.105			
4	.701	7.006	68.111			
5	.662	6.623	74.734			
6	.620	6.200	80.934			
7	.569	5.690	86.624			
8	.539	5.390	92.014			
9	.440	4.399	96.412			
10	.359	3.588	100.000			

Extraction Method: Principal Axis Factoring.

Factor Matrix[a]

	Factor
	1
ITEM99	.677
ITEM104	.646
ITEM100	.644
ITEM102	.599
ITEM106	.588
ITEM98	.570
ITEM101	.536
ITEM105	.516
ITEM97	.442
ITEM103	.405

Extraction Method: Principal Axis Factoring.
a. 1 factors extracted. 5 iterations required.

Reproduced Correlations

		ITEM97	ITEM98	ITEM99	ITEM100	ITEM101	ITEM102	ITEM103	ITEM104	ITEM105	ITEM106
Reproduced Correlation	ITEM97	.195[a]	.252	.299	.284	.237	.265	.179	.285	.228	.260
	ITEM98	.252	.324[a]	.385	.367	.305	.341	.230	.368	.294	.335
	ITEM99	.299	.385	.458[a]	.436	.363	.405	.274	.437	.349	.398
	ITEM100	.284	.367	.436	.414[a]	.345	.385	.260	.416	.332	.378
	ITEM101	.237	.305	.363	.345	.287[a]	.321	.217	.346	.277	.315
	ITEM102	.265	.341	.405	.385	.321	.359[a]	.242	.387	.309	.352
	ITEM103	.179	.230	.274	.260	.217	.242	.164[a]	.261	.209	.238
	ITEM104	.285	.368	.437	.416	.346	.387	.261	.417[a]	.333	.379
	ITEM105	.228	.294	.349	.332	.277	.309	.209	.333	.266[a]	.303
	ITEM106	.260	.335	.398	.378	.315	.352	.238	.379	.303	.345[a]
Residual[b]	ITEM97		.040	-.014	-.043	-.041	-.050	.225	.044	-.070	-.029
	ITEM98	.040		.055	.064	-.031	-.071	.005	.044	-.013	-.102
	ITEM99	-.014	.055		.103	-.035	-.093	.036	.063	-.051	-.078
	ITEM100	-.043	.064	.103		-.022	-.078	-.023	.023	.007	-.064
	ITEM101	-.041	-.031	-.035	-.022		.094	-.088	-.038	.076	.066
	ITEM102	-.050	-.071	-.093	-.078	.094		-.065	-.070	.057	.284
	ITEM103	.225	.005	.036	-.023	-.088	-.065		.036	-.042	-.046
	ITEM104	.044	.044	.063	.023	-.038	-.070	.036		-.026	-.070
	ITEM105	-.070	-.013	-.051	.007	.076	.057	-.042	-.026		.046

ITEM106	-.029	-.102	-.078	-.064	.066	.284	-.046	-.070	.046	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 22 (48.0%) nonredundant residuals with absolute values greater than 0.05.

13. PLAYFULLNESS

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM107	4.01	.879	3912
ITEM108	3.67	.964	3912
ITEM109	3.53	.997	3912
ITEM110	3.81	.816	3912
ITEM111	3.99	.704	3912
ITEM112	3.26	.990	3912

Correlation Matrix[a]

		ITEM107	ITEM108	ITEM109	ITEM110	ITEM111	ITEM112
Correlation	ITEM107	1.000	.351	.405	.467	.430	.267
	ITEM108	.351	1.000	.570	.573	.360	.456
	ITEM109	.405	.570	1.000	.652	.430	.376
	ITEM110	.467	.573	.652	1.000	.527	.434
	ITEM111	.430	.360	.430	.527	1.000	.312
	ITEM112	.267	.456	.376	.434	.312	1.000
Sig. (1-tailed)	ITEM107		.000	.000	.000	.000	.000
	ITEM108	.000		.000	.000	.000	.000
	ITEM109	.000	.000		.000	.000	.000
	ITEM110	.000	.000	.000		.000	.000
	ITEM111	.000	.000	.000	.000		.000
	ITEM112	.000	.000	.000	.000	.000	

a. Determinant = .131

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.852
Bartlett's Test of Sphericity	Approx. Chi-Square	7935.990
	df	15
	Sig.	.000

Anti-image Matrices

		ITEM107	ITEM108	ITEM109	ITEM110	ITEM111	ITEM112
Anti-image Covariance	ITEM107	.721	-.035	-.058	-.096	-.155	-.020
	ITEM108	-.035	.564	-.150	-.112	-.005	-.160
	ITEM109	-.058	-.150	.505	-.178	-.049	-.024
	ITEM110	-.096	-.112	-.178	.434	-.142	-.081
	ITEM111	-.155	-.005	-.049	-.142	.668	-.053
	ITEM112	-.020	-.160	-.024	-.081	-.053	.740
Anti-image Correlation	ITEM107	.891[a]	-.056	-.096	-.172	-.224	-.027
	ITEM108	-.056	.851[a]	-.282	-.226	-.009	-.248
	ITEM109	-.096	-.282	.837[a]	-.380	-.084	-.039
	ITEM110	-.172	-.226	-.380	.820[a]	-.264	-.143
	ITEM111	-.224	-.009	-.084	-.264	.868[a]	-.075
	ITEM112	-.027	-.248	-.039	-.143	-.075	.887[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM107	.279	.309
ITEM108	.436	.491
ITEM109	.495	.573
ITEM110	.566	.710
ITEM111	.332	.363
ITEM112	.260	.285

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.235	53.913	53.913	2.732	45.533	45.533
2	.810	13.504	67.417			
3	.633	10.558	77.975			
4	.573	9.554	87.529			
5	.420	6.993	94.522			
6	.329	5.478	100.000			

Extraction Method: Principal Axis Factoring.

Factor Matrix[a]

	Factor
	1
ITEM110	.843
ITEM109	.757
ITEM108	.701
ITEM111	.603
ITEM107	.556
ITEM112	.534

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 7 iterations required.

Reproduced Correlations

		ITEM107	ITEM108	ITEM109	ITEM110	ITEM111	ITEM112
Reproduced Correlation	ITEM107	.309[a]	.390	.421	.469	.335	.297
	ITEM108	.390	.491[a]	.530	.591	.422	.374
	ITEM109	.421	.530	.573[a]	.638	.456	.404
	ITEM110	.469	.591	.638	.710[a]	.508	.450
	ITEM111	.335	.422	.456	.508	.363[a]	.322
	ITEM112	.297	.374	.404	.450	.322	.285[a]
Residual[b]	ITEM107		-.039	-.016	-.002	.095	-.030
	ITEM108	-.039		.040	-.018	-.062	.082
	ITEM109	-.016	.040		.014	-.027	-.028
	ITEM110	-.002	-.018	.014		.020	-.016
	ITEM111	.095	-.062	-.027	.020		-.010
	ITEM112	-.030	.082	-.028	-.016	-.010	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 3 (20.0%) nonredundant residuals with absolute values greater than 0.05.

14. SOCIABILITY

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM113	3.21	1.077	3912
ITEM114	3.80	.874	3912
ITEM115	3.58	1.011	3912
ITEM116	3.11	1.116	3912
ITEM117	3.54	1.036	3912
ITEM118	4.09	.733	3912
ITEM119	3.75	.915	3912

Correlation Matrix[a]

		ITEM113	ITEM114	ITEM115	ITEM116	ITEM117	ITEM118	ITEM119
Correlation	ITEM113	1.000	.421	.466	.334	.427	.319	.427
	ITEM114	.421	1.000	.474	.444	.590	.482	.613
	ITEM115	.466	.474	1.000	.376	.544	.453	.560
	ITEM116	.334	.444	.376	1.000	.580	.342	.477
	ITEM117	.427	.590	.544	.580	1.000	.496	.717
	ITEM118	.319	.482	.453	.342	.496	1.000	.576
	ITEM119	.427	.613	.560	.477	.717	.576	1.000
Sig. (1-tailed)	ITEM113		.000	.000	.000	.000	.000	.000
	ITEM114	.000		.000	.000	.000	.000	.000
	ITEM115	.000	.000		.000	.000	.000	.000
	ITEM116	.000	.000	.000		.000	.000	.000
	ITEM117	.000	.000	.000	.000		.000	.000
	ITEM118	.000	.000	.000	.000	.000		.000
	ITEM119	.000	.000	.000	.000	.000	.000	

a. Determinant = .051

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.892
Bartlett's Test of Sphericity	Approx. Chi-Square	11663.630
	df	21
	Sig.	.000

Anti-image Matrices

		ITEM113	ITEM114	ITEM115	ITEM116	ITEM117	ITEM118	ITEM119
Anti-image Covariance	ITEM113	.711	-.085	-.157	-.047	-.031	-.006	-.030
	ITEM114	-.085	.536	-.042	-.062	-.071	-.082	-.100
	ITEM115	-.157	-.042	.581	-.013	-.070	-.081	-.076
	ITEM116	-.047	-.062	-.013	.641	-.163	-.008	-.019
	ITEM117	-.031	-.071	-.070	-.163	.380	-.028	-.151
	ITEM118	-.006	-.082	-.081	-.008	-.028	.622	-.128
	ITEM119	-.030	-.100	-.076	-.019	-.151	-.128	.376
Anti-image Correlation	ITEM113	.915[a]	-.137	-.244	-.070	-.060	-.008	-.058
	ITEM114	-.137	.923[a]	-.075	-.105	-.158	-.143	-.222
	ITEM115	-.244	-.075	.914[a]	-.022	-.148	-.135	-.162
	ITEM116	-.070	-.105	-.022	.899[a]	-.329	-.013	-.039
	ITEM117	-.060	-.158	-.148	-.329	.856[a]	-.058	-.400
	ITEM118	-.008	-.143	-.135	-.013	-.058	.916[a]	-.265
	ITEM119	-.058	-.222	-.162	-.039	-.400	-.265	.862[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

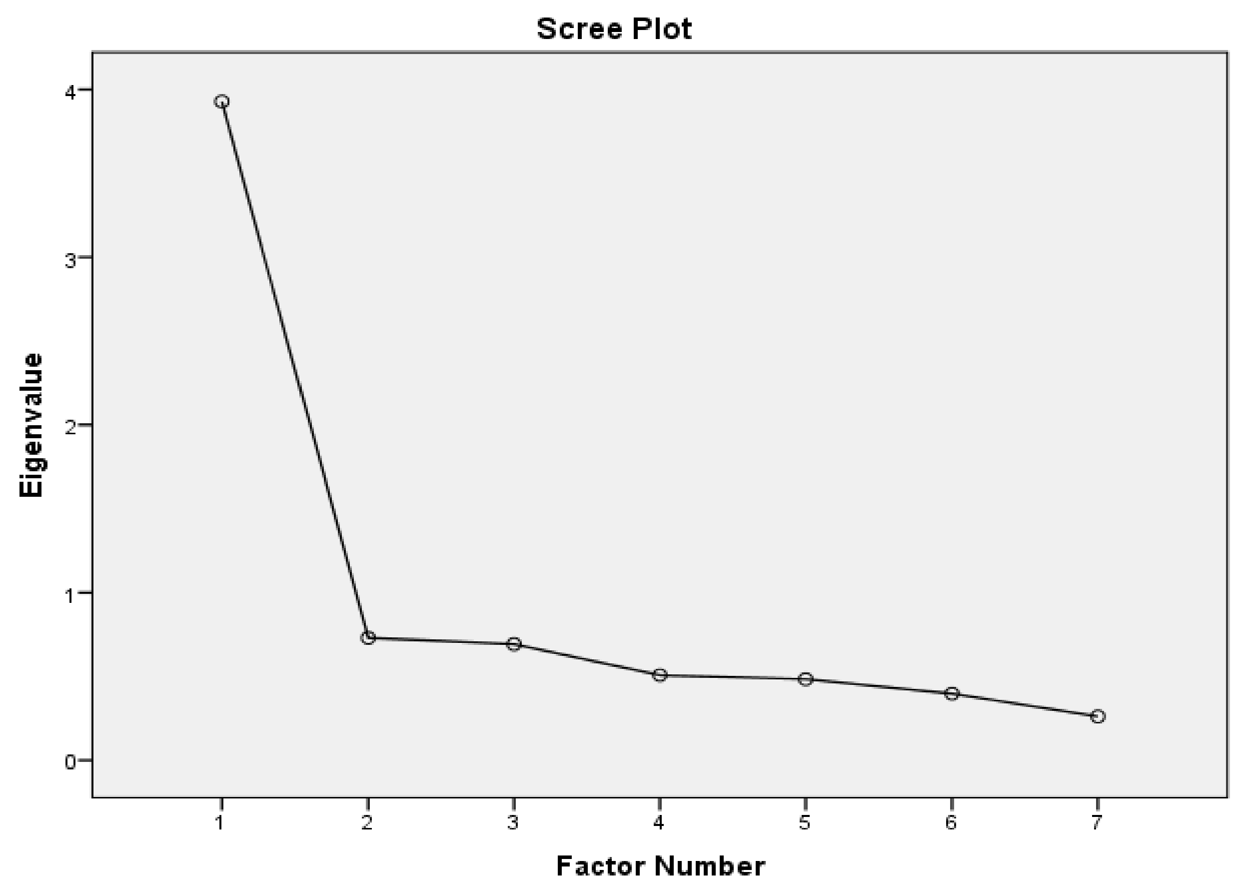
	Initial	Extraction
ITEM113	.289	.305
ITEM114	.464	.531
ITEM115	.419	.463
ITEM116	.359	.362
ITEM117	.620	.691
ITEM118	.378	.402
ITEM119	.624	.704

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.928	56.115	56.115	3.458	49.405	49.405
2	.730	10.430	66.545			
3	.692	9.892	76.436			
4	.508	7.253	83.689			
5	.483	6.906	90.595			
6	.397	5.673	96.268			
7	.261	3.732	100.000			

Extraction Method: Principal Axis Factoring.



	Factor
	1
ITEM119	.839
ITEM117	.831
ITEM114	.728
ITEM115	.681
ITEM118	.634
ITEM116	.602
ITEM113	.552

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 5 iterations required.

Reproduced Correlations

		ITEM113	ITEM114	ITEM115	ITEM116	ITEM117	ITEM118	ITEM119
Reproduced Correlation	ITEM113	.305[a]	.402	.376	.332	.459	.350	.463
	ITEM114	.402	.531[a]	.496	.438	.606	.462	.611
	ITEM115	.376	.496	.463[a]	.409	.566	.432	.571
	ITEM116	.332	.438	.409	.362[a]	.500	.382	.505
	ITEM117	.459	.606	.566	.500	.691[a]	.527	.698
	ITEM118	.350	.462	.432	.382	.527	.402[a]	.532
	ITEM119	.463	.611	.571	.505	.698	.532	.704[a]
Residual[b]	ITEM113		.019	.091	.002	-.032	-.031	-.036
	ITEM114	.019		-.022	.006	-.016	.020	.002
	ITEM115	.091	-.022		-.034	-.021	.021	-.012
	ITEM116	.002	.006	-.034		.079	-.039	-.028
	ITEM117	-.032	-.016	-.021	.079		-.031	.019
	ITEM118	-.031	.020	.021	-.039	-.031		.044
	ITEM119	-.036	.002	-.012	-.028	.019	.044	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 2 (9.0%) nonredundant residuals with absolute values greater than 0.05.

15. ACHIEVEMENT ORIENTATION

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM120	4.05	.866	3912
ITEM121	3.93	.899	3912
ITEM122	3.80	.971	3912
ITEM123	4.18	.655	3912
ITEM124	4.03	.787	3912
ITEM125	3.52	1.025	3912
ITEM126	4.18	.660	3912
ITEM127	4.34	.642	3912
ITEM128	4.05	.710	3912
ITEM129	4.18	.658	3912
ITEM130	4.13	.648	3912

Correlation Matrix[a]

		ITEM120	ITEM121	ITEM122	ITEM123	ITEM124	ITEM125	ITEM126	ITEM127	ITEM128	ITEM129	ITEM130
Correlation	ITEM120	1.000	.528	.402	.299	.496	.306	.404	.321	.289	.333	.301
	ITEM121	.528	1.000	.485	.297	.558	.297	.428	.306	.255	.383	.308
	ITEM122	.402	.485	1.000	.294	.526	.277	.399	.345	.287	.498	.271
	ITEM123	.299	.297	.294	1.000	.396	.225	.447	.405	.452	.379	.311
	ITEM124	.496	.558	.526	.396	1.000	.414	.550	.464	.394	.494	.395
	ITEM125	.306	.297	.277	.225	.414	1.000	.327	.253	.280	.275	.242
	ITEM126	.404	.428	.399	.447	.550	.327	1.000	.480	.441	.489	.396
	ITEM127	.321	.306	.345	.405	.464	.253	.480	1.000	.447	.476	.327
	ITEM128	.289	.255	.287	.452	.394	.280	.441	.447	1.000	.411	.295
	ITEM129	.333	.383	.498	.379	.494	.275	.489	.476	.411	1.000	.402
	ITEM130	.301	.308	.271	.311	.395	.242	.396	.327	.295	.402	1.000
Sig. (1-tailed)	ITEM120		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM121	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM122	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM123	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM124	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM125	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM126	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM127	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM128	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000

ITEM129	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
ITEM130	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .024

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.920
Bartlett's Test of Sphericity	Approx. Chi-Square	14611.125
	df	55
	Sig.	.000

Anti-image Matrices

		ITEM120	ITEM121	ITEM122	ITEM123	ITEM124	ITEM125	ITEM126	ITEM127	ITEM128	ITEM129	ITEM130
Anti-image Covariance	ITEM120	.634	-.176	-.053	-.023	-.072	-.055	-.038	-.024	-.023	.015	-.039
	ITEM121	-.176	.566	-.114	-.016	-.117	-.018	-.048	.019	.030	-.017	-.026
	ITEM122	-.053	-.114	.605	-.007	-.101	-.017	-.010	-.012	.003	-.152	.025
	ITEM123	-.023	-.016	-.007	.681	-.029	.006	-.090	-.073	-.157	-.033	-.050
	ITEM124	-.072	-.117	-.101	-.029	.455	-.109	-.084	-.067	-.024	-.040	-.053
	ITEM125	-.055	-.018	-.017	.006	-.109	.794	-.039	.001	-.065	-.006	-.033
	ITEM126	-.038	-.048	-.010	-.090	-.084	-.039	.543	-.086	-.073	-.070	-.070
	ITEM127	-.024	.019	-.012	-.073	-.067	.001	-.086	.624	-.114	-.106	-.030
	ITEM128	-.023	.030	.003	-.157	-.024	-.065	-.073	-.114	.657	-.069	-.020
	ITEM129	.015	-.017	-.152	-.033	-.040	-.006	-.070	-.106	-.069	.563	-.107
	ITEM130	-.039	-.026	.025	-.050	-.053	-.033	-.070	-.030	-.020	-.107	.748
Anti-image Correlation	ITEM120	.917[a]	-.294	-.085	-.035	-.134	-.077	-.065	-.038	-.036	.025	-.057
	ITEM121	-.294	.892[a]	-.196	-.025	-.230	-.027	-.086	.032	.049	-.030	-.041
	ITEM122	-.085	-.196	.908[a]	-.011	-.192	-.025	-.018	-.020	.005	-.261	.037
	ITEM123	-.035	-.025	-.011	.926[a]	-.052	.008	-.148	-.112	-.234	-.054	-.070
	ITEM124	-.134	-.230	-.192	-.052	.916[a]	-.182	-.169	-.126	-.045	-.078	-.090
	ITEM125	-.077	-.027	-.025	.008	-.182	.941[a]	-.060	.001	-.090	-.009	-.043
	ITEM126	-.065	-.086	-.018	-.148	-.169	-.060	.937[a]	-.148	-.121	-.127	-.110
	ITEM127	-.038	.032	-.020	-.112	-.126	.001	-.148	.928[a]	-.179	-.179	-.044
	ITEM128	-.036	.049	.005	-.234	-.045	-.090	-.121	-.179	.911[a]	-.113	-.029
	ITEM129	.025	-.030	-.261	-.054	-.078	-.009	-.127	-.179	-.113	.914[a]	-.164
	ITEM130	-.057	-.041	.037	-.070	-.090	-.043	-.110	-.044	-.029	-.164	.945[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM120	.366	.428
ITEM121	.434	.590
ITEM122	.395	.422
ITEM123	.319	.384
ITEM124	.545	.633
ITEM125	.206	.213
ITEM126	.457	.526
ITEM127	.376	.455
ITEM128	.343	.447
ITEM129	.437	.468
ITEM130	.252	.272

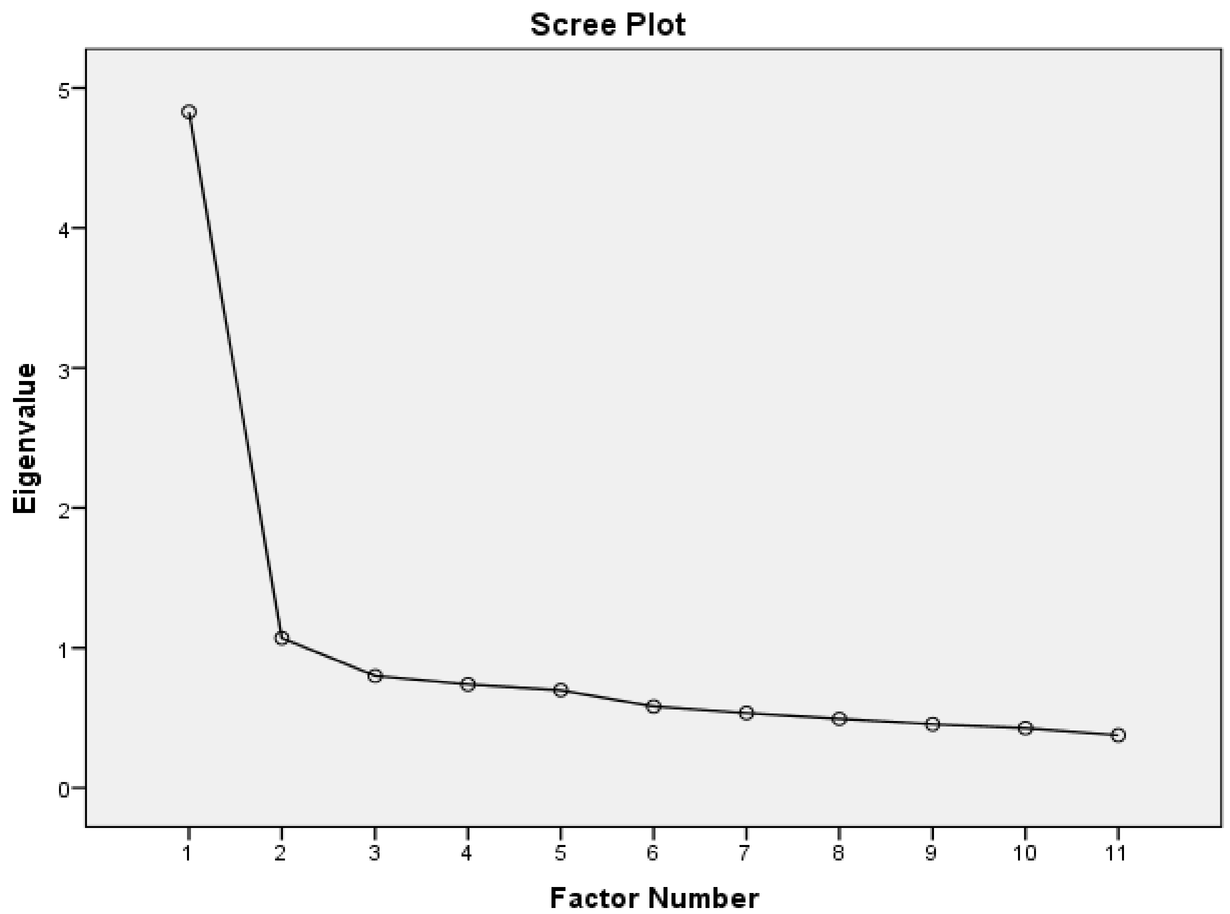
Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4.829	43.898	43.898	4.295	39.047	39.047	3.740
2	1.069	9.720	53.618	.544	4.948	43.995	3.646
3	.800	7.274	60.892				
4	.739	6.720	67.612				
5	.697	6.340	73.952				
6	.582	5.286	79.238				
7	.534	4.857	84.096				
8	.493	4.478	88.574				
9	.455	4.132	92.706				
10	.426	3.876	96.582				
11	.376	3.418	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor Matrix[a]

	Factor	
	1	2
ITEM124	.781	-.152
ITEM126	.716	.115
ITEM129	.676	.107
ITEM121	.655	-.401
ITEM127	.628	.247
ITEM122	.623	-.187
ITEM120	.604	-.253
ITEM128	.582	.328
ITEM123	.569	.246
ITEM130	.517	.068
ITEM125	.458	-.055

Extraction Method: Principal Axis Factoring.

a. 2 factors extracted. 10 iterations required.

Reproduced Correlations

		ITEM120	ITEM121	ITEM122	ITEM123	ITEM124	ITEM125	ITEM126	ITEM127	ITEM128	ITEM129	ITEM130
Reproduced Correlation	ITEM120	.428[a]	.497	.423	.281	.510	.290	.403	.317	.268	.381	.295
	ITEM121	.497	.590[a]	.483	.274	.573	.322	.423	.312	.250	.400	.311
	ITEM122	.423	.483	.422[a]	.308	.515	.295	.424	.345	.301	.401	.309
	ITEM123	.281	.274	.308	.384[a]	.407	.247	.436	.418	.412	.411	.311
	ITEM124	.510	.573	.515	.407	.633[a]	.366	.542	.453	.405	.512	.394
	ITEM125	.290	.322	.295	.247	.366	.213[a]	.322	.274	.248	.303	.233
	ITEM126	.403	.423	.424	.436	.542	.322	.526[a]	.478	.455	.496	.378
	ITEM127	.317	.312	.345	.418	.453	.274	.478	.455[a]	.447	.451	.342
	ITEM128	.268	.250	.301	.412	.405	.248	.455	.447	.447[a]	.429	.324
	ITEM129	.381	.400	.401	.411	.512	.303	.496	.451	.429	.468[a]	.357
	ITEM130	.295	.311	.309	.311	.394	.233	.378	.342	.324	.357	.272[a]
Residual[b]	ITEM120		.031	-.021	.018	-.014	.016	.001	.004	.020	-.048	.006
	ITEM121	.031		.003	.023	-.015	-.025	.006	-.007	.005	-.017	-.003
	ITEM122	-.021	.003		-.015	.012	-.018	-.026	.000	-.014	.097	-.038
	ITEM123	.018	.023	-.015		-.011	-.022	.011	-.013	.040	-.031	5.938E-5
	ITEM124	-.014	-.015	.012	-.011		.048	.008	.011	-.011	-.017	.002
	ITEM125	.016	-.025	-.018	-.022	.048		.005	-.021	.032	-.029	.009
	ITEM126	.001	.006	-.026	.011	.008	.005		.002	-.014	-.007	.018
	ITEM127	.004	-.007	.000	-.013	.011	-.021	.002		.000	.025	-.015
	ITEM128	.020	.005	-.014	.040	-.011	.032	-.014	.000		-.017	-.029
	ITEM129	-.048	-.017	.097	-.031	-.017	-.029	-.007	.025	-.017		.045
	ITEM130	.006	-.003	-.038	5.938E-5	.002	.009	.018	-.015	-.029	.045	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 1 (1.0%) nonredundant residuals with absolute values greater than 0.05.

Pattern Matrix[a]

	Factor	
	1	2
ITEM128	.736	.107
ITEM127	.662	-.019
ITEM123	.627	.011
ITEM126	.549	-.231
ITEM129	.515	-.220
ITEM130	.378	-.185
ITEM121	-.126	-.848
ITEM120	.028	-.635
ITEM124	.254	-.601
ITEM122	.122	-.561
ITEM125	.191	-.310

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.[a]
a. Rotation converged in 10 iterations.

Structure Matrix

	Factor	
	1	2
ITEM126	.705	-.603
ITEM127	.675	-.469
ITEM129	.665	-.570
ITEM128	.664	-.393
ITEM123	.620	-.415
ITEM130	.504	-.442
ITEM124	.662	-.774
ITEM121	.450	-.762
ITEM120	.460	-.654
ITEM122	.503	-.644
ITEM125	.401	-.439

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Factor Correlation Matrix

Factor	1	2
1	1.000	-.679
2	-.679	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

FACTOR MATRIX WHEN FORCING THE EXTRACTION OF A SINGLE FACTOR

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM120	4.05	.866	3912
ITEM121	3.93	.899	3912
ITEM122	3.80	.971	3912
ITEM123	4.18	.655	3912
ITEM124	4.03	.787	3912
ITEM125	3.52	1.025	3912
ITEM126	4.18	.660	3912
ITEM127	4.34	.642	3912
ITEM128	4.05	.710	3912
ITEM129	4.18	.658	3912
ITEM130	4.13	.648	3912

Correlation Matrix[a]

		ITEM120	ITEM121	ITEM122	ITEM123	ITEM124	ITEM125	ITEM126	ITEM127	ITEM128	ITEM129	ITEM130
Correlation	ITEM120	1.000	.528	.402	.299	.496	.306	.404	.321	.289	.333	.301
	ITEM121	.528	1.000	.485	.297	.558	.297	.428	.306	.255	.383	.308
	ITEM122	.402	.485	1.000	.294	.526	.277	.399	.345	.287	.498	.271
	ITEM123	.299	.297	.294	1.000	.396	.225	.447	.405	.452	.379	.311
	ITEM124	.496	.558	.526	.396	1.000	.414	.550	.464	.394	.494	.395
	ITEM125	.306	.297	.277	.225	.414	1.000	.327	.253	.280	.275	.242
	ITEM126	.404	.428	.399	.447	.550	.327	1.000	.480	.441	.489	.396
	ITEM127	.321	.306	.345	.405	.464	.253	.480	1.000	.447	.476	.327
	ITEM128	.289	.255	.287	.452	.394	.280	.441	.447	1.000	.411	.295
	ITEM129	.333	.383	.498	.379	.494	.275	.489	.476	.411	1.000	.402
	ITEM130	.301	.308	.271	.311	.395	.242	.396	.327	.295	.402	1.000
Sig. (1-tailed)	ITEM120		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM121	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM122	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM123	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM124	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM125	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM126	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM127	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM128	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM129	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	ITEM130	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .024

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.920
Bartlett's Test of Sphericity	Approx. Chi-Square	14611.125
	df	55
	Sig.	.000

Anti-image Matrices

		ITEM120	ITEM121	ITEM122	ITEM123	ITEM124	ITEM125	ITEM126	ITEM127	ITEM128	ITEM129	ITEM130
Anti-image Covariance	ITEM120	.634	-.176	-.053	-.023	-.072	-.055	-.038	-.024	-.023	.015	-.039
	ITEM121	-.176	.566	-.114	-.016	-.117	-.018	-.048	.019	.030	-.017	-.026
	ITEM122	-.053	-.114	.605	-.007	-.101	-.017	-.010	-.012	.003	-.152	.025
	ITEM123	-.023	-.016	-.007	.681	-.029	.006	-.090	-.073	-.157	-.033	-.050
	ITEM124	-.072	-.117	-.101	-.029	.455	-.109	-.084	-.067	-.024	-.040	-.053
	ITEM125	-.055	-.018	-.017	.006	-.109	.794	-.039	.001	-.065	-.006	-.033
	ITEM126	-.038	-.048	-.010	-.090	-.084	-.039	.543	-.086	-.073	-.070	-.070
	ITEM127	-.024	.019	-.012	-.073	-.067	.001	-.086	.624	-.114	-.106	-.030
	ITEM128	-.023	.030	.003	-.157	-.024	-.065	-.073	-.114	.657	-.069	-.020
	ITEM129	.015	-.017	-.152	-.033	-.040	-.006	-.070	-.106	-.069	.563	-.107
	ITEM130	-.039	-.026	.025	-.050	-.053	-.033	-.070	-.030	-.020	-.107	.748
Anti-image Correlation	ITEM120	.917[a]	-.294	-.085	-.035	-.134	-.077	-.065	-.038	-.036	.025	-.057
	ITEM121	-.294	.892[a]	-.196	-.025	-.230	-.027	-.086	.032	.049	-.030	-.041
	ITEM122	-.085	-.196	.908[a]	-.011	-.192	-.025	-.018	-.020	.005	-.261	.037
	ITEM123	-.035	-.025	-.011	.926[a]	-.052	.008	-.148	-.112	-.234	-.054	-.070
	ITEM124	-.134	-.230	-.192	-.052	.916[a]	-.182	-.169	-.126	-.045	-.078	-.090
	ITEM125	-.077	-.027	-.025	.008	-.182	.941[a]	-.060	.001	-.090	-.009	-.043
	ITEM126	-.065	-.086	-.018	-.148	-.169	-.060	.937[a]	-.148	-.121	-.127	-.110
	ITEM127	-.038	.032	-.020	-.112	-.126	.001	-.148	.928[a]	-.179	-.179	-.044
	ITEM128	-.036	.049	.005	-.234	-.045	-.090	-.121	-.179	.911[a]	-.113	-.029
	ITEM129	.025	-.030	-.261	-.054	-.078	-.009	-.127	-.179	-.113	.914[a]	-.164
	ITEM130	-.057	-.041	.037	-.070	-.090	-.043	-.110	-.044	-.029	-.164	.945[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

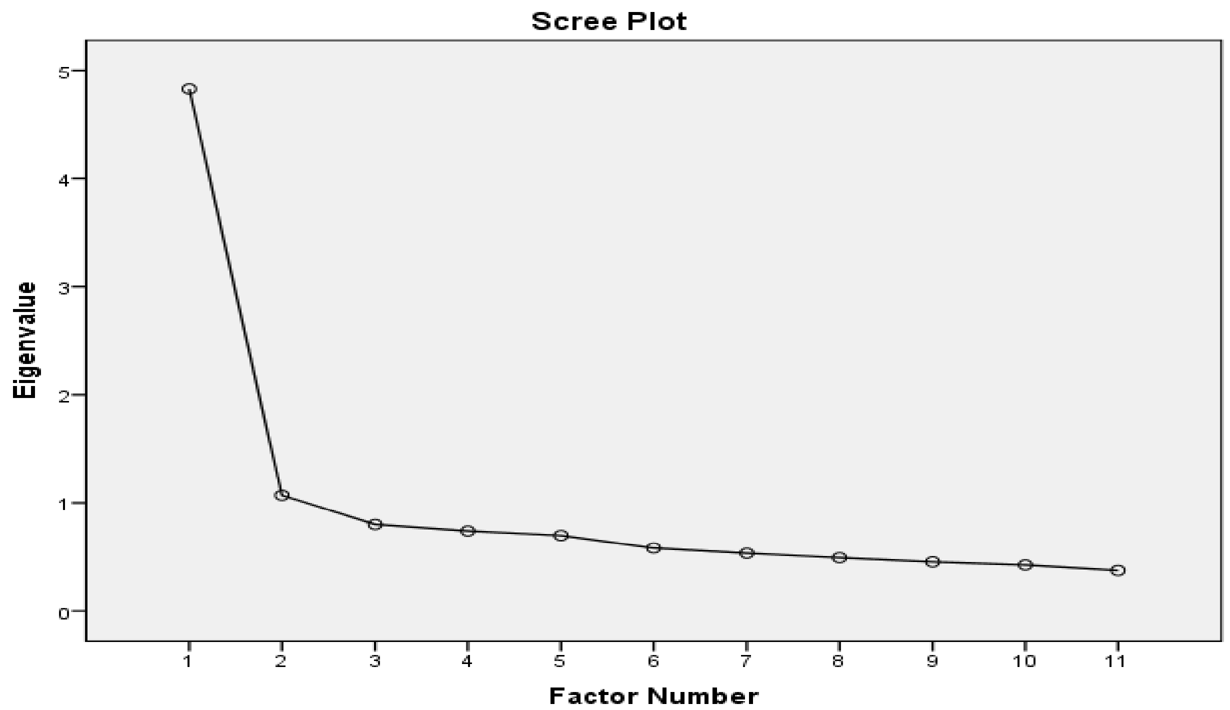
	Initial	Extraction
ITEM120	.366	.356
ITEM121	.434	.396
ITEM122	.395	.386
ITEM123	.319	.318
ITEM124	.545	.611
ITEM125	.206	.212
ITEM126	.457	.517
ITEM127	.376	.387
ITEM128	.343	.325
ITEM129	.437	.461
ITEM130	.252	.271

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.829	43.898	43.898	4.241	38.557	38.557
2	1.069	9.720	53.618			
3	.800	7.274	60.892			
4	.739	6.720	67.612			
5	.697	6.340	73.952			
6	.582	5.286	79.238			
7	.534	4.857	84.096			
8	.493	4.478	88.574			
9	.455	4.132	92.706			
10	.426	3.876	96.582			
11	.376	3.418	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM124	.782
ITEM126	.719
ITEM129	.679
ITEM121	.630
ITEM127	.622
ITEM122	.621
ITEM120	.597
ITEM128	.570
ITEM123	.564
ITEM130	.521
ITEM125	.461

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 4 iterations required.

Reproduced Correlations

		ITEM120	ITEM121	ITEM122	ITEM123	ITEM124	ITEM125	ITEM126	ITEM127	ITEM128	ITEM129	ITEM130
Reproduced Correlation	ITEM120	.356[a]	.376	.370	.336	.466	.275	.429	.371	.340	.405	.311
	ITEM121	.376	.396[a]	.391	.355	.492	.290	.453	.392	.359	.428	.328
	ITEM122	.370	.391	.386[a]	.350	.485	.286	.447	.387	.354	.422	.323
	ITEM123	.336	.355	.350	.318[a]	.441	.260	.406	.351	.321	.383	.294
	ITEM124	.466	.492	.485	.441	.611[a]	.360	.562	.487	.445	.531	.407
	ITEM125	.275	.290	.286	.260	.360	.212[a]	.331	.287	.262	.313	.240
	ITEM126	.429	.453	.447	.406	.562	.331	.517[a]	.448	.410	.489	.375
	ITEM127	.371	.392	.387	.351	.487	.287	.448	.387[a]	.355	.423	.324
	ITEM128	.340	.359	.354	.321	.445	.262	.410	.355	.325[a]	.387	.297
	ITEM129	.405	.428	.422	.383	.531	.313	.489	.423	.387	.461[a]	.354
	ITEM130	.311	.328	.323	.294	.407	.240	.375	.324	.297	.354	.271[a]
Residual[b]	ITEM120		.153	.031	-.038	.030	.031	-.025	-.050	-.051	-.072	-.009
	ITEM121	.153		.094	-.058	.066	.007	-.025	-.086	-.104	-.045	-.020
	ITEM122	.031	.094		-.056	.041	-.009	-.048	-.042	-.067	.076	-.052
	ITEM123	-.038	-.058	-.056		-.045	-.035	.041	.054	.131	-.004	.018
	ITEM124	.030	.066	.041	-.045		.054	-.013	-.023	-.051	-.037	-.012
	ITEM125	.031	.007	-.009	-.035	.054		-.005	-.034	.017	-.038	.002
	ITEM126	-.025	-.025	-.048	.041	-.013	-.005		.032	.031	.001	.022
	ITEM127	-.050	-.086	-.042	.054	-.023	-.034	.032		.092	.053	.003
	ITEM128	-.051	-.104	-.067	.131	-.051	.017	.031	.092		.024	-.002
	ITEM129	-.072	-.045	.076	-.004	-.037	-.038	.001	.053	.024		.048
	ITEM130	-.009	-.020	-.052	.018	-.012	.002	.022	.003	-.002	.048	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 19 (34.0%) nonredundant residuals with absolute values greater than 0.05.

16. ORDERLINESS

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM131	4.04	.859	3912
ITEM132	4.14	.700	3912
ITEM133	3.86	.827	3912
ITEM134	4.01	.780	3912
ITEM135	3.84	.887	3912
ITEM136	3.97	.836	3912
ITEM137	3.89	.827	3912
ITEM138	4.06	.656	3912
ITEM139	4.00	.726	3912
ITEM140	4.01	.790	3912
ITEM141	4.00	.690	3912
ITEM142	3.93	.757	3912
ITEM143	3.93	.775	3912

Correlation Matrix[a]

		ITEM131	ITEM132	ITEM133	ITEM134	ITEM135	ITEM136	ITEM137	ITEM138	ITEM139	ITEM140	ITEM141	ITEM142	ITEM143
Correlation	ITEM131	1.000	.373	.205	.287	.610	.511	.538	.307	.382	.238	.344	.264	.277
	ITEM132	.373	1.000	.397	.356	.311	.446	.306	.563	.508	.347	.409	.343	.243
	ITEM133	.205	.397	1.000	.255	.215	.277	.221	.407	.404	.214	.274	.228	.222
	ITEM134	.287	.356	.255	1.000	.323	.414	.305	.381	.350	.424	.526	.422	.283
	ITEM135	.610	.311	.215	.323	1.000	.474	.561	.286	.377	.227	.345	.263	.271
	ITEM136	.511	.446	.277	.414	.474	1.000	.474	.455	.491	.441	.511	.449	.330
	ITEM137	.538	.306	.221	.305	.561	.474	1.000	.338	.394	.288	.345	.317	.306
	ITEM138	.307	.563	.407	.381	.286	.455	.338	1.000	.567	.387	.446	.402	.325
	ITEM139	.382	.508	.404	.350	.377	.491	.394	.567	1.000	.339	.426	.363	.325
	ITEM140	.238	.347	.214	.424	.227	.441	.288	.387	.339	1.000	.485	.640	.340
	ITEM141	.344	.409	.274	.526	.345	.511	.345	.446	.426	.485	1.000	.483	.343
	ITEM142	.264	.343	.228	.422	.263	.449	.317	.402	.363	.640	.483	1.000	.347
	ITEM143	.277	.243	.222	.283	.271	.330	.306	.325	.325	.340	.343	.347	1.000
Sig. (1-tailed)	ITEM131		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM132	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM133	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM134	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM135	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM136	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM137	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM138	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM139	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM140	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM141	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM142	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	ITEM143	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .006

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.914
Bartlett's Test of Sphericity	Approx. Chi-Square	19712.009
	df	78
	Sig.	.000

Anti-image Matrices

		ITEM131	ITEM132	ITEM133	ITEM134	ITEM135	ITEM136	ITEM137	ITEM138	ITEM139	ITEM140	ITEM141	ITEM142	ITEM143
Anti-image Covariance	ITEM131	.522	-.071	.017	.008	-.191	-.099	-.118	.016	-.018	.018	-.012	.010	-.031
	ITEM132	-.071	.571	-.105	-.031	.001	-.042	.021	-.155	-.086	-.027	-.030	-.004	.033
	ITEM133	.017	-.105	.762	-.031	-.014	.005	-.007	-.087	-.100	.010	-.008	.001	-.041
	ITEM134	.008	-.031	-.031	.643	-.051	-.028	-.009	-.030	-.002	-.059	-.161	-.050	-.019
	ITEM135	-.191	.001	-.014	-.051	.527	-.054	-.156	.022	-.033	.026	-.019	.002	-.020
	ITEM136	-.099	-.042	.005	-.028	-.054	.505	-.057	-.034	-.065	-.054	-.081	-.045	-.011
	ITEM137	-.118	.021	-.007	-.009	-.156	-.057	.575	-.028	-.040	-.013	.000	-.024	-.048
	ITEM138	.016	-.155	-.087	-.030	.022	-.034	-.028	.520	-.138	-.021	-.041	-.032	-.046
	ITEM139	-.018	-.086	-.100	-.002	-.033	-.065	-.040	-.138	.542	.005	-.031	-.014	-.044
	ITEM140	.018	-.027	.010	-.059	.026	-.054	-.013	-.021	.005	.522	-.069	-.236	-.058
	ITEM141	-.012	-.030	-.008	-.161	-.019	-.081	.000	-.041	-.031	-.069	.544	-.057	-.046
	ITEM142	.010	-.004	.001	-.050	.002	-.045	-.024	-.032	-.014	-.236	-.057	.519	-.054
	ITEM143	-.031	.033	-.041	-.019	-.020	-.011	-.048	-.046	-.044	-.058	-.046	-.054	.777
Anti-image Correlation	ITEM131	.879[a]	-.129	.027	.014	-.364	-.192	-.216	.031	-.034	.034	-.023	.019	-.049
	ITEM132	-.129	.918[a]	-.160	-.051	.001	-.078	.037	-.285	-.155	-.050	-.054	-.007	.050
	ITEM133	.027	-.160	.929[a]	-.045	-.023	.008	-.011	-.138	-.155	.016	-.012	.001	-.053
	ITEM134	.014	-.051	-.045	.937[a]	-.087	-.049	-.014	-.051	-.003	-.102	-.272	-.087	-.026
	ITEM135	-.364	.001	-.023	-.087	.875[a]	-.105	-.284	.042	-.063	.050	-.035	.004	-.031
	ITEM136	-.192	-.078	.008	-.049	-.105	.948[a]	-.105	-.066	-.125	-.106	-.154	-.088	-.018
	ITEM137	-.216	.037	-.011	-.014	-.284	-.105	.917[a]	-.051	-.072	-.024	-.001	-.045	-.072
	ITEM138	.031	-.285	-.138	-.051	.042	-.066	-.051	.913[a]	-.260	-.040	-.078	-.061	-.073
	ITEM139	-.034	-.155	-.155	-.003	-.063	-.125	-.072	-.260	.933[a]	.009	-.057	-.027	-.067
	ITEM140	.034	-.050	.016	-.102	.050	-.106	-.024	-.040	.009	.871[a]	-.130	-.453	-.091
	ITEM141	-.023	-.054	-.012	-.272	-.035	-.154	-.001	-.078	-.057	-.130	.935[a]	-.108	-.072
	ITEM142	.019	-.007	.001	-.087	.004	-.088	-.045	-.061	-.027	-.453	-.108	.882[a]	-.085
	ITEM143	-.049	.050	-.053	-.026	-.031	-.018	-.072	-.073	-.067	-.091	-.072	-.085	.961[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM131	.478	.602
ITEM132	.429	.510
ITEM133	.238	.300
ITEM134	.357	.373
ITEM135	.473	.622
ITEM136	.495	.540
ITEM137	.425	.501
ITEM138	.480	.607
ITEM139	.458	.544
ITEM140	.478	.625
ITEM141	.456	.494
ITEM142	.481	.598
ITEM143	.223	.237

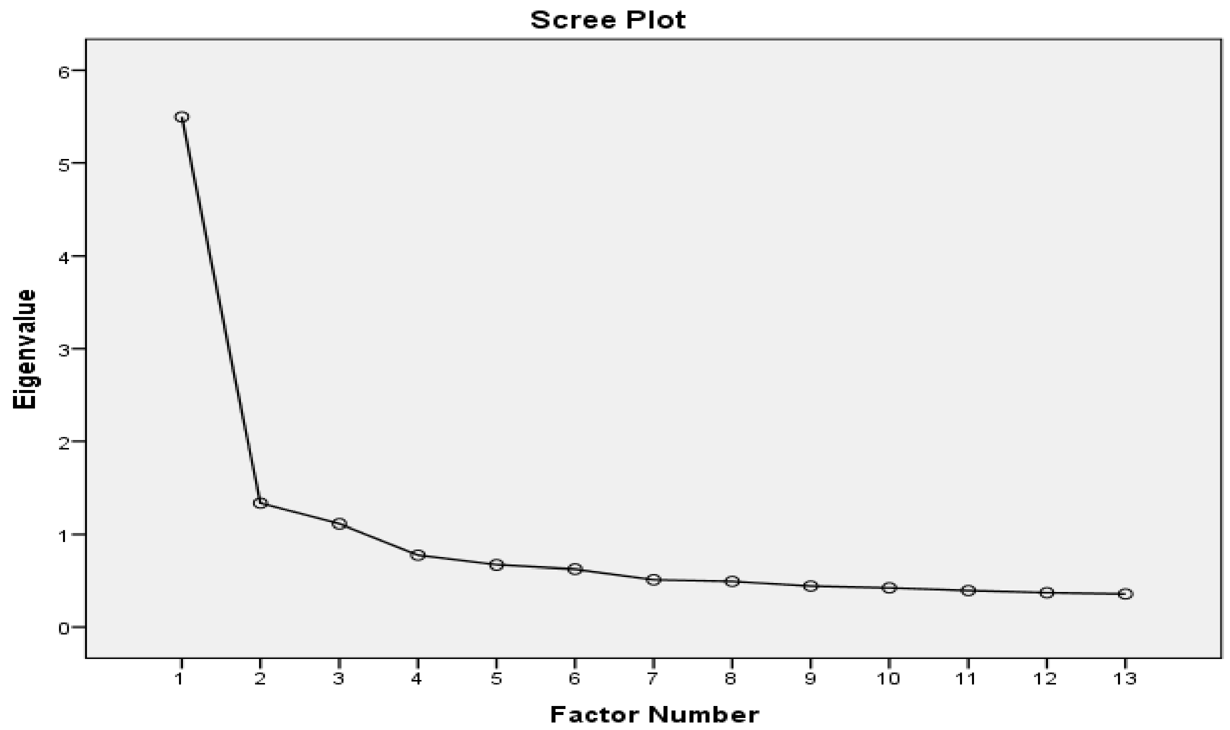
Extraction Method: Principal Axis Factoring.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	5.496	42.279	42.279	5.018	38.601	38.601	3.864
2	1.336	10.281	52.560	.918	7.059	45.660	3.613
3	1.113	8.559	61.119	.617	4.746	50.405	3.960
4	.774	5.950	67.069				
5	.670	5.157	72.226				
6	.624	4.798	77.024				
7	.511	3.930	80.954				
8	.493	3.789	84.742				
9	.442	3.399	88.141				
10	.423	3.252	91.394				
11	.393	3.026	94.420				
12	.370	2.843	97.263				
13	.356	2.737	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor Matrix[a]

	Factor		
	1	2	3
ITEM136	.727	.085	-.065
ITEM138	.682	-.168	.337
ITEM139	.681	-.004	.284
ITEM141	.678	-.159	-.099
ITEM142	.639	-.331	-.283
ITEM132	.638	-.069	.313
ITEM140	.624	-.380	-.301
ITEM131	.616	.465	-.079
ITEM137	.609	.343	-.109
ITEM135	.608	.488	-.123
ITEM134	.587	-.138	-.095
ITEM143	.479	-.047	-.067
ITEM133	.449	-.071	.305

Extraction Method: Principal Axis Factoring.

a. 3 factors extracted. 9 iterations required.

Reproduced Correlations

		ITEM131	ITEM132	ITEM133	ITEM134	ITEM135	ITEM136	ITEM137	ITEM138	ITEM139	ITEM140	ITEM141	ITEM142	ITEM143
Reproduced Correlation	ITEM131	.602[a]	.336	.220	.305	.611	.492	.543	.315	.395	.231	.351	.262	.279
	ITEM132	.336	.510[a]	.387	.354	.316	.438	.331	.552	.524	.330	.412	.342	.288
	ITEM133	.220	.387	.300[a]	.245	.201	.301	.216	.421	.393	.216	.286	.225	.198
	ITEM134	.305	.354	.245	.373[a]	.301	.421	.321	.391	.373	.448	.429	.448	.294
	ITEM135	.611	.316	.201	.301	.622[a]	.491	.551	.291	.377	.231	.346	.262	.277
	ITEM136	.492	.438	.301	.421	.491	.540[a]	.479	.460	.476	.441	.486	.455	.349
	ITEM137	.543	.331	.216	.321	.551	.479	.501[a]	.321	.383	.283	.369	.307	.283
	ITEM138	.315	.552	.421	.391	.291	.460	.321	.607[a]	.561	.388	.455	.396	.312
	ITEM139	.395	.524	.393	.373	.377	.476	.383	.561	.544[a]	.341	.434	.356	.308
	ITEM140	.231	.330	.216	.448	.231	.441	.283	.388	.341	.625[a]	.513	.610	.337
	ITEM141	.351	.412	.286	.429	.346	.486	.369	.455	.434	.513	.494[a]	.514	.339
	ITEM142	.262	.342	.225	.448	.262	.455	.307	.396	.356	.610	.514	.598[a]	.341
	ITEM143	.279	.288	.198	.294	.277	.349	.283	.312	.308	.337	.339	.341	.237[a]
Residual[b]	ITEM131		.036	-.015	-.018	-.001	.019	-.006	-.008	-.013	.006	-.007	.002	-.002
	ITEM132	.036		.010	.002	-.005	.008	-.025	.011	-.016	.017	-.003	.001	-.045
	ITEM133	-.015	.010		.011	.014	-.024	.005	-.014	.011	-.002	-.012	.003	.024
	ITEM134	-.018	.002	.011		.022	-.007	-.016	-.011	-.024	-.024	.097	-.026	-.011
	ITEM135	-.001	-.005	.014	.022		-.017	.010	-.005	-.001	-.004	-.001	.001	-.005
	ITEM136	.019	.008	-.024	-.007	-.017		-.005	-.005	.015	.000	.025	-.005	-.019
	ITEM137	-.006	-.025	.005	-.016	.010	-.005		.017	.011	.006	-.025	.010	.023
	ITEM138	-.008	.011	-.014	-.011	-.005	-.005	.017		.006	.000	-.009	.005	.012
	ITEM139	-.013	-.016	.011	-.024	-.001	.015	.011	.006		-.002	-.008	.007	.018
	ITEM140	.006	.017	-.002	-.024	-.004	.000	.006	.000	-.002		-.029	.030	.003
	ITEM141	-.007	-.003	-.012	.097	-.001	.025	-.025	-.009	-.008	-.029		-.031	.004
	ITEM142	.002	.001	.003	-.026	.001	-.005	.010	.005	.007	.030	-.031		.006
	ITEM143	-.002	-.045	.024	-.011	-.005	-.019	.023	.012	.018	.003	.004	.006	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 1 (1.0%) nonredundant residuals with absolute values greater than 0.05.

Pattern Matrix[a]

	Factor		
	1	2	3
ITEM140	.857	-.071	-.055
ITEM142	.805	-.018	-.037
ITEM141	.505	.115	.176
ITEM134	.447	.103	.140
ITEM143	.301	.154	.112
ITEM135	-.028	.828	-.046
ITEM131	-.048	.787	.021
ITEM137	.077	.660	.009
ITEM136	.294	.395	.179
ITEM138	.096	-.070	.755
ITEM132	.020	.035	.681
ITEM139	.013	.136	.643
ITEM133	-.048	-.036	.596

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Rotation converged in 7 iterations.

Structure Matrix

	Factor		
	1	2	3
ITEM140	.786	.330	.445
ITEM142	.773	.368	.461
ITEM141	.675	.472	.562
ITEM134	.588	.410	.482
ITEM143	.450	.371	.391
ITEM135	.362	.787	.413
ITEM131	.363	.775	.444
ITEM137	.417	.704	.438
ITEM136	.607	.647	.592
ITEM138	.537	.413	.775
ITEM139	.488	.513	.729
ITEM132	.468	.437	.713
ITEM133	.310	.284	.545

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Factor Correlation Matrix

Factor	1	2	3
1	1.000	.506	.632
2	.506	1.000	.576
3	.632	.576	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

FACTOR MATRIX WHEN FORCING THE EXTRACTION OF A SINGLE FACTOR

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM131	4.04	.859	3912
ITEM132	4.14	.700	3912
ITEM133	3.86	.827	3912
ITEM134	4.01	.780	3912
ITEM135	3.84	.887	3912
ITEM136	3.97	.836	3912
ITEM137	3.89	.827	3912
ITEM138	4.06	.656	3912
ITEM139	4.00	.726	3912
ITEM140	4.01	.790	3912
ITEM141	4.00	.690	3912
ITEM142	3.93	.757	3912
ITEM143	3.93	.775	3912

Correlation Matrix[a]

		ITEM131	ITEM132	ITEM133	ITEM134	ITEM135	ITEM136	ITEM137	ITEM138	ITEM139	ITEM140	ITEM141	ITEM142	ITEM143
Correlation	ITEM131	1.000	.373	.205	.287	.610	.511	.538	.307	.382	.238	.344	.264	.277
	ITEM132	.373	1.000	.397	.356	.311	.446	.306	.563	.508	.347	.409	.343	.243
	ITEM133	.205	.397	1.000	.255	.215	.277	.221	.407	.404	.214	.274	.228	.222
	ITEM134	.287	.356	.255	1.000	.323	.414	.305	.381	.350	.424	.526	.422	.283
	ITEM135	.610	.311	.215	.323	1.000	.474	.561	.286	.377	.227	.345	.263	.271
	ITEM136	.511	.446	.277	.414	.474	1.000	.474	.455	.491	.441	.511	.449	.330
	ITEM137	.538	.306	.221	.305	.561	.474	1.000	.338	.394	.288	.345	.317	.306
	ITEM138	.307	.563	.407	.381	.286	.455	.338	1.000	.567	.387	.446	.402	.325
	ITEM139	.382	.508	.404	.350	.377	.491	.394	.567	1.000	.339	.426	.363	.325
	ITEM140	.238	.347	.214	.424	.227	.441	.288	.387	.339	1.000	.485	.640	.340
	ITEM141	.344	.409	.274	.526	.345	.511	.345	.446	.426	.485	1.000	.483	.343
	ITEM142	.264	.343	.228	.422	.263	.449	.317	.402	.363	.640	.483	1.000	.347
	ITEM143	.277	.243	.222	.283	.271	.330	.306	.325	.325	.340	.343	.347	1.000
Sig. (1-tailed)	ITEM131		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM132	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM133	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM134	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM135	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM136	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM137	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM138	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM139	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM140	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM141	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM142	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	ITEM143	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .006

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.914
Bartlett's Test of Sphericity	Approx. Chi-Square	19712.009
	df	78
	Sig.	.000

Anti-image Matrices

		ITEM131	ITEM132	ITEM133	ITEM134	ITEM135	ITEM136	ITEM137	ITEM138	ITEM139	ITEM140	ITEM141	ITEM142	ITEM143
Anti-image Covariance	ITEM131	.522	-.071	.017	.008	-.191	-.099	-.118	.016	-.018	.018	-.012	.010	-.031
	ITEM132	-.071	.571	-.105	-.031	.001	-.042	.021	-.155	-.086	-.027	-.030	-.004	.033
	ITEM133	.017	-.105	.762	-.031	-.014	.005	-.007	-.087	-.100	.010	-.008	.001	-.041
	ITEM134	.008	-.031	-.031	.643	-.051	-.028	-.009	-.030	-.002	-.059	-.161	-.050	-.019
	ITEM135	-.191	.001	-.014	-.051	.527	-.054	-.156	.022	-.033	.026	-.019	.002	-.020
	ITEM136	-.099	-.042	.005	-.028	-.054	.505	-.057	-.034	-.065	-.054	-.081	-.045	-.011
	ITEM137	-.118	.021	-.007	-.009	-.156	-.057	.575	-.028	-.040	-.013	.000	-.024	-.048
	ITEM138	.016	-.155	-.087	-.030	.022	-.034	-.028	.520	-.138	-.021	-.041	-.032	-.046
	ITEM139	-.018	-.086	-.100	-.002	-.033	-.065	-.040	-.138	.542	.005	-.031	-.014	-.044
	ITEM140	.018	-.027	.010	-.059	.026	-.054	-.013	-.021	.005	.522	-.069	-.236	-.058
	ITEM141	-.012	-.030	-.008	-.161	-.019	-.081	.000	-.041	-.031	-.069	.544	-.057	-.046
	ITEM142	.010	-.004	.001	-.050	.002	-.045	-.024	-.032	-.014	-.236	-.057	.519	-.054
	ITEM143	-.031	.033	-.041	-.019	-.020	-.011	-.048	-.046	-.044	-.058	-.046	-.054	.777
Anti-image Correlation	ITEM131	.879[a]	-.129	.027	.014	-.364	-.192	-.216	.031	-.034	.034	-.023	.019	-.049
	ITEM132	-.129	.918[a]	-.160	-.051	.001	-.078	.037	-.285	-.155	-.050	-.054	-.007	.050
	ITEM133	.027	-.160	.929[a]	-.045	-.023	.008	-.011	-.138	-.155	.016	-.012	.001	-.053
	ITEM134	.014	-.051	-.045	.937[a]	-.087	-.049	-.014	-.051	-.003	-.102	-.272	-.087	-.026
	ITEM135	-.364	.001	-.023	-.087	.875[a]	-.105	-.284	.042	-.063	.050	-.035	.004	-.031
	ITEM136	-.192	-.078	.008	-.049	-.105	.948[a]	-.105	-.066	-.125	-.106	-.154	-.088	-.018
	ITEM137	-.216	.037	-.011	-.014	-.284	-.105	.917[a]	-.051	-.072	-.024	-.001	-.045	-.072
	ITEM138	.031	-.285	-.138	-.051	.042	-.066	-.051	.913[a]	-.260	-.040	-.078	-.061	-.073
	ITEM139	-.034	-.155	-.155	-.003	-.063	-.125	-.072	-.260	.933[a]	.009	-.057	-.027	-.067
	ITEM140	.034	-.050	.016	-.102	.050	-.106	-.024	-.040	.009	.871[a]	-.130	-.453	-.091
	ITEM141	-.023	-.054	-.012	-.272	-.035	-.154	-.001	-.078	-.057	-.130	.935[a]	-.108	-.072
	ITEM142	.019	-.007	.001	-.087	.004	-.088	-.045	-.061	-.027	-.453	-.108	.882[a]	-.085
	ITEM143	-.049	.050	-.053	-.026	-.031	-.018	-.072	-.073	-.067	-.091	-.072	-.085	.961[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

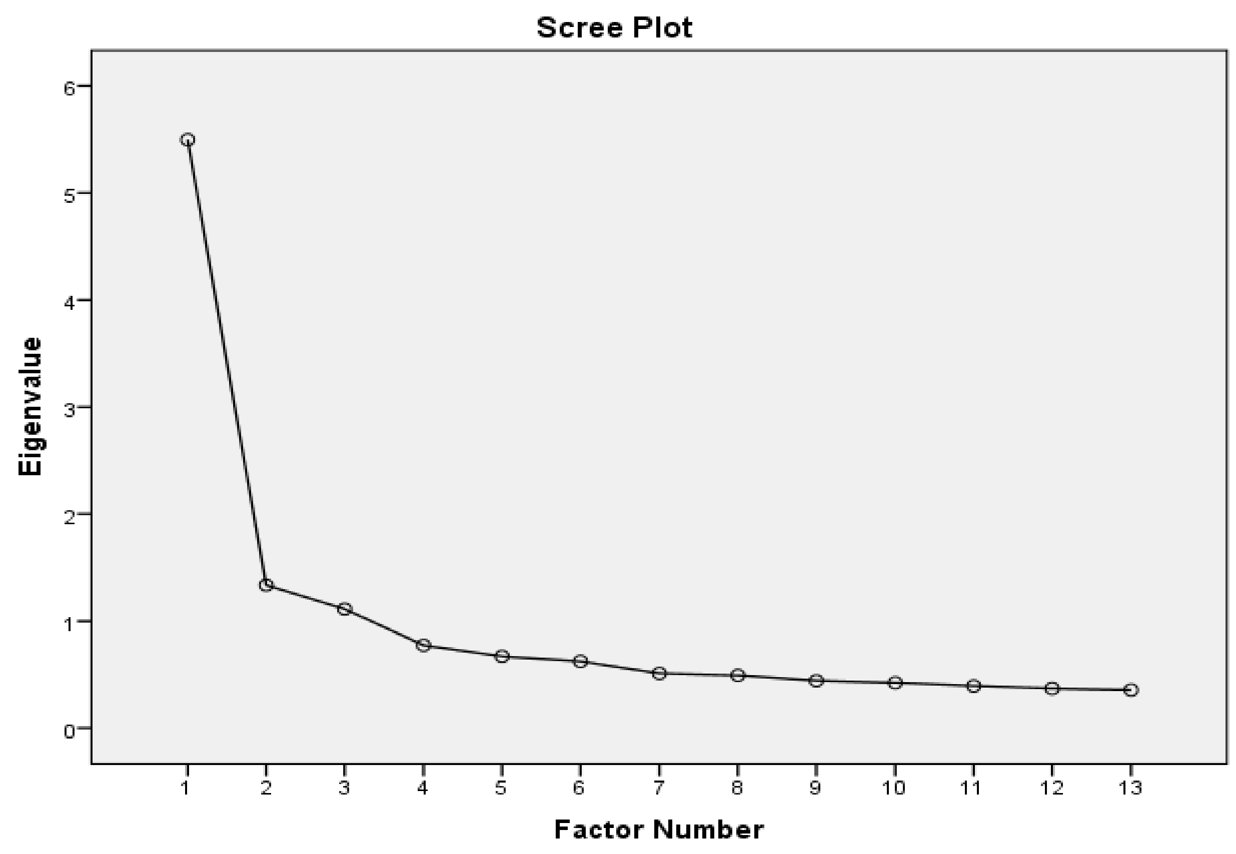
	Initial	Extraction
ITEM131	.478	.351
ITEM132	.429	.400
ITEM133	.238	.199
ITEM134	.357	.351
ITEM135	.473	.337
ITEM136	.495	.542
ITEM137	.425	.358
ITEM138	.480	.449
ITEM139	.458	.460
ITEM140	.478	.360
ITEM141	.456	.466
ITEM142	.481	.385
ITEM143	.223	.235

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.496	42.279	42.279	4.892	37.632	37.632
2	1.336	10.281	52.560			
3	1.113	8.559	61.119			
4	.774	5.950	67.069			
5	.670	5.157	72.226			
6	.624	4.798	77.024			
7	.511	3.930	80.954			
8	.493	3.789	84.742			
9	.442	3.399	88.141			
10	.423	3.252	91.394			
11	.393	3.026	94.420			
12	.370	2.843	97.263			
13	.356	2.737	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor 1
ITEM136	.736
ITEM141	.683
ITEM139	.678
ITEM138	.670
ITEM132	.632
ITEM142	.620
ITEM140	.600
ITEM137	.598
ITEM134	.592
ITEM131	.592
ITEM135	.580
ITEM143	.485
ITEM133	.446

Extraction Method: Principal Axis Factoring.

a. 1 factors

extracted. 4
iterations required.

Reproduced Correlations

		ITEM131	ITEM132	ITEM133	ITEM134	ITEM135	ITEM136	ITEM137	ITEM138	ITEM139	ITEM140	ITEM141	ITEM142	ITEM143
Reproduced Correlation	ITEM131	.351[a]	.374	.264	.351	.344	.436	.354	.397	.402	.355	.404	.367	.287
	ITEM132	.374	.400[a]	.282	.374	.367	.465	.378	.424	.429	.379	.432	.392	.307
	ITEM133	.264	.282	.199[a]	.264	.259	.329	.267	.299	.303	.268	.305	.277	.217
	ITEM134	.351	.374	.264	.351[a]	.344	.436	.354	.397	.402	.355	.404	.367	.287
	ITEM135	.344	.367	.259	.344	.337[a]	.427	.347	.389	.394	.348	.396	.360	.282
	ITEM136	.436	.465	.329	.436	.427	.542[a]	.440	.493	.499	.441	.503	.457	.357
	ITEM137	.354	.378	.267	.354	.347	.440	.358[a]	.401	.406	.359	.409	.371	.290
	ITEM138	.397	.424	.299	.397	.389	.493	.401	.449[a]	.454	.402	.457	.416	.325
	ITEM139	.402	.429	.303	.402	.394	.499	.406	.454	.460[a]	.407	.463	.421	.329
	ITEM140	.355	.379	.268	.355	.348	.441	.359	.402	.407	.360[a]	.410	.372	.291
	ITEM141	.404	.432	.305	.404	.396	.503	.409	.457	.463	.410	.466[a]	.424	.331
	ITEM142	.367	.392	.277	.367	.360	.457	.371	.416	.421	.372	.424	.385[a]	.301
	ITEM143	.287	.307	.217	.287	.282	.357	.290	.325	.329	.291	.331	.301	.235[a]
Residual[b]	ITEM131		-.002	-.060	-.064	.266	.075	.183	-.089	-.020	-.117	-.061	-.104	-.010
	ITEM132	-.002		.114	-.018	-.056	-.019	-.072	.140	.079	-.033	-.023	-.049	-.064
	ITEM133	-.060	.114		-.009	-.044	-.052	-.046	.108	.101	-.054	-.031	-.049	.006
	ITEM134	-.064	-.018	-.009		-.020	-.021	-.049	-.016	-.052	.069	.122	.055	-.004
	ITEM135	.266	-.056	-.044	-.020		.047	.214	-.103	-.017	-.121	-.051	-.097	-.010
	ITEM136	.075	-.019	-.052	-.021	.047		.034	-.038	-.008	.000	.008	-.007	-.027
	ITEM137	.183	-.072	-.046	-.049	.214	.034		-.062	-.012	-.070	-.064	-.054	.015
	ITEM138	-.089	.140	.108	-.016	-.103	-.038	-.062		.112	-.014	-.011	-.014	.000
	ITEM139	-.020	.079	.101	-.052	-.017	-.008	-.012	.112		-.068	-.038	-.057	-.004
	ITEM140	-.117	-.033	-.054	.069	-.121	.000	-.070	-.014	-.068		.075	.268	.049
	ITEM141	-.061	-.023	-.031	.122	-.051	.008	-.064	-.011	-.038	.075		.059	.011
	ITEM142	-.104	-.049	-.049	.055	-.097	-.007	-.054	-.014	-.057	.268	.059		.046
	ITEM143	-.010	-.064	.006	-.004	-.010	-.027	.015	.000	-.004	.049	.011	.046	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 38 (48.0%) nonredundant residuals with absolute values greater than 0.05.

17. TRADITIONALISM-RELIGIOSITY

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM144	3.37	.992	3912
ITEM145	3.59	1.255	3912
ITEM146	4.00	.810	3912
ITEM147	3.53	1.288	3912

Correlation Matrix[a]

		ITEM144	ITEM145	ITEM146	ITEM147
Correlation	ITEM144	1.000	.306	.517	.325
	ITEM145	.306	1.000	.344	.722
	ITEM146	.517	.344	1.000	.376
	ITEM147	.325	.722	.376	1.000
Sig. (1-tailed)	ITEM144		.000	.000	.000
	ITEM145	.000		.000	.000
	ITEM146	.000	.000		.000
	ITEM147	.000	.000	.000	

a. Determinant = .288

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.645
Bartlett's Test of Sphericity	Approx. Chi-Square	4865.516
	df	6
	Sig.	.000

Anti-image Matrices

		ITEM144	ITEM145	ITEM146	ITEM147
Anti-image Covariance	ITEM144	.710	-.039	-.308	-.043
	ITEM145	-.039	.470	-.040	-.312
	ITEM146	-.308	-.040	.681	-.079
	ITEM147	-.043	-.312	-.079	.457
Anti-image Correlation	ITEM144	.693[a]	-.067	-.443	-.076
	ITEM145	-.067	.613[a]	-.071	-.673
	ITEM146	-.443	-.071	.703[a]	-.142
	ITEM147	-.076	-.673	-.142	.616[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

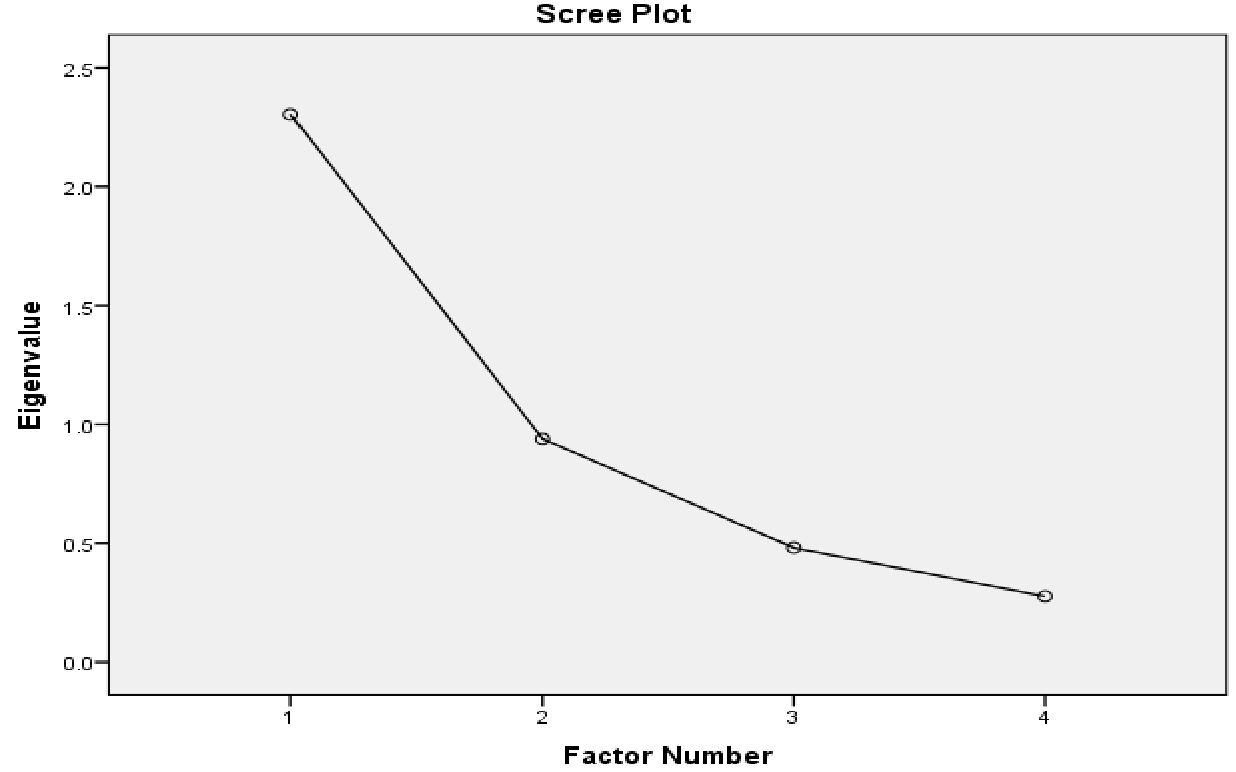
	Initial	Extraction
ITEM144	.290	.259
ITEM145	.530	.584
ITEM146	.319	.309
ITEM147	.543	.645

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.303	57.578	57.578	1.797	44.924	44.924
2	.939	23.473	81.051			
3	.481	12.028	93.079			
4	.277	6.921	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM147	.803
ITEM145	.764
ITEM146	.556
ITEM144	.509

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 9 iterations required.

Reproduced Correlations

		ITEM144	ITEM145	ITEM146	ITEM147
Reproduced Correlation	ITEM144	.259[a]	.389	.283	.409
	ITEM145	.389	.584[a]	.425	.614
	ITEM146	.283	.425	.309[a]	.447
	ITEM147	.409	.614	.447	.645[a]
Residual[b]	ITEM144		-.082	.234	-.084
	ITEM145	-.082		-.081	.108
	ITEM146	.234	-.081		-.071
	ITEM147	-.084	.108	-.071	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 6 (100.0%) nonredundant residuals with absolute values greater than 0.05.

TWO FACTORS EXTRACTED

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM144	3.37	.992	3912
ITEM145	3.59	1.255	3912
ITEM146	4.00	.810	3912
ITEM147	3.53	1.288	3912

Correlation Matrix[a]

		ITEM144	ITEM145	ITEM146	ITEM147
Correlation	ITEM144	1.000	.306	.517	.325
	ITEM145	.306	1.000	.344	.722
	ITEM146	.517	.344	1.000	.376
	ITEM147	.325	.722	.376	1.000
Sig. (1-tailed)	ITEM144		.000	.000	.000
	ITEM145	.000		.000	.000
	ITEM146	.000	.000		.000
	ITEM147	.000	.000	.000	

a. Determinant = .288

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.645
Bartlett's Test of Sphericity	Approx. Chi-Square	4865.516
	df	6
	Sig.	.000

Anti-image Matrices

		ITEM144	ITEM145	ITEM146	ITEM147
Anti-image Covariance	ITEM144	.710	-.039	-.308	-.043
	ITEM145	-.039	.470	-.040	-.312
	ITEM146	-.308	-.040	.681	-.079
	ITEM147	-.043	-.312	-.079	.457
Anti-image Correlation	ITEM144	.693[a]	-.067	-.443	-.076
	ITEM145	-.067	.613[a]	-.071	-.673
	ITEM146	-.443	-.071	.703[a]	-.142
	ITEM147	-.076	-.673	-.142	.616[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM144	.290	.499
ITEM145	.530	.711
ITEM146	.319	.537
ITEM147	.543	.734

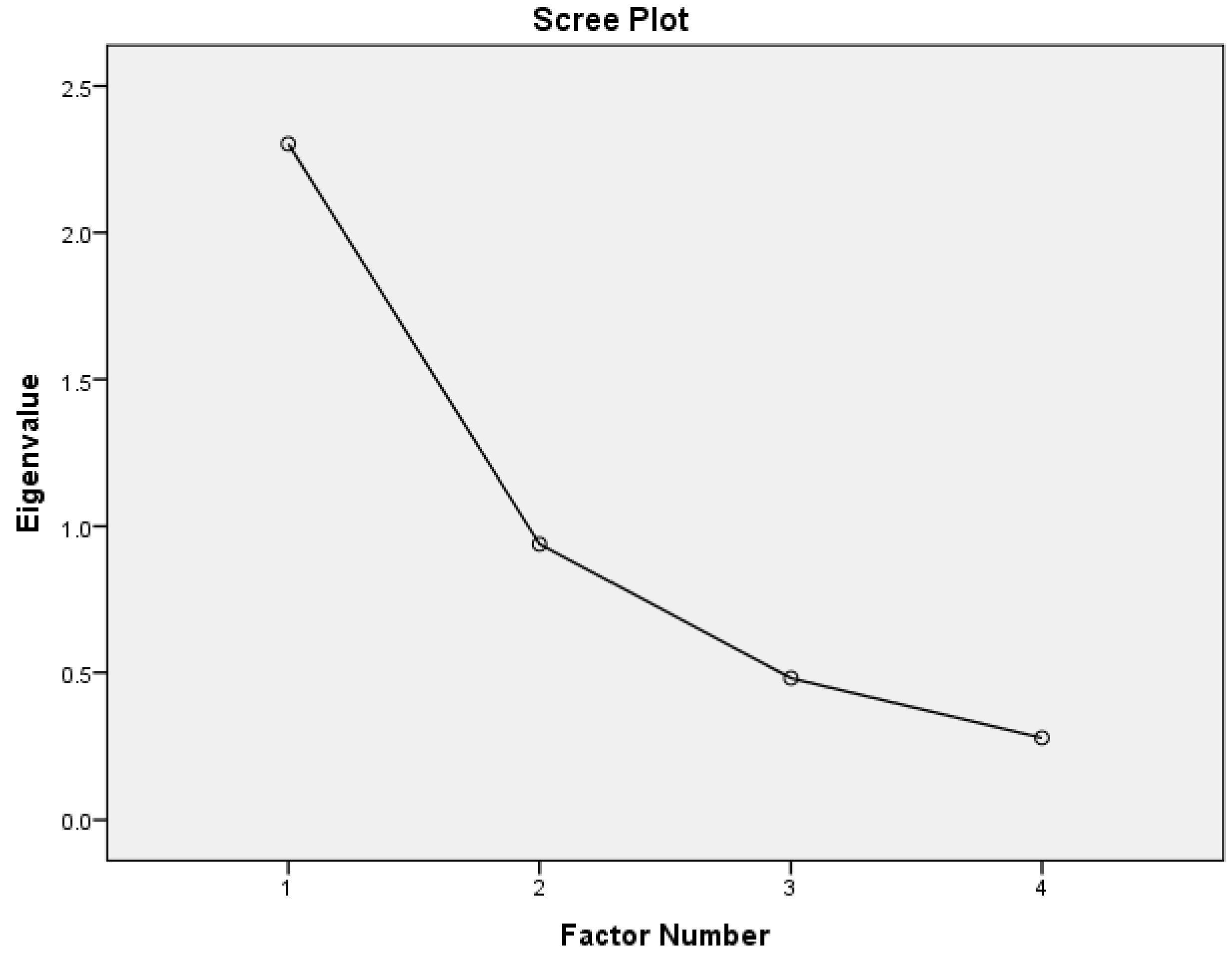
Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	2.303	57.578	57.578	1.946	48.655	48.655	1.760
2	.939	23.473	81.051	.534	13.353	62.008	1.471
3	.481	12.028	93.079				
4	.277	6.921	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor Matrix[a]

	Factor	
	1	2
ITEM147	.805	-.295
ITEM145	.780	-.320
ITEM146	.611	.404
ITEM144	.563	.426

Extraction Method: Principal Axis Factoring.

a. 2 factors extracted. 9 iterations required.

Reproduced Correlations

		ITEM144	ITEM145	ITEM146	ITEM147
Reproduced Correlation	ITEM144	.499[a]	.303	.516	.328
	ITEM145	.303	.711[a]	.347	.722
	ITEM146	.516	.347	.537[a]	.372
	ITEM147	.328	.722	.372	.734[a]
Residual[b]	ITEM144		.003	.000	-.003
	ITEM145	.003		-.003	.000
	ITEM146	.000	-.003		.003
	ITEM147	-.003	.000	.003	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 0 (.0%) nonredundant residuals with absolute values greater than 0.05.

Pattern Matrix[a]

	Factor	
	1	2
ITEM145	.853	-.018
ITEM147	.845	.021
ITEM144	-.024	.719
ITEM146	.030	.716

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Rotation converged in 4 iterations.

Structure Matrix

	Factor	
	1	2
ITEM147	.857	.485
ITEM145	.843	.450
ITEM146	.422	.732
ITEM144	.370	.706

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Factor Correlation Matrix

Factor	1	2
1	1.000	.548
2	.548	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

18. BROADMINDEDNESS

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM148	3.94	.902	3912
ITEM149	3.88	.909	3912
ITEM150	4.20	.661	3912
ITEM151	3.96	.820	3912
ITEM152	3.68	.835	3912
ITEM153	4.37	.703	3912

Correlation Matrix[a]

		ITEM148	ITEM149	ITEM150	ITEM151	ITEM152	ITEM153
Correlation	ITEM148	1.000	.298	.317	.306	.516	.195
	ITEM149	.298	1.000	.493	.336	.336	.448
	ITEM150	.317	.493	1.000	.350	.382	.425
	ITEM151	.306	.336	.350	1.000	.382	.277
	ITEM152	.516	.336	.382	.382	1.000	.201
	ITEM153	.195	.448	.425	.277	.201	1.000
Sig. (1-tailed)	ITEM148		.000	.000	.000	.000	.000
	ITEM149	.000		.000	.000	.000	.000
	ITEM150	.000	.000		.000	.000	.000
	ITEM151	.000	.000	.000		.000	.000
	ITEM152	.000	.000	.000	.000		.000
	ITEM153	.000	.000	.000	.000	.000	

a. Determinant = .254

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.793
Bartlett's Test of Sphericity	Approx. Chi-Square	5354.763
	df	15
	Sig.	.000

Anti-image Matrices

		ITEM148	ITEM149	ITEM150	ITEM151	ITEM152	ITEM153
Anti-image Covariance	ITEM148	.704	-.053	-.050	-.065	-.272	-.013
	ITEM149	-.053	.652	-.183	-.081	-.061	-.195
	ITEM150	-.050	-.183	.643	-.084	-.106	-.164
	ITEM151	-.065	-.081	-.084	.771	-.143	-.076
	ITEM152	-.272	-.061	-.106	-.143	.643	.028
	ITEM153	-.013	-.195	-.164	-.076	.028	.736
Anti-image Correlation	ITEM148	.762[a]	-.078	-.074	-.088	-.404	-.018
	ITEM149	-.078	.803[a]	-.282	-.114	-.095	-.281
	ITEM150	-.074	-.282	.812[a]	-.119	-.165	-.238
	ITEM151	-.088	-.114	-.119	.865[a]	-.203	-.101
	ITEM152	-.404	-.095	-.165	-.203	.746[a]	.041
	ITEM153	-.018	-.281	-.238	-.101	.041	.784[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM148	.296	.394
ITEM149	.348	.502
ITEM150	.357	.484
ITEM151	.229	.283
ITEM152	.357	.682
ITEM153	.264	.422

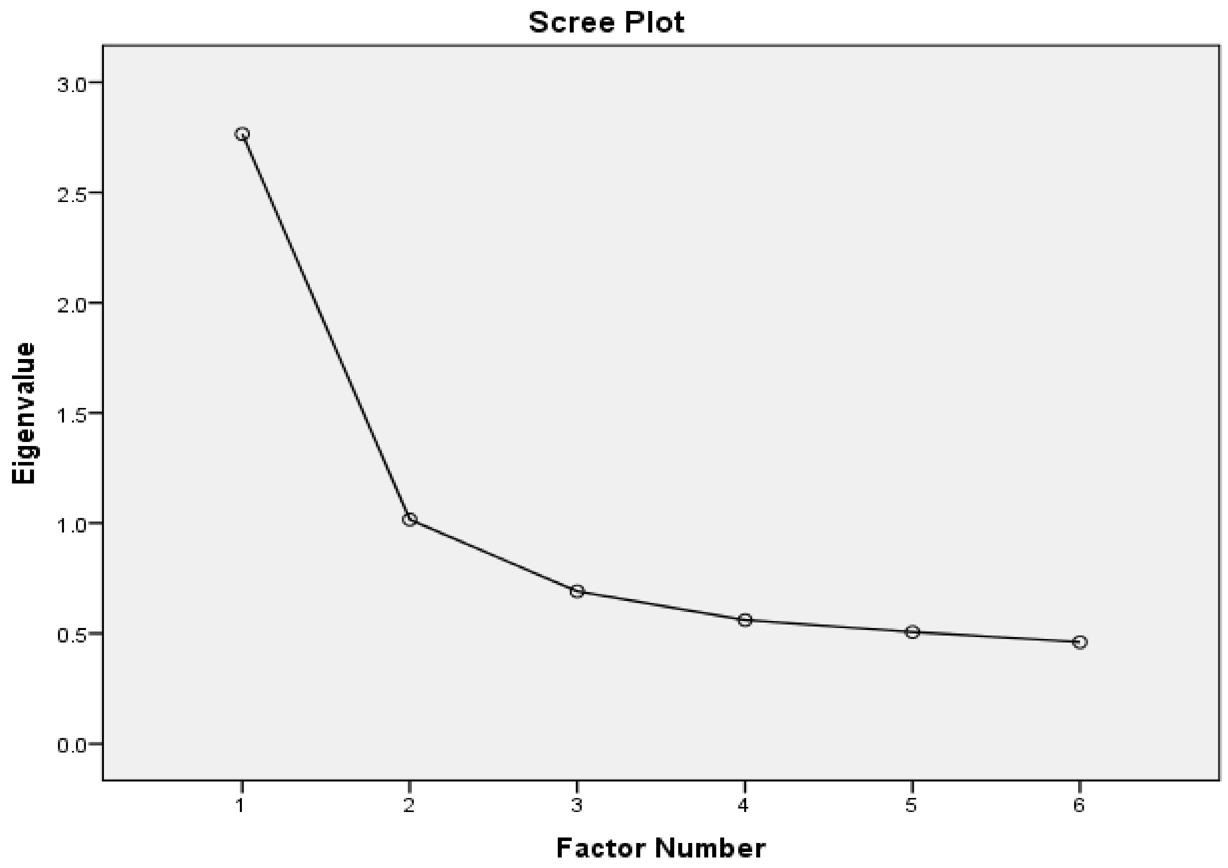
Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	2.765	46.078	46.078	2.241	37.358	37.358	1.904
2	1.016	16.938	63.017	.526	8.760	46.118	1.806
3	.691	11.518	74.534				
4	.561	9.344	83.878				
5	.507	8.444	92.322				
6	.461	7.678	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor Matrix[a]

	Factor	
	1	2
ITEM152	.690	-.454
ITEM150	.671	.184
ITEM149	.659	.259
ITEM148	.559	-.287
ITEM153	.536	.367
ITEM151	.530	-.034

Extraction Method: Principal Axis Factoring.

a. Attempted to extract 2 factors. More than 25 iterations required. (Convergence=.002). Extraction was terminated.

Reproduced Correlations

		ITEM148	ITEM149	ITEM150	ITEM151	ITEM152	ITEM153
Reproduced Correlation	ITEM148	.394[a]	.294	.322	.306	.515	.194
	ITEM149	.294	.502[a]	.490	.341	.337	.449
	ITEM150	.322	.490	.484[a]	.350	.379	.427
	ITEM151	.306	.341	.350	.283[a]	.381	.272
	ITEM152	.515	.337	.379	.381	.682[a]	.203
	ITEM153	.194	.449	.427	.272	.203	.422[a]
Residual[b]	ITEM148		.004	-.005	.000	.000	.001
	ITEM149	.004		.003	-.005	-.001	-.001
	ITEM150	-.005	.003		.000	.003	-.002
	ITEM151	.000	-.005	.000		.001	.005
	ITEM152	.000	-.001	.003	.001		-.002
	ITEM153	.001	-.001	-.002	.005	-.002	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 0 (.0%) nonredundant residuals with absolute values greater than 0.05.

Pattern Matrix[a]

	Factor	
	1	2
ITEM153	.704	.110
ITEM149	.666	-.072
ITEM150	.596	-.159
ITEM152	-.054	-.854
ITEM148	.040	-.605
ITEM151	.285	-.318

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Rotation converged in 7 iterations.

Structure Matrix

	Factor	
	1	2
ITEM149	.706	-.439
ITEM150	.683	-.487
ITEM153	.643	-.278
ITEM152	.417	-.825
ITEM148	.374	-.627
ITEM151	.461	-.475

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Factor Correlation Matrix

Factor	1	2
1	1.000	-.551
2	-.551	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

FACTOR MATRIX WHEN FORCING THE EXTRACTION OF A SINGLE FACTOR

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM148	3.94	.902	3912
ITEM149	3.88	.909	3912
ITEM150	4.20	.661	3912
ITEM151	3.96	.820	3912
ITEM152	3.68	.835	3912
ITEM153	4.37	.703	3912

Correlation Matrix[a]

		ITEM148	ITEM149	ITEM150	ITEM151	ITEM152	ITEM153
Correlation	ITEM148	1.000	.298	.317	.306	.516	.195
	ITEM149	.298	1.000	.493	.336	.336	.448
	ITEM150	.317	.493	1.000	.350	.382	.425
	ITEM151	.306	.336	.350	1.000	.382	.277
	ITEM152	.516	.336	.382	.382	1.000	.201
	ITEM153	.195	.448	.425	.277	.201	1.000
Sig. (1-tailed)	ITEM148		.000	.000	.000	.000	.000
	ITEM149	.000		.000	.000	.000	.000
	ITEM150	.000	.000		.000	.000	.000
	ITEM151	.000	.000	.000		.000	.000
	ITEM152	.000	.000	.000	.000		.000
	ITEM153	.000	.000	.000	.000	.000	

a. Determinant = .254

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.793
Bartlett's Test of Sphericity	Approx. Chi-Square	5354.763
	df	15
	Sig.	.000

Anti-image Matrices

		ITEM148	ITEM149	ITEM150	ITEM151	ITEM152	ITEM153
Anti-image Covariance	ITEM148	.704	-.053	-.050	-.065	-.272	-.013
	ITEM149	-.053	.652	-.183	-.081	-.061	-.195
	ITEM150	-.050	-.183	.643	-.084	-.106	-.164
	ITEM151	-.065	-.081	-.084	.771	-.143	-.076
	ITEM152	-.272	-.061	-.106	-.143	.643	.028
	ITEM153	-.013	-.195	-.164	-.076	.028	.736
Anti-image Correlation	ITEM148	.762[a]	-.078	-.074	-.088	-.404	-.018
	ITEM149	-.078	.803[a]	-.282	-.114	-.095	-.281
	ITEM150	-.074	-.282	.812[a]	-.119	-.165	-.238
	ITEM151	-.088	-.114	-.119	.865[a]	-.203	-.101
	ITEM152	-.404	-.095	-.165	-.203	.746[a]	.041
	ITEM153	-.018	-.281	-.238	-.101	.041	.784[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

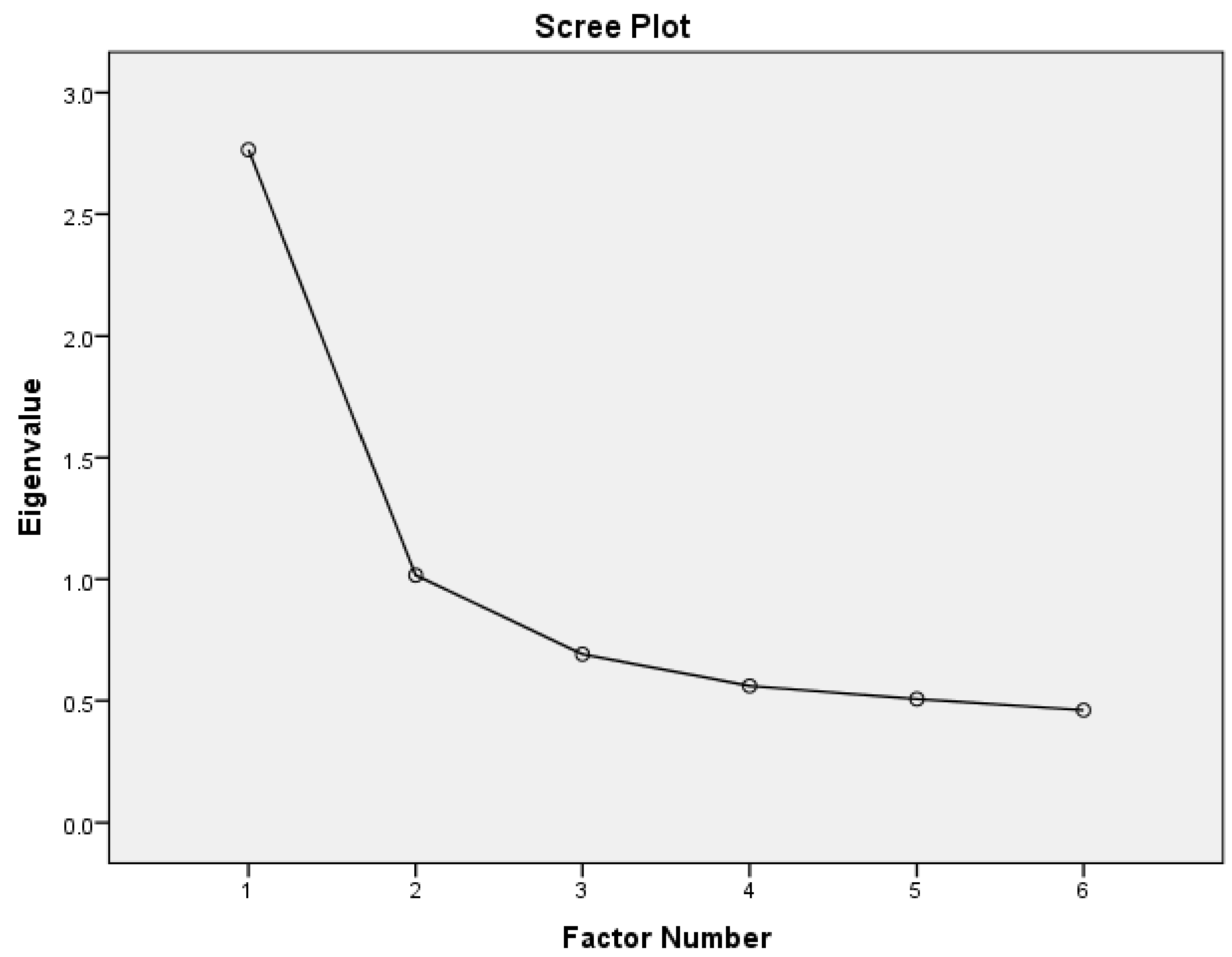
	Initial	Extraction
ITEM148	.296	.293
ITEM149	.348	.433
ITEM150	.357	.469
ITEM151	.229	.299
ITEM152	.357	.373
ITEM153	.264	.268

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.765	46.078	46.078	2.133	35.558	35.558
2	1.016	16.938	63.017			
3	.691	11.518	74.534			
4	.561	9.344	83.878			
5	.507	8.444	92.322			
6	.461	7.678	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM150	.685
ITEM149	.658
ITEM152	.610
ITEM151	.546
ITEM148	.541
ITEM153	.517

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 6 iterations required.

Reproduced Correlations

		ITEM148	ITEM149	ITEM150	ITEM151	ITEM152	ITEM153
Reproduced Correlation	ITEM148	.293[a]	.356	.370	.296	.330	.280
	ITEM149	.356	.433[a]	.451	.360	.402	.340
	ITEM150	.370	.451	.469[a]	.374	.418	.354
	ITEM151	.296	.360	.374	.299[a]	.334	.283
	ITEM152	.330	.402	.418	.334	.373[a]	.316
	ITEM153	.280	.340	.354	.283	.316	.268[a]
Residual[b]	ITEM148		-.058	-.054	.010	.186	-.085
	ITEM149	-.058		.042	-.023	-.066	.107
	ITEM150	-.054	.042		-.025	-.036	.071
	ITEM151	.010	-.023	-.025		.049	-.006
	ITEM152	.186	-.066	-.036	.049		-.115
	ITEM153	-.085	.107	.071	-.006	-.115	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 8 (53.0%) nonredundant residuals with absolute values greater than 0.05.

19. EPISTEMIC CURIOSITY

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM154	4.40	.708	3912
ITEM155	4.28	.715	3912
ITEM156	4.18	.609	3912
ITEM157	4.38	.582	3912
ITEM158	4.32	.568	3912
ITEM159	4.51	.635	3912

Correlation Matrix[a]

		ITEM154	ITEM155	ITEM156	ITEM157	ITEM158	ITEM159
Correlation	ITEM154	1.000	.238	.288	.411	.321	.325
	ITEM155	.238	1.000	.316	.410	.380	.233
	ITEM156	.288	.316	1.000	.395	.428	.265
	ITEM157	.411	.410	.395	1.000	.517	.369
	ITEM158	.321	.380	.428	.517	1.000	.313
	ITEM159	.325	.233	.265	.369	.313	1.000
Sig. (1-tailed)	ITEM154		.000	.000	.000	.000	.000
	ITEM155	.000		.000	.000	.000	.000
	ITEM156	.000	.000		.000	.000	.000
	ITEM157	.000	.000	.000		.000	.000
	ITEM158	.000	.000	.000	.000		.000
	ITEM159	.000	.000	.000	.000	.000	

a. Determinant = .287

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.830
Bartlett's Test of Sphericity	Approx. Chi-Square	4877.472
	df	15
	Sig.	.000

Anti-image Matrices

		ITEM154	ITEM155	ITEM156	ITEM157	ITEM158	ITEM159
Anti-image Covariance	ITEM154	.778	-.025	-.072	-.151	-.053	-.140
	ITEM155	-.025	.777	-.092	-.142	-.115	-.037
	ITEM156	-.072	-.092	.749	-.090	-.162	-.059
	ITEM157	-.151	-.142	-.090	.596	-.186	-.113
	ITEM158	-.053	-.115	-.162	-.186	.642	-.068
	ITEM159	-.140	-.037	-.059	-.113	-.068	.807
Anti-image Correlation	ITEM154	.844[a]	-.032	-.094	-.221	-.075	-.177
	ITEM155	-.032	.856[a]	-.121	-.209	-.163	-.047
	ITEM156	-.094	-.121	.853[a]	-.135	-.233	-.076
	ITEM157	-.221	-.209	-.135	.797[a]	-.301	-.163
	ITEM158	-.075	-.163	-.233	-.301	.811[a]	-.094
	ITEM159	-.177	-.047	-.076	-.163	-.094	.862[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

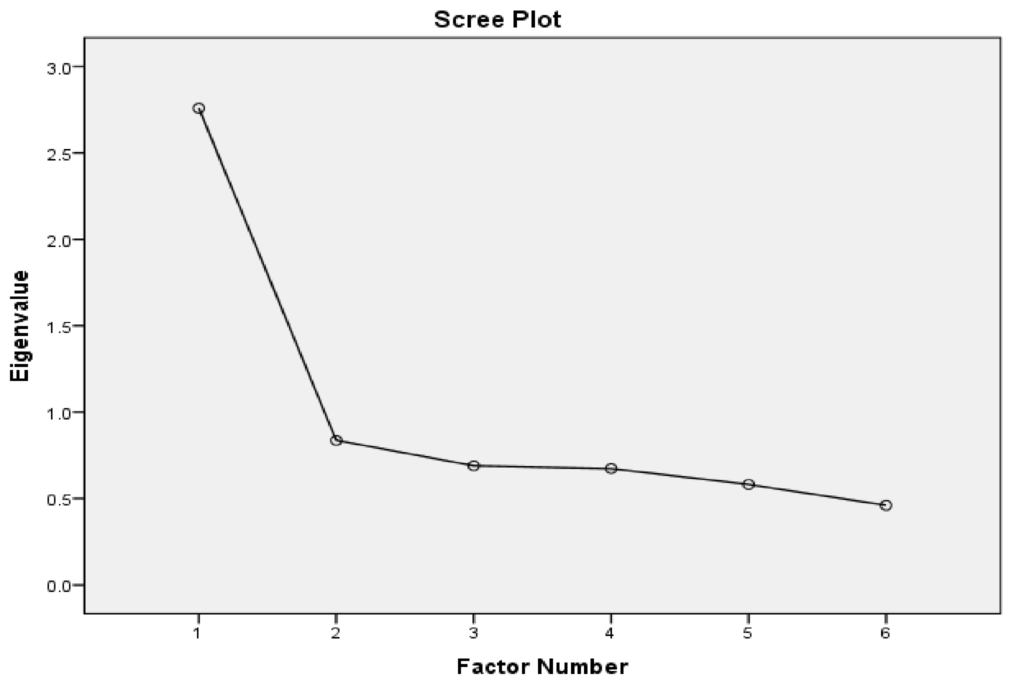
	Initial	Extraction
ITEM154	.222	.271
ITEM155	.223	.278
ITEM156	.251	.323
ITEM157	.404	.564
ITEM158	.358	.472
ITEM159	.193	.240

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.758	45.974	45.974	2.149	35.809	35.809
2	.836	13.941	59.914			
3	.690	11.494	71.409			
4	.673	11.214	82.622			
5	.582	9.695	92.317			
6	.461	7.683	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor
	1
ITEM157	.751
ITEM158	.687
ITEM156	.568
ITEM155	.527
ITEM154	.520
ITEM159	.490

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 7 iterations required.

Reproduced Correlations

		ITEM154	ITEM155	ITEM156	ITEM157	ITEM158	ITEM159
Reproduced Correlation	ITEM154	.271[a]	.275	.296	.391	.358	.255
	ITEM155	.275	.278[a]	.300	.396	.363	.258
	ITEM156	.296	.300	.323[a]	.427	.390	.278
	ITEM157	.391	.396	.427	.564[a]	.516	.368
	ITEM158	.358	.363	.390	.516	.472[a]	.337
	ITEM159	.255	.258	.278	.368	.337	.240[a]
Residual[b]	ITEM154		-.037	-.008	.020	-.037	.070
	ITEM155	-.037		.016	.014	.018	-.025
	ITEM156	-.008	.016		-.031	.037	-.013
	ITEM157	.020	.014	-.031		.001	.001
	ITEM158	-.037	.018	.037	.001		-.024
	ITEM159	.070	-.025	-.013	.001	-.024	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 1 (6.0%) nonredundant residuals with absolute values greater than 0.05.

20. **INTELLECT**

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM160	4.31	.678	3912
ITEM161	3.96	.750	3912
ITEM162	3.93	.788	3912
ITEM163	4.02	.693	3912
ITEM164	3.48	1.029	3912
ITEM165	4.21	.677	3912
ITEM166	3.76	.657	3912
ITEM167	3.89	.727	3912
ITEM168	3.74	.748	3912
ITEM169	4.20	.615	3912
ITEM170	3.96	.738	3912

Correlation Matrix[a]

		ITEM160	ITEM161	ITEM162	ITEM163	ITEM164	ITEM165	ITEM166	ITEM167	ITEM168	ITEM169	ITEM170
Correlation	ITEM160	1.000	.329	.268	.534	.226	.228	.238	.292	.314	.202	.274
	ITEM161	.329	1.000	.311	.413	.219	.182	.264	.254	.316	.167	.216
	ITEM162	.268	.311	1.000	.325	.292	.224	.258	.329	.492	.248	.244
	ITEM163	.534	.413	.325	1.000	.257	.250	.341	.355	.386	.214	.311
	ITEM164	.226	.219	.292	.257	1.000	.211	.276	.376	.294	.158	.262
	ITEM165	.228	.182	.224	.250	.211	1.000	.361	.288	.286	.304	.214
	ITEM166	.238	.264	.258	.341	.276	.361	1.000	.329	.351	.292	.269
	ITEM167	.292	.254	.329	.355	.376	.288	.329	1.000	.375	.280	.293
	ITEM168	.314	.316	.492	.386	.294	.286	.351	.375	1.000	.292	.375
	ITEM169	.202	.167	.248	.214	.158	.304	.292	.280	.292	1.000	.253
	ITEM170	.274	.216	.244	.311	.262	.214	.269	.293	.375	.253	1.000
Sig. (1-tailed)	ITEM160		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM161	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM162	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM163	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM164	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM165	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM166	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM167	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM168	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM169	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000

ITEM170	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .087

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.880
Bartlett's Test of Sphericity	Approx. Chi-Square	9520.090
	df	55
	Sig.	.000

Anti-image Matrices

		ITEM160	ITEM161	ITEM162	ITEM163	ITEM164	ITEM165	ITEM166	ITEM167	ITEM168	ITEM169	ITEM170
Anti-image Covariance	ITEM160	.676	-.072	-.019	-.241	-.027	-.040	.015	-.034	-.026	-.028	-.052
	ITEM161	-.072	.766	-.086	-.139	-.033	-.002	-.054	-.016	-.047	-.002	-.013
	ITEM162	-.019	-.086	.694	-.035	-.080	-.016	-.001	-.058	-.209	-.055	.005
	ITEM163	-.241	-.139	-.035	.588	-.008	-.016	-.079	-.065	-.054	.007	-.053
	ITEM164	-.027	-.033	-.080	-.008	.789	-.031	-.071	-.161	-.029	.026	-.077
	ITEM165	-.040	-.002	-.016	-.016	-.031	.789	-.156	-.063	-.043	-.130	-.017
	ITEM166	.015	-.054	-.001	-.079	-.071	-.156	.728	-.063	-.070	-.088	-.043
	ITEM167	-.034	-.016	-.058	-.065	-.161	-.063	-.063	.701	-.064	-.076	-.050
	ITEM168	-.026	-.047	-.209	-.054	-.029	-.043	-.070	-.064	.613	-.052	-.124
	ITEM169	-.028	-.002	-.055	.007	.026	-.130	-.088	-.076	-.052	.813	-.080
	ITEM170	-.052	-.013	.005	-.053	-.077	-.017	-.043	-.050	-.124	-.080	.781
Anti-image Correlation	ITEM160	.843[a]	-.100	-.028	-.383	-.036	-.055	.021	-.049	-.040	-.038	-.072
	ITEM161	-.100	.906[a]	-.118	-.207	-.042	-.003	-.072	-.022	-.068	-.003	-.016
	ITEM162	-.028	-.118	.867[a]	-.054	-.107	-.021	-.001	-.083	-.321	-.073	.007
	ITEM163	-.383	-.207	-.054	.841[a]	-.012	-.023	-.121	-.101	-.089	.010	-.078
	ITEM164	-.036	-.042	-.107	-.012	.891[a]	-.039	-.094	-.216	-.041	.032	-.098
	ITEM165	-.055	-.003	-.021	-.023	-.039	.888[a]	-.205	-.085	-.062	-.163	-.022
	ITEM166	.021	-.072	-.001	-.121	-.094	-.205	.895[a]	-.088	-.104	-.115	-.057
	ITEM167	-.049	-.022	-.083	-.101	-.216	-.085	-.088	.906[a]	-.098	-.101	-.067
	ITEM168	-.040	-.068	-.321	-.089	-.041	-.062	-.104	-.098	.873[a]	-.073	-.180
	ITEM169	-.038	-.003	-.073	.010	.032	-.163	-.115	-.101	-.073	.892[a]	-.101
	ITEM170	-.072	-.016	.007	-.078	-.098	-.022	-.057	-.067	-.180	-.101	.913[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
ITEM160	.324	.419
ITEM161	.234	.277
ITEM162	.306	.316
ITEM163	.412	.656
ITEM164	.211	.233
ITEM165	.211	.249
ITEM166	.272	.323
ITEM167	.299	.362
ITEM168	.387	.445
ITEM169	.187	.234
ITEM170	.219	.250

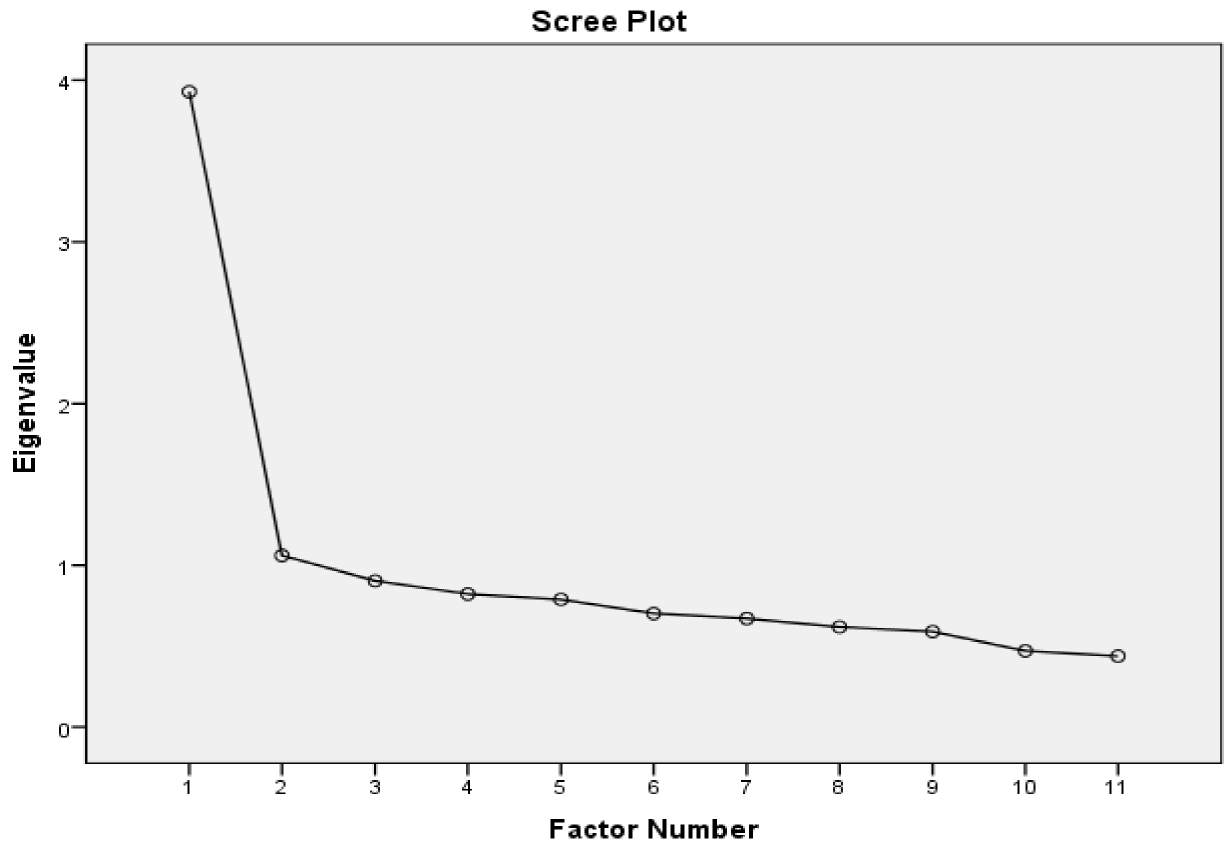
Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3.928	35.709	35.709	3.297	29.974	29.974	3.052
2	1.061	9.646	45.355	.469	4.260	34.234	2.570
3	.904	8.222	53.577				
4	.823	7.480	61.057				
5	.789	7.175	68.232				
6	.703	6.387	74.619				
7	.671	6.103	80.722				
8	.619	5.632	86.354				
9	.591	5.370	91.724				
10	.472	4.287	96.011				
11	.439	3.989	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor Matrix[a]

	Factor	
	1	2
ITEM163	.689	-.426
ITEM168	.656	.124
ITEM167	.587	.132
ITEM160	.565	-.317
ITEM162	.556	.085
ITEM166	.547	.155
ITEM161	.500	-.165
ITEM170	.496	.068
ITEM164	.469	.113
ITEM165	.462	.188
ITEM169	.437	.207

Extraction Method: Principal Axis Factoring.

a. 2 factors extracted. 19 iterations required.

Reproduced Correlations

		ITEM160	ITEM161	ITEM162	ITEM163	ITEM164	ITEM165	ITEM166	ITEM167	ITEM168	ITEM169	ITEM170
Reproduced Correlation	ITEM160	.419[a]	.335	.287	.524	.229	.202	.260	.289	.331	.181	.258
	ITEM161	.335	.277[a]	.264	.415	.216	.200	.248	.272	.308	.184	.237
	ITEM162	.287	.264	.316[a]	.347	.270	.273	.317	.337	.375	.261	.281
	ITEM163	.524	.415	.347	.656[a]	.275	.239	.311	.348	.399	.213	.312
	ITEM164	.229	.216	.270	.275	.233[a]	.238	.274	.290	.322	.229	.240
	ITEM165	.202	.200	.273	.239	.238	.249[a]	.282	.296	.326	.241	.242
	ITEM166	.260	.248	.317	.311	.274	.282	.323[a]	.341	.378	.271	.281
	ITEM167	.289	.272	.337	.348	.290	.296	.341	.362[a]	.401	.284	.300
	ITEM168	.331	.308	.375	.399	.322	.326	.378	.401	.445[a]	.312	.334
	ITEM169	.181	.184	.261	.213	.229	.241	.271	.284	.312	.234[a]	.231
	ITEM170	.258	.237	.281	.312	.240	.242	.281	.300	.334	.231	.250[a]
Residual[b]	ITEM160		-.006	-.019	.010	-.003	.026	-.022	.003	-.017	.021	.016
	ITEM161	-.006		.046	-.002	.003	-.018	.016	-.018	.008	-.017	-.020
	ITEM162	-.019	.046		-.022	.021	-.049	-.059	-.009	.117	-.012	-.037
	ITEM163	.010	-.002	-.022		-.018	.012	.030	.007	-.014	.001	-.002
	ITEM164	-.003	.003	.021	-.018		-.027	.002	.085	-.028	-.071	.022
	ITEM165	.026	-.018	-.049	.012	-.027		.080	-.008	-.040	.063	-.028
	ITEM166	-.022	.016	-.059	.030	.002	.080		-.012	-.027	.021	-.012
	ITEM167	.003	-.018	-.009	.007	.085	-.008	-.012		-.026	-.004	-.007
	ITEM168	-.017	.008	.117	-.014	-.028	-.040	-.027	-.026		-.020	.041
	ITEM169	.021	-.017	-.012	.001	-.071	.063	.021	-.004	-.020		.022
	ITEM170	.016	-.020	-.037	-.002	.022	-.028	-.012	-.007	.041	.022	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 6 (10.0%) nonredundant residuals with absolute values greater than 0.05.

Pattern Matrix[a]

	Factor	
	1	2
ITEM168	.594	-.102
ITEM167	.557	-.063
ITEM166	.556	-.018
ITEM169	.542	.094
ITEM165	.536	.058
ITEM162	.481	-.112
ITEM164	.454	-.040
ITEM170	.420	-.109
ITEM163	-.024	-.826
ITEM160	.018	-.635
ITEM161	.150	-.413

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.[a]
a. Rotation converged in 5 iterations.

Structure Matrix

	Factor	
	1	2
ITEM168	.663	-.503
ITEM167	.600	-.439
ITEM166	.568	-.393
ITEM162	.556	-.436
ITEM165	.497	-.303
ITEM170	.494	-.393
ITEM164	.482	-.347
ITEM169	.479	-.272
ITEM163	.533	-.810
ITEM160	.446	-.647
ITEM161	.429	-.515

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

Factor Correlation Matrix

Factor	1	2
1	1.000	-.674
2	-.674	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

FACTOR MATRIX WHEN FORCING THE EXTRACTION OF A SINGLE FACTOR

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ITEM160	4.31	.678	3912
ITEM161	3.96	.750	3912
ITEM162	3.93	.788	3912
ITEM163	4.02	.693	3912
ITEM164	3.48	1.029	3912
ITEM165	4.21	.677	3912
ITEM166	3.76	.657	3912
ITEM167	3.89	.727	3912
ITEM168	3.74	.748	3912
ITEM169	4.20	.615	3912
ITEM170	3.96	.738	3912

Correlation Matrix[a]

		ITEM160	ITEM161	ITEM162	ITEM163	ITEM164	ITEM165	ITEM166	ITEM167	ITEM168	ITEM169	ITEM170
Correlation	ITEM160	1.000	.329	.268	.534	.226	.228	.238	.292	.314	.202	.274
	ITEM161	.329	1.000	.311	.413	.219	.182	.264	.254	.316	.167	.216
	ITEM162	.268	.311	1.000	.325	.292	.224	.258	.329	.492	.248	.244
	ITEM163	.534	.413	.325	1.000	.257	.250	.341	.355	.386	.214	.311
	ITEM164	.226	.219	.292	.257	1.000	.211	.276	.376	.294	.158	.262
	ITEM165	.228	.182	.224	.250	.211	1.000	.361	.288	.286	.304	.214
	ITEM166	.238	.264	.258	.341	.276	.361	1.000	.329	.351	.292	.269
	ITEM167	.292	.254	.329	.355	.376	.288	.329	1.000	.375	.280	.293
	ITEM168	.314	.316	.492	.386	.294	.286	.351	.375	1.000	.292	.375
	ITEM169	.202	.167	.248	.214	.158	.304	.292	.280	.292	1.000	.253
	ITEM170	.274	.216	.244	.311	.262	.214	.269	.293	.375	.253	1.000
Sig. (1-tailed)	ITEM160		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM161	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	ITEM162	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	ITEM163	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	ITEM164	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	ITEM165	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	ITEM166	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	ITEM167	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	ITEM168	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	ITEM169	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	ITEM170	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

a. Determinant = .087

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.880
Bartlett's Test of Sphericity	Approx. Chi-Square	9520.090
	df	55
	Sig.	.000

Anti-image Matrices

		ITEM160	ITEM161	ITEM162	ITEM163	ITEM164	ITEM165	ITEM166	ITEM167	ITEM168	ITEM169	ITEM170
Anti-image Covariance	ITEM160	.676	-.072	-.019	-.241	-.027	-.040	.015	-.034	-.026	-.028	-.052
	ITEM161	-.072	.766	-.086	-.139	-.033	-.002	-.054	-.016	-.047	-.002	-.013
	ITEM162	-.019	-.086	.694	-.035	-.080	-.016	-.001	-.058	-.209	-.055	.005
	ITEM163	-.241	-.139	-.035	.588	-.008	-.016	-.079	-.065	-.054	.007	-.053
	ITEM164	-.027	-.033	-.080	-.008	.789	-.031	-.071	-.161	-.029	.026	-.077
	ITEM165	-.040	-.002	-.016	-.016	-.031	.789	-.156	-.063	-.043	-.130	-.017
	ITEM166	.015	-.054	-.001	-.079	-.071	-.156	.728	-.063	-.070	-.088	-.043
	ITEM167	-.034	-.016	-.058	-.065	-.161	-.063	-.063	.701	-.064	-.076	-.050
	ITEM168	-.026	-.047	-.209	-.054	-.029	-.043	-.070	-.064	.613	-.052	-.124
	ITEM169	-.028	-.002	-.055	.007	.026	-.130	-.088	-.076	-.052	.813	-.080
	ITEM170	-.052	-.013	.005	-.053	-.077	-.017	-.043	-.050	-.124	-.080	.781
Anti-image Correlation	ITEM160	.843[a]	-.100	-.028	-.383	-.036	-.055	.021	-.049	-.040	-.038	-.072
	ITEM161	-.100	.906[a]	-.118	-.207	-.042	-.003	-.072	-.022	-.068	-.003	-.016
	ITEM162	-.028	-.118	.867[a]	-.054	-.107	-.021	-.001	-.083	-.321	-.073	.007
	ITEM163	-.383	-.207	-.054	.841[a]	-.012	-.023	-.121	-.101	-.089	.010	-.078
	ITEM164	-.036	-.042	-.107	-.012	.891[a]	-.039	-.094	-.216	-.041	.032	-.098
	ITEM165	-.055	-.003	-.021	-.023	-.039	.888[a]	-.205	-.085	-.062	-.163	-.022
	ITEM166	.021	-.072	-.001	-.121	-.094	-.205	.895[a]	-.088	-.104	-.115	-.057
	ITEM167	-.049	-.022	-.083	-.101	-.216	-.085	-.088	.906[a]	-.098	-.101	-.067
	ITEM168	-.040	-.068	-.321	-.089	-.041	-.062	-.104	-.098	.873[a]	-.073	-.180
	ITEM169	-.038	-.003	-.073	.010	.032	-.163	-.115	-.101	-.073	.892[a]	-.101
	ITEM170	-.072	-.016	.007	-.078	-.098	-.022	-.057	-.067	-.180	-.101	.913[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

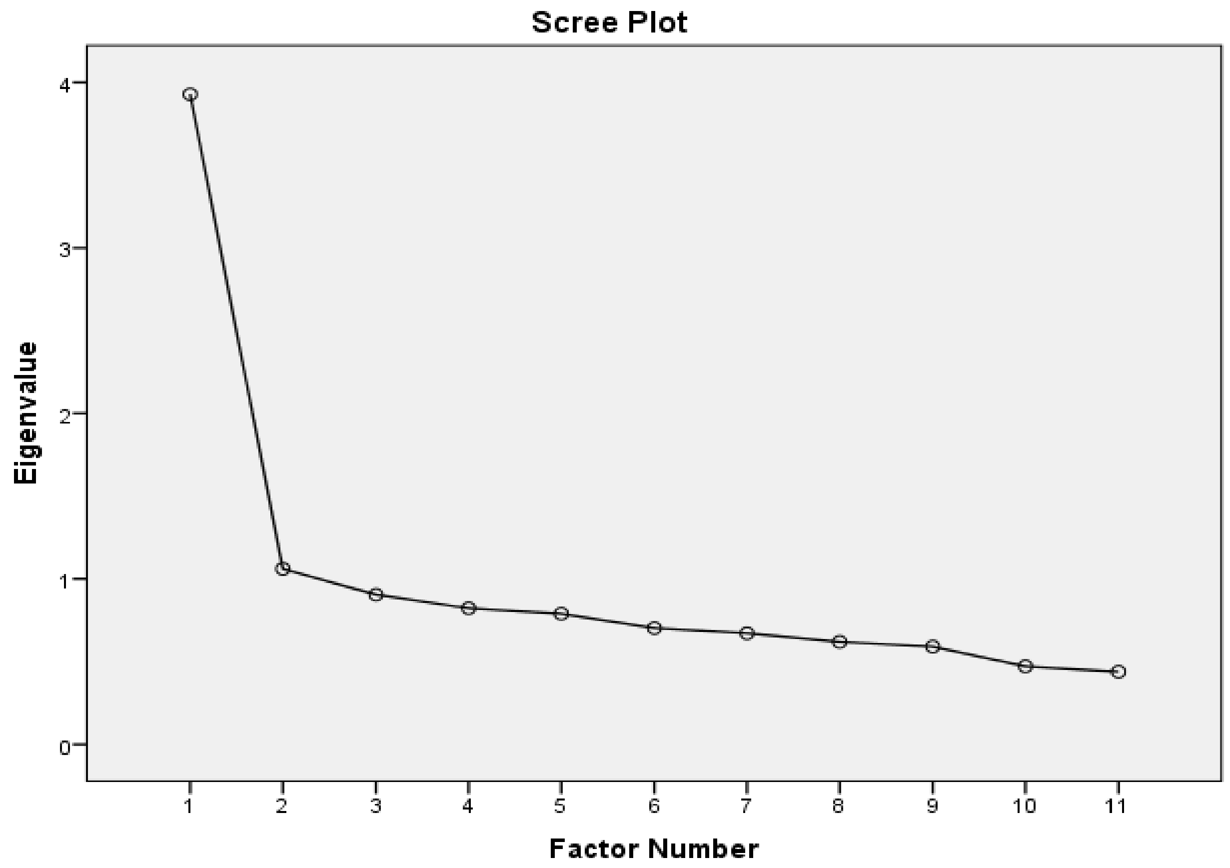
	Initial	Extraction
ITEM160	.324	.298
ITEM161	.234	.249
ITEM162	.306	.316
ITEM163	.412	.414
ITEM164	.211	.224
ITEM165	.211	.214
ITEM166	.272	.301
ITEM167	.299	.348
ITEM168	.387	.437
ITEM169	.187	.191
ITEM170	.219	.250

Extraction Method: Principal Axis Factoring.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.928	35.709	35.709	3.240	29.459	29.459
2	1.061	9.646	45.355			
3	.904	8.222	53.577			
4	.823	7.480	61.057			
5	.789	7.175	68.232			
6	.703	6.387	74.619			
7	.671	6.103	80.722			
8	.619	5.632	86.354			
9	.591	5.370	91.724			
10	.472	4.287	96.011			
11	.439	3.989	100.000			

Extraction Method: Principal Axis Factoring.



Factor Matrix[a]

	Factor 1
ITEM168	.661
ITEM163	.643
ITEM167	.590
ITEM162	.562
ITEM166	.548
ITEM160	.546
ITEM170	.500
ITEM161	.499
ITEM164	.473
ITEM165	.462
ITEM169	.437

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 4 iterations required.

Reproduced Correlations

		ITEM160	ITEM161	ITEM162	ITEM163	ITEM164	ITEM165	ITEM166	ITEM167	ITEM168	ITEM169	ITEM170
Reproduced Correlation	ITEM160	.298[a]	.272	.307	.351	.258	.252	.299	.322	.361	.238	.273
	ITEM161	.272	.249[a]	.280	.321	.236	.230	.273	.294	.330	.218	.249
	ITEM162	.307	.280	.316[a]	.361	.266	.260	.308	.332	.371	.245	.281
	ITEM163	.351	.321	.361	.414[a]	.304	.297	.353	.380	.425	.281	.322
	ITEM164	.258	.236	.266	.304	.224[a]	.219	.259	.279	.313	.207	.237
	ITEM165	.252	.230	.260	.297	.219	.214[a]	.253	.273	.306	.202	.231
	ITEM166	.299	.273	.308	.353	.259	.253	.301[a]	.324	.362	.239	.274
	ITEM167	.322	.294	.332	.380	.279	.273	.324	.348[a]	.390	.258	.295
	ITEM168	.361	.330	.371	.425	.313	.306	.362	.390	.437[a]	.289	.331
	ITEM169	.238	.218	.245	.281	.207	.202	.239	.258	.289	.191[a]	.218
	ITEM170	.273	.249	.281	.322	.237	.231	.274	.295	.331	.218	.250[a]
Residual[b]	ITEM160		.056	-.039	.183	-.032	-.025	-.061	-.030	-.047	-.036	.001
	ITEM161	.056		.030	.092	-.017	-.048	-.010	-.041	-.014	-.050	-.033
	ITEM162	-.039	.030		-.036	.026	-.036	-.050	-.003	.121	.003	-.037
	ITEM163	.183	.092	-.036		-.048	-.047	-.011	-.025	-.039	-.067	-.011
	ITEM164	-.032	-.017	.026	-.048		-.007	.017	.096	-.019	-.048	.026
	ITEM165	-.025	-.048	-.036	-.047	-.007		.108	.015	-.019	.102	-.017
	ITEM166	-.061	-.010	-.050	-.011	.017	.108		.006	-.012	.053	-.005
	ITEM167	-.030	-.041	-.003	-.025	.096	.015	.006		-.015	.022	-.002
	ITEM168	-.047	-.014	.121	-.039	-.019	-.019	-.012	-.015		.003	.044
	ITEM169	-.036	-.050	.003	-.067	-.048	.102	.053	.022	.003		.035
	ITEM170	.001	-.033	-.037	-.011	.026	-.017	-.005	-.002	.044	.035	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 12 (21.0%) nonredundant residuals with absolute values greater than 0.05.

DATE: 05/12/2017
TIME: 09:18

P R E L I S 2.80

BY

Karl G. Jöreskog & Dag Sörbom

The following lines were read from file C:\LISREL88\SAPIP2.PR2:

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!PRELIS SYNTAX: Can be edited
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OU MA=CM XT
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Total Sample Size = 3912

Univariate Summary Statistics for Continuous Variables

Variable	Mean	St. Dev.	T-Value	Skewness	Kurtosis	Minimum	Freq.	Maximum	Freq.
EMP_P1	3.936	0.619	397.890	-0.577	0.937	1.000	2	5.000	375
EMP_P2	4.165	0.504	516.813	-0.233	0.394	1.500	1	5.000	561
EMP_P3	3.992	0.599	417.021	-0.580	0.869	1.000	1	5.000	355
FAC_P1	3.870	0.652	371.021	-0.502	0.461	1.500	12	5.000	345
FAC_P2	3.620	0.711	318.267	-0.227	0.049	1.000	6	5.000	250
FAC_P3	3.616	0.725	311.761	-0.283	0.104	1.000	11	5.000	257
FAC_P4	3.774	0.647	365.121	-0.260	0.096	1.000	2	5.000	294
FAC_P5	3.909	0.592	413.307	-0.513	0.969	1.000	2	5.000	301
INT_P1	4.067	0.607	419.035	-0.367	0.113	1.000	1	5.000	598
INT_P2	4.209	0.508	518.173	-0.275	0.413	1.000	1	5.000	651
INT_P3	4.286	0.560	478.289	-0.586	0.706	1.000	2	5.000	992
INT_P4	4.003	0.618	405.080	-0.422	0.375	1.000	2	5.000	486
INT_P5	4.206	0.498	528.247	-0.301	0.895	1.000	1	5.000	633
INT_P6	4.182	0.477	548.479	-0.273	0.786	1.000	1	5.000	431
IPR_P1	4.023	0.575	437.907	-0.610	0.987	1.000	2	5.000	358
IPR_P2	3.764	0.658	357.617	-0.430	0.348	1.000	4	5.000	229
IPR_P3	3.969	0.538	461.406	-0.239	0.388	1.500	3	5.000	298
IPR_P4	3.995	0.510	490.134	-0.281	0.995	1.000	1	5.000	262
SOC_P1	3.883	0.608	399.482	-0.508	0.989	1.000	5	5.000	311
SOC_P2	3.997	0.597	418.595	-0.607	1.513	1.000	5	5.000	463
WAR_P1	4.114	0.539	477.693	-0.462	0.581	1.500	1	5.000	464
WAR_P2	4.029	0.576	437.854	-0.524	0.759	1.500	5	5.000	400
WAR_P3	4.046	0.532	475.622	-0.356	0.914	1.500	1	5.000	424
WAR_P4	4.061	0.523	485.580	-0.335	0.718	1.000	1	5.000	385
WAR_P5	3.945	0.521	473.530	-0.277	0.697	1.333	1	5.000	215
ARR_P1	2.088	0.780	167.327	0.734	0.482	1.000	552	5.000	13
ARR_P2	1.877	0.731	160.523	0.854	0.806	1.000	906	5.000	8
ARR_P3	2.107	0.750	175.738	0.466	0.017	1.000	559	5.000	7
CON_P1	2.565	0.853	188.092	0.125	-0.493	1.000	259	5.000	17
CON_P2	1.742	0.619	176.136	0.769	0.774	1.000	1005	5.000	2
CON_P3	2.043	0.628	203.568	0.437	0.222	1.000	301	5.000	3
HOS_P1	2.538	0.759	209.067	0.285	-0.198	1.000	121	5.000	6
HOS_P2	2.247	0.705	199.356	0.386	0.044	1.000	260	5.000	4
HOS_P3	1.721	0.613	175.600	0.832	0.891	1.000	1029	4.500	6
HOS_P4	1.966	0.665	184.912	0.673	0.911	1.000	593	5.000	6
HOS_P5	1.747	0.642	170.337	0.923	1.447	1.000	1046	5.000	6
HOS_P6	2.697	0.672	251.160	-0.004	0.271	1.000	76	5.000	11
HOS_P7	2.015	0.835	150.925	0.630	-0.101	1.000	924	5.000	10
DEC_P1	2.028	0.691	183.501	0.713	0.762	1.000	466	5.000	8
DEC_P2	2.325	0.716	203.008	0.333	0.232	1.000	256	5.000	11
DEC_P3	2.257	0.781	180.885	0.400	-0.159	1.000	348	5.000	9
EMO_P1	4.143	0.716	361.797	-0.943	1.006	1.000	4	5.000	866

EMO_P2	3.739	0.677	345.600	-0.516	0.390	1.000	5	5.000	200
EMO_P3	3.798	0.694	342.316	-0.449	0.274	1.000	4	5.000	317
EMO_P4	3.847	0.644	373.634	-0.470	0.600	1.000	6	5.000	304
NEG_P1	2.700	0.905	186.623	0.289	-0.427	1.000	161	5.000	57
NEG_P2	3.006	0.852	220.670	-0.016	-0.530	1.000	58	5.000	56
NEG_P3	3.261	0.942	216.502	-0.105	-0.643	1.000	59	5.000	223
NEG_P4	3.530	0.815	270.832	-0.246	-0.369	1.000	9	5.000	248
NEG_P5	2.246	0.813	172.723	0.499	-0.070	1.000	440	5.000	11
PLA_P1	3.463	0.834	259.768	-0.265	-0.303	1.000	17	5.000	240
PLA_P2	3.777	0.701	336.809	-0.464	0.444	1.000	8	5.000	316
SOB_P1	3.480	0.842	258.420	-0.280	-0.319	1.000	19	5.000	233
SOB_P2	3.945	0.693	356.227	-0.656	0.637	1.000	3	5.000	483
SOB_P3	3.409	0.861	247.704	-0.259	-0.428	1.000	15	5.000	179
ACH_P1	4.086	0.614	416.406	-0.591	0.473	1.000	1	5.000	548
ACH_P2	4.058	0.650	390.193	-0.679	0.830	1.000	4	5.000	582
ACH_P3	3.926	0.679	361.763	-0.497	0.242	1.000	2	5.000	455
ACH_P4	4.262	0.544	490.243	-0.569	0.993	1.000	1	5.000	858
ACH_P5	3.911	0.649	377.155	-0.379	0.155	1.000	2	5.000	338
ORD_P1	3.986	0.653	381.761	-0.526	0.427	1.000	3	5.000	471
ORD_P2	4.038	0.597	422.733	-0.430	0.470	1.000	1	5.000	502
ORD_P3	3.928	0.607	404.920	-0.389	0.545	1.000	2	5.000	363
ORD_P4	4.011	0.663	378.649	-0.534	0.518	1.000	5	5.000	588
ORD_P5	3.922	0.671	365.796	-0.483	0.303	1.000	1	5.000	445
ORD_P6	3.974	0.609	408.391	-0.391	0.403	1.000	2	5.000	364
TRA_P1	3.453	0.932	231.808	-0.583	-0.135	1.000	75	5.000	224
TRA_P2	3.796	0.856	277.296	-0.750	0.248	1.000	19	5.000	480
BRO_P1	4.156	0.623	416.903	-0.617	0.352	1.000	1	5.000	727
BRO_P2	3.779	0.713	331.535	-0.461	0.302	1.000	8	5.000	325
BRO_P3	4.078	0.610	418.103	-0.439	0.255	1.500	2	5.000	611
EPI_P1	4.453	0.547	509.095	-1.007	1.379	1.000	2	5.000	1450
EPI_P2	4.303	0.534	503.786	-0.440	0.259	1.500	1	5.000	986
EPI_P3	4.283	0.498	538.389	-0.240	0.235	2.000	5	5.000	855
ITL_P1	4.133	0.565	457.262	-0.596	1.206	1.000	3	5.000	552
ITL_P2	4.081	0.523	488.117	-0.347	0.635	1.000	1	5.000	399
ITL_P3	3.835	0.663	361.640	-0.408	0.292	1.000	2	5.000	342
ITL_P4	3.955	0.584	423.307	-0.380	0.700	1.000	1	5.000	373
ITL_P5	3.816	0.571	417.759	-0.350	0.472	1.000	2	5.000	129

Test of Univariate Normality for Continuous Variables

	Skewness		Kurtosis		Skewness and Kurtosis	
Variable	Z-Score	P-Value	Z-Score	P-Value	Chi-Square	P-Value
EMP_P1	-13.738	0.000	11.964	0.000	331.865	0.000
EMP_P2	-5.872	0.000	5.035	0.000	59.832	0.000
EMP_P3	-13.809	0.000	11.099	0.000	313.872	0.000
FAC_P1	-12.143	0.000	5.895	0.000	182.215	0.000
FAC_P2	-5.729	0.000	0.623	0.533	33.209	0.000
FAC_P3	-7.101	0.000	1.328	0.184	52.193	0.000
FAC_P4	-6.550	0.000	1.228	0.219	44.410	0.000
FAC_P5	-12.388	0.000	12.381	0.000	306.759	0.000
INT_P1	-9.099	0.000	1.441	0.150	84.875	0.000
INT_P2	-6.907	0.000	5.280	0.000	75.587	0.000
INT_P3	-13.930	0.000	9.017	0.000	275.332	0.000
INT_P4	-10.362	0.000	4.790	0.000	130.303	0.000
INT_P5	-7.538	0.000	11.430	0.000	187.478	0.000
INT_P6	-6.869	0.000	10.047	0.000	148.118	0.000
IPR_P1	-14.437	0.000	12.607	0.000	367.360	0.000
IPR_P2	-10.536	0.000	4.452	0.000	130.822	0.000
IPR_P3	-6.027	0.000	4.951	0.000	60.839	0.000
IPR_P4	-7.052	0.000	12.717	0.000	211.456	0.000
SOC_P1	-12.285	0.000	12.637	0.000	310.635	0.000
SOC_P2	-14.377	0.000	19.327	0.000	580.240	0.000
WAR_P1	-11.266	0.000	7.418	0.000	181.960	0.000
WAR_P2	-12.622	0.000	9.695	0.000	253.311	0.000
WAR_P3	-8.847	0.000	11.673	0.000	214.514	0.000
WAR_P4	-8.341	0.000	9.172	0.000	153.704	0.000
WAR_P5	-6.958	0.000	8.898	0.000	127.588	0.000
ARR_P1	16.887	0.000	6.156	0.000	323.064	0.000
ARR_P2	19.092	0.000	10.297	0.000	470.524	0.000
ARR_P3	11.347	0.000	0.220	0.826	128.812	0.000
CON_P1	3.187	0.001	-6.302	0.000	49.871	0.000
CON_P2	17.541	0.000	9.892	0.000	405.541	0.000
CON_P3	10.694	0.000	2.842	0.004	122.446	0.000
HOS_P1	7.148	0.000	-2.531	0.011	57.496	0.000
HOS_P2	9.531	0.000	0.557	0.578	91.143	0.000

HOS_P3	18.698	0.000	11.385	0.000	479.230	0.000
HOS_P4	15.708	0.000	11.644	0.000	382.333	0.000
HOS_P5	20.275	0.000	18.490	0.000	752.959	0.000
HOS_P6	-0.109	0.914	3.462	0.001	11.996	0.002
HOS_P7	14.837	0.000	-1.285	0.199	221.774	0.000
DEC_P1	16.479	0.000	9.732	0.000	366.275	0.000
DEC_P2	8.298	0.000	2.960	0.003	77.612	0.000
DEC_P3	9.856	0.000	-2.029	0.042	101.259	0.000
EMO_P1	-20.621	0.000	12.847	0.000	590.295	0.000
EMO_P2	-12.451	0.000	4.980	0.000	179.837	0.000
EMO_P3	-10.974	0.000	3.506	0.000	132.710	0.000
EMO_P4	-11.435	0.000	7.665	0.000	189.516	0.000
NEG_P1	7.244	0.000	-5.460	0.000	82.293	0.000
NEG_P2	-0.402	0.688	-6.774	0.000	46.051	0.000
NEG_P3	-2.681	0.007	-8.219	0.000	74.733	0.000
NEG_P4	-6.197	0.000	-4.718	0.000	60.652	0.000
NEG_P5	12.087	0.000	-0.897	0.370	146.908	0.000
PLA_P1	-6.665	0.000	-3.874	0.000	59.426	0.000
PLA_P2	-11.310	0.000	5.672	0.000	160.089	0.000
SOB_P1	-7.020	0.000	-4.071	0.000	65.856	0.000
SOB_P2	-15.366	0.000	8.142	0.000	302.410	0.000
SOB_P3	-6.519	0.000	-5.463	0.000	72.345	0.000
ACH_P1	-14.035	0.000	6.044	0.000	233.528	0.000
ACH_P2	-15.823	0.000	10.606	0.000	362.855	0.000
ACH_P3	-12.045	0.000	3.086	0.002	154.596	0.000
ACH_P4	-13.577	0.000	12.681	0.000	345.138	0.000
ACH_P5	-9.370	0.000	1.981	0.048	91.724	0.000
ORD_P1	-12.675	0.000	5.460	0.000	190.467	0.000
ORD_P2	-10.553	0.000	6.005	0.000	147.436	0.000
ORD_P3	-9.609	0.000	6.964	0.000	140.831	0.000
ORD_P4	-12.829	0.000	6.612	0.000	208.310	0.000
ORD_P5	-11.720	0.000	3.869	0.000	152.337	0.000
ORD_P6	-9.660	0.000	5.153	0.000	119.867	0.000
TRA_P1	-13.875	0.000	-1.722	0.085	195.491	0.000
TRA_P2	-17.184	0.000	3.170	0.002	305.346	0.000
BRO_P1	-14.579	0.000	4.492	0.000	232.723	0.000
BRO_P2	-11.231	0.000	3.852	0.000	140.979	0.000
BRO_P3	-10.740	0.000	3.253	0.001	125.931	0.000
EPI_P1	-21.678	0.000	17.619	0.000	780.374	0.000
EPI_P2	-10.775	0.000	3.306	0.001	127.023	0.000
EPI_P3	-6.055	0.000	2.996	0.003	45.646	0.000
ITL_P1	-14.148	0.000	15.408	0.000	437.569	0.000
ITL_P2	-8.626	0.000	8.110	0.000	140.173	0.000
ITL_P3	-10.049	0.000	3.725	0.000	114.853	0.000
ITL_P4	-9.390	0.000	8.945	0.000	168.198	0.000
ITL_P5	-8.694	0.000	6.024	0.000	111.877	0.000

Relative Multivariate Kurtosis = 1.193

Test of Multivariate Normality for Continuous Variables

Skewness			Kurtosis			Skewness and Kurtosis	
Value	Z-Score	P-Value	Value	Z-Score	P-Value	Chi-Square	P-Value
288.869	187.170	0.000	7634.592	103.283	0.000	45699.944	0.000

Histograms for Continuous Variables

EMP_P1

Frequency	Percentage	Lower Class Limit	
2	0.1	1.000	
8	0.2	1.400	
37	0.9	1.800	
110	2.8	2.200	□□□
347	8.9	2.600	□□□□□□□□□
0	0.0	3.000	
668	17.1	3.400	□□□□□□□□□□□□□□□□□
1722	44.0	3.800	□□
643	16.4	4.200	□□□□□□□□□□□□□□□□□
375	9.6	4.600	□□□□□□□□□□

EMP_P2

Frequency	Percentage	Lower Class Limit
1	0.0	1.500
2	0.1	1.850
14	0.4	2.200

Frequency	Percentage	Lower Class Limit
0	0.0	2.550
157	4.0	2.900
404	10.3	3.250
0	0.0	3.600
1833	46.9	3.950
940	24.0	4.300
561	14.3	4.650

EMP_P3

Frequency	Percentage	Lower Class Limit
1	0.0	1.000
9	0.2	1.400
20	0.5	1.800
38	1.0	2.200
288	7.4	2.600
325	8.3	3.000
549	14.0	3.400
1323	33.8	3.800
624	16.0	4.200
735	18.8	4.600

FAC_P1

Frequency	Percentage	Lower Class Limit
12	0.3	1.500
53	1.4	1.850
140	3.6	2.200
0	0.0	2.550
450	11.5	2.900
726	18.6	3.250
0	0.0	3.600
1577	40.3	3.950
609	15.6	4.300
345	8.8	4.650

FAC_P2

Frequency	Percentage	Lower Class Limit
6	0.2	1.000
15	0.4	1.400
109	2.8	1.800
289	7.4	2.200
718	18.4	2.600
0	0.0	3.000
995	25.4	3.400
1157	29.6	3.800
373	9.5	4.200
250	6.4	4.600

FAC_P3

Frequency	Percentage	Lower Class Limit
11	0.3	1.000
18	0.5	1.400
112	2.9	1.800
272	7.0	2.200
822	21.0	2.600
0	0.0	3.000
795	20.3	3.400
1283	32.8	3.800
342	8.7	4.200
257	6.6	4.600

FAC_P4

Frequency	Percentage	Lower Class Limit
2	0.1	1.000
2	0.1	1.400
54	1.4	1.800
141	3.6	2.200
689	17.6	2.600
0	0.0	3.000
733	18.7	3.400
1580	40.4	3.800
417	10.7	4.200
294	7.5	4.600

FAC_P5

Frequency	Percentage	Lower Class Limit
2	0.1	1.000
6	0.2	1.400

32	0.8	1.800
89	2.3	2.200
0	0.0	2.600
373	9.5	3.000
753	19.2	3.400
1736	44.4	3.800
620	15.8	4.200
301	7.7	4.600

INT_P1

Frequency	Percentage	Lower Class Limit
1	0.0	1.000
1	0.0	1.400
14	0.4	1.800
46	1.2	2.200
345	8.8	2.600
0	0.0	3.000
570	14.6	3.400
1541	39.4	3.800
796	20.3	4.200
598	15.3	4.600

INT_P2

Frequency	Percentage	Lower Class Limit
1	0.0	1.000
0	0.0	1.400
2	0.1	1.800
17	0.4	2.200
0	0.0	2.600
98	2.5	3.000
455	11.6	3.400
1641	41.9	3.800
1047	26.8	4.200
651	16.6	4.600

INT_P3

Frequency	Percentage	Lower Class Limit
2	0.1	1.000
0	0.0	1.400
5	0.1	1.800
27	0.7	2.200
148	3.8	2.600
0	0.0	3.000
288	7.4	3.400
1501	38.4	3.800
949	24.3	4.200
992	25.4	4.600

INT_P4

Frequency	Percentage	Lower Class Limit
2	0.1	1.000
2	0.1	1.400
20	0.5	1.800
92	2.4	2.200
0	0.0	2.600
314	8.0	3.000
725	18.5	3.400
1490	38.1	3.800
781	20.0	4.200
486	12.4	4.600

INT_P5

Frequency	Percentage	Lower Class Limit
1	0.0	1.000
1	0.0	1.400
3	0.1	1.800
17	0.4	2.200
0	0.0	2.600
98	2.5	3.000
371	9.5	3.400
1802	46.1	3.800
986	25.2	4.200
633	16.2	4.600

INT_P6

Frequency	Percentage	Lower Class Limit
1	0.0	1.000

2	0.1	1.400
1	0.0	1.800
2	0.1	2.200
9	0.2	2.600
256	6.5	3.000
457	11.7	3.400
1347	34.4	3.800
855	21.9	4.200
982	25.1	4.600

IPR_P1

Frequency	Percentage	Lower Class Limit
2	0.1	1.000
3	0.1	1.400
15	0.4	1.800
86	2.2	2.200
0	0.0	2.600
249	6.4	3.000
639	16.3	3.400
1615	41.3	3.800
945	24.2	4.200
358	9.2	4.600

IPR_P2

Frequency	Percentage	Lower Class Limit
4	0.1	1.000
11	0.3	1.400
55	1.4	1.800
198	5.1	2.200
525	13.4	2.600
0	0.0	3.000
956	24.4	3.400
1337	34.2	3.800
597	15.3	4.200
229	5.9	4.600

IPR_P3

Frequency	Percentage	Lower Class Limit
3	0.1	1.500
7	0.2	1.850
41	1.0	2.200
0	0.0	2.550
299	7.6	2.900
838	21.4	3.250
0	0.0	3.600
1665	42.6	3.950
761	19.5	4.300
298	7.6	4.650

IPR_P4

Frequency	Percentage	Lower Class Limit
1	0.0	1.000
3	0.1	1.400
6	0.2	1.800
13	0.3	2.200
191	4.9	2.600
355	9.1	3.000
652	16.7	3.400
1518	38.8	3.800
562	14.4	4.200
611	15.6	4.600

SOC_P1

Frequency	Percentage	Lower Class Limit
5	0.1	1.000
5	0.1	1.400
31	0.8	1.800
109	2.8	2.200
417	10.7	2.600
0	0.0	3.000
749	19.1	3.400
1732	44.3	3.800
553	14.1	4.200
311	7.9	4.600

SOC_P2

Frequency	Percentage	Lower Class Limit

5	0.1	1.000
5	0.1	1.400
29	0.7	1.800
66	1.7	2.200
320	8.2	2.600
0	0.0	3.000
512	13.1	3.400
1938	49.5	3.800
574	14.7	4.200
463	11.8	4.600

WAR_P1

Frequency	Percentage	Lower Class Limit
1	0.0	1.500
9	0.2	1.850
38	1.0	2.200
0	0.0	2.550
201	5.1	2.900
525	13.4	3.250
0	0.0	3.600
1626	41.6	3.950
1048	26.8	4.300
464	11.9	4.650

WAR_P2

Frequency	Percentage	Lower Class Limit
5	0.1	1.500
17	0.4	1.850
68	1.7	2.200
0	0.0	2.550
266	6.8	2.900
633	16.2	3.250
0	0.0	3.600
1634	41.8	3.950
889	22.7	4.300
400	10.2	4.650

WAR_P3

Frequency	Percentage	Lower Class Limit
1	0.0	1.500
12	0.3	1.850
47	1.2	2.200
0	0.0	2.550
233	6.0	2.900
512	13.1	3.250
0	0.0	3.600
2003	51.2	3.950
680	17.4	4.300
424	10.8	4.650

WAR_P4

Frequency	Percentage	Lower Class Limit
1	0.0	1.000
0	0.0	1.400
9	0.2	1.800
32	0.8	2.200
198	5.1	2.600
0	0.0	3.000
648	16.6	3.400
1747	44.7	3.800
892	22.8	4.200
385	9.8	4.600

WAR_P5

Frequency	Percentage	Lower Class Limit
4	0.1	1.333
6	0.2	1.700
18	0.5	2.067
59	1.5	2.433
180	4.6	2.800
418	10.7	3.167
751	19.2	3.533
1350	34.5	3.900
593	15.2	4.267
533	13.6	4.633

ARR_P1

Frequency	Percentage	Lower Class Limit
552	14.1	1.000
827	21.1	1.400
1152	29.4	1.800
642	16.4	2.200
0	0.0	2.600
435	11.1	3.000
162	4.1	3.400
102	2.6	3.800
27	0.7	4.200
13	0.3	4.600

ARR_P2

Frequency	Percentage	Lower Class Limit
906	23.2	1.000
900	23.0	1.400
1112	28.4	1.800
517	13.2	2.200
303	7.7	2.600
0	0.0	3.000
103	2.6	3.400
49	1.3	3.800
14	0.4	4.200
8	0.2	4.600

ARR_P3

Frequency	Percentage	Lower Class Limit
559	14.3	1.000
715	18.3	1.400
1130	28.9	1.800
715	18.3	2.200
0	0.0	2.600
539	13.8	3.000
171	4.4	3.400
60	1.5	3.800
16	0.4	4.200
7	0.2	4.600

CON_P1

Frequency	Percentage	Lower Class Limit
259	6.6	1.000
428	10.9	1.400
789	20.2	1.800
782	20.0	2.200
830	21.2	2.600
0	0.0	3.000
458	11.7	3.400
293	7.5	3.800
56	1.4	4.200
17	0.4	4.600

CON_P2

Frequency	Percentage	Lower Class Limit
1005	25.7	1.000
1030	26.3	1.400
1207	30.9	1.800
414	10.6	2.200
187	4.8	2.600
0	0.0	3.000
52	1.3	3.400
11	0.3	3.800
4	0.1	4.200
2	0.1	4.600

CON_P3

Frequency	Percentage	Lower Class Limit
841	21.5	1.000
629	16.1	1.400
884	22.6	1.800
676	17.3	2.200
462	11.8	2.600
360	9.2	3.000
34	0.9	3.400
18	0.5	3.800
4	0.1	4.200
4	0.1	4.600

HOS_P1

Frequency	Percentage	Lower Class Limit
121	3.1	1.000
455	11.6	1.400
894	22.9	1.800
955	24.4	2.200
849	21.7	2.600
0	0.0	3.000
370	9.5	3.400
205	5.2	3.800
57	1.5	4.200
6	0.2	4.600

HOS_P2

Frequency	Percentage	Lower Class Limit
260	6.6	1.000
729	18.6	1.400
1061	27.1	1.800
962	24.6	2.200
595	15.2	2.600
0	0.0	3.000
217	5.5	3.400
64	1.6	3.800
20	0.5	4.200
4	0.1	4.600

HOS_P3

Frequency	Percentage	Lower Class Limit
1029	26.3	1.000
1089	27.8	1.350
1165	29.8	1.700
0	0.0	2.050
394	10.1	2.400
165	4.2	2.750
0	0.0	3.100
48	1.2	3.450
16	0.4	3.800
6	0.2	4.150

HOS_P4

Frequency	Percentage	Lower Class Limit
593	15.2	1.000
836	21.4	1.400
1401	35.8	1.800
615	15.7	2.200
333	8.5	2.600
0	0.0	3.000
83	2.1	3.400
34	0.9	3.800
11	0.3	4.200
6	0.2	4.600

HOS_P5

Frequency	Percentage	Lower Class Limit
1046	26.7	1.000
948	24.2	1.400
1263	32.3	1.800
390	10.0	2.200
172	4.4	2.600
0	0.0	3.000
58	1.5	3.400
26	0.7	3.800
3	0.1	4.200
6	0.2	4.600

HOS_P6

Frequency	Percentage	Lower Class Limit
76	1.9	1.000
220	5.6	1.400
668	17.1	1.800
1012	25.9	2.200
0	0.0	2.600
1256	32.1	3.000
475	12.1	3.400
157	4.0	3.800
37	0.9	4.200
11	0.3	4.600

HOS_P7

Frequency	Percentage	Lower Class Limit
924	23.6	1.000
637	16.3	1.400
1010	25.8	1.800
585	15.0	2.200
0	0.0	2.600
422	10.8	3.000
193	4.9	3.400
118	3.0	3.800
13	0.3	4.200
10	0.3	4.600

DEC_P1

Frequency	Percentage	Lower Class Limit
466	11.9	1.000
975	24.9	1.400
1184	30.3	1.800
738	18.9	2.200
0	0.0	2.600
362	9.3	3.000
113	2.9	3.400
55	1.4	3.800
11	0.3	4.200
8	0.2	4.600

DEC_P2

Frequency	Percentage	Lower Class Limit
256	6.5	1.000
545	13.9	1.400
1042	26.6	1.800
1054	26.9	2.200
0	0.0	2.600
665	17.0	3.000
226	5.8	3.400
96	2.5	3.800
17	0.4	4.200
11	0.3	4.600

DEC_P3

Frequency	Percentage	Lower Class Limit
683	17.5	1.000
496	12.7	1.400
758	19.4	1.800
579	14.8	2.200
879	22.5	2.600
255	6.5	3.000
154	3.9	3.400
68	1.7	3.800
21	0.5	4.200
19	0.5	4.600

EMO_P1

Frequency	Percentage	Lower Class Limit
4	0.1	1.000
18	0.5	1.400
50	1.3	1.800
105	2.7	2.200
277	7.1	2.600
0	0.0	3.000
432	11.0	3.400
1160	29.7	3.800
1000	25.6	4.200
866	22.1	4.600

EMO_P2

Frequency	Percentage	Lower Class Limit
5	0.1	1.000
14	0.4	1.400
87	2.2	1.800
196	5.0	2.200
545	13.9	2.600
0	0.0	3.000
938	24.0	3.400
1303	33.3	3.800
624	16.0	4.200

Frequency	Percentage	Lower Class Limit
200	5.1	4.600

EMO_P3

Frequency	Percentage	Lower Class Limit
4	0.1	1.000
20	0.5	1.400
57	1.5	1.800
182	4.7	2.200
560	14.3	2.600
0	0.0	3.000
831	21.2	3.400
1303	33.3	3.800
638	16.3	4.200
317	8.1	4.600

EMO_P4

Frequency	Percentage	Lower Class Limit
6	0.2	1.000
3	0.1	1.400
51	1.3	1.800
134	3.4	2.200
453	11.6	2.600
0	0.0	3.000
877	22.4	3.400
1448	37.0	3.800
636	16.3	4.200
304	7.8	4.600

NEG_P1

Frequency	Percentage	Lower Class Limit
161	4.1	1.000
398	10.2	1.400
792	20.2	1.800
774	19.8	2.200
0	0.0	2.600
736	18.8	3.000
525	13.4	3.400
308	7.9	3.800
161	4.1	4.200
57	1.5	4.600

NEG_P2

Frequency	Percentage	Lower Class Limit
58	1.5	1.000
189	4.8	1.400
603	15.4	1.800
621	15.9	2.200
895	22.9	2.600
0	0.0	3.000
745	19.0	3.400
530	13.5	3.800
215	5.5	4.200
56	1.4	4.600

NEG_P3

Frequency	Percentage	Lower Class Limit
59	1.5	1.000
127	3.2	1.400
455	11.6	1.800
544	13.9	2.200
0	0.0	2.600
756	19.3	3.000
660	16.9	3.400
705	18.0	3.800
383	9.8	4.200
223	5.7	4.600

NEG_P4

Frequency	Percentage	Lower Class Limit
9	0.2	1.000
49	1.3	1.400
221	5.6	1.800
369	9.4	2.200
776	19.8	2.600
0	0.0	3.000
841	21.5	3.400
889	22.7	3.800

510	13.0	4.200
248	6.3	4.600

NEG_P5

Frequency	Percentage	Lower Class Limit
440	11.2	1.000
632	16.2	1.400
1123	28.7	1.800
695	17.8	2.200
564	14.4	2.600
0	0.0	3.000
279	7.1	3.400
128	3.3	3.800
40	1.0	4.200
11	0.3	4.600

PLA_P1

Frequency	Percentage	Lower Class Limit
17	0.4	1.000
67	1.7	1.400
271	6.9	1.800
400	10.2	2.200
747	19.1	2.600
0	0.0	3.000
845	21.6	3.400
949	24.3	3.800
376	9.6	4.200
240	6.1	4.600

PLA_P2

Frequency	Percentage	Lower Class Limit
13	0.3	1.000
15	0.4	1.400
56	1.4	1.800
98	2.5	2.200
538	13.8	2.600
510	13.0	3.000
573	14.6	3.400
1174	30.0	3.800
378	9.7	4.200
557	14.2	4.600

SOB_P1

Frequency	Percentage	Lower Class Limit
19	0.5	1.000
81	2.1	1.400
216	5.5	1.800
432	11.0	2.200
753	19.2	2.600
0	0.0	3.000
837	21.4	3.400
850	21.7	3.800
491	12.6	4.200
233	6.0	4.600

SOB_P2

Frequency	Percentage	Lower Class Limit
3	0.1	1.000
14	0.4	1.400
68	1.7	1.800
136	3.5	2.200
355	9.1	2.600
0	0.0	3.000
676	17.3	3.400
1423	36.4	3.800
754	19.3	4.200
483	12.3	4.600

SOB_P3

Frequency	Percentage	Lower Class Limit
61	1.6	1.000
86	2.2	1.400
225	5.8	1.800
259	6.6	2.200
336	8.6	2.600
1045	26.7	3.000
550	14.1	3.400

635	16.2	3.800
309	7.9	4.200
406	10.4	4.600

ACH_P1

Frequency	Percentage	Lower Class Limit
1	0.0	1.000
3	0.1	1.400
17	0.4	1.800
84	2.1	2.200
262	6.7	2.600
0	0.0	3.000
594	15.2	3.400
1369	35.0	3.800
1034	26.4	4.200
548	14.0	4.600

ACH_P2

Frequency	Percentage	Lower Class Limit
4	0.1	1.000
11	0.3	1.400
19	0.5	1.800
103	2.6	2.200
285	7.3	2.600
0	0.0	3.000
615	15.7	3.400
1354	34.6	3.800
939	24.0	4.200
582	14.9	4.600

ACH_P3

Frequency	Percentage	Lower Class Limit
2	0.1	1.000
7	0.2	1.400
47	1.2	1.800
158	4.0	2.200
394	10.1	2.600
0	0.0	3.000
735	18.8	3.400
1373	35.1	3.800
741	18.9	4.200
455	11.6	4.600

ACH_P4

Frequency	Percentage	Lower Class Limit
1	0.0	1.000
4	0.1	1.400
4	0.1	1.800
23	0.6	2.200
0	0.0	2.600
123	3.1	3.000
339	8.7	3.400
1529	39.1	3.800
1031	26.4	4.200
858	21.9	4.600

ACH_P5

Frequency	Percentage	Lower Class Limit
4	0.1	1.000
7	0.2	1.400
22	0.6	1.800
45	1.2	2.200
418	10.7	2.600
466	11.9	3.000
696	17.8	3.400
941	24.1	3.800
553	14.1	4.200
760	19.4	4.600

ORD_P1

Frequency	Percentage	Lower Class Limit
3	0.1	1.000
9	0.2	1.400
29	0.7	1.800
93	2.4	2.200
363	9.3	2.600
0	0.0	3.000

786	20.1	3.400
1239	31.7	3.800
919	23.5	4.200
471	12.0	4.600

ORD_P2

Frequency	Percentage	Lower Class Limit
1	0.0	1.000
5	0.1	1.400
9	0.2	1.800
76	1.9	2.200
0	0.0	2.600
287	7.3	3.000
649	16.6	3.400
1569	40.1	3.800
814	20.8	4.200
502	12.8	4.600

ORD_P3

Frequency	Percentage	Lower Class Limit
2	0.1	1.000
7	0.2	1.400
16	0.4	1.800
97	2.5	2.200
0	0.0	2.600
382	9.8	3.000
805	20.6	3.400
1561	39.9	3.800
679	17.4	4.200
363	9.3	4.600

ORD_P4

Frequency	Percentage	Lower Class Limit
5	0.1	1.000
2	0.1	1.400
42	1.1	1.800
85	2.2	2.200
0	0.0	2.600
362	9.3	3.000
653	16.7	3.400
1427	36.5	3.800
748	19.1	4.200
588	15.0	4.600

ORD_P5

Frequency	Percentage	Lower Class Limit
1	0.0	1.000
10	0.3	1.400
50	1.3	1.800
121	3.1	2.200
432	11.0	2.600
0	0.0	3.000
731	18.7	3.400
1405	35.9	3.800
717	18.3	4.200
445	11.4	4.600

ORD_P6

Frequency	Percentage	Lower Class Limit
3	0.1	1.000
5	0.1	1.400
11	0.3	1.800
38	1.0	2.200
311	7.9	2.600
424	10.8	3.000
622	15.9	3.400
1171	29.9	3.800
525	13.4	4.200
802	20.5	4.600

TRA_P1

Frequency	Percentage	Lower Class Limit
75	1.9	1.000
160	4.1	1.400
253	6.5	1.800
323	8.3	2.200
0	0.0	2.600

605	15.5	3.000
790	20.2	3.400
980	25.1	3.800
502	12.8	4.200
224	5.7	4.600

TRA_P2

Frequency	Percentage	Lower Class Limit
19	0.5	1.000
67	1.7	1.400
172	4.4	1.800
230	5.9	2.200
410	10.5	2.600
0	0.0	3.000
646	16.5	3.400
1155	29.5	3.800
733	18.7	4.200
480	12.3	4.600

BRO_P1

Frequency	Percentage	Lower Class Limit
1	0.0	1.000
2	0.1	1.400
20	0.5	1.800
57	1.5	2.200
0	0.0	2.600
239	6.1	3.000
584	14.9	3.400
1187	30.3	3.800
1095	28.0	4.200
727	18.6	4.600

BRO_P2

Frequency	Percentage	Lower Class Limit
8	0.2	1.000
16	0.4	1.400
81	2.1	1.800
190	4.9	2.200
553	14.1	2.600
0	0.0	3.000
883	22.6	3.400
1228	31.4	3.800
628	16.1	4.200
325	8.3	4.600

BRO_P3

Frequency	Percentage	Lower Class Limit
2	0.1	1.500
16	0.4	1.850
78	2.0	2.200
0	0.0	2.550
265	6.8	2.900
590	15.1	3.250
0	0.0	3.600
1537	39.3	3.950
813	20.8	4.300
611	15.6	4.650

EPI_P1

Frequency	Percentage	Lower Class Limit
2	0.1	1.000
1	0.0	1.400
2	0.1	1.800
20	0.5	2.200
102	2.6	2.600
0	0.0	3.000
223	5.7	3.400
953	24.4	3.800
1159	29.6	4.200
1450	37.1	4.600

EPI_P2

Frequency	Percentage	Lower Class Limit
1	0.0	1.500
5	0.1	1.850
15	0.4	2.200
0	0.0	2.550

104	2.7	2.900
312	8.0	3.250
0	0.0	3.600
1502	38.4	3.950
987	25.2	4.300
986	25.2	4.650

EPI_P3

Frequency	Percentage	Lower Class Limit
5	0.1	2.000
8	0.2	2.300
0	0.0	2.600
82	2.1	2.900
257	6.6	3.200
0	0.0	3.500
1736	44.4	3.800
0	0.0	4.100
969	24.8	4.400
855	21.9	4.700

ITL_P1

Frequency	Percentage	Lower Class Limit
3	0.1	1.000
5	0.1	1.400
8	0.2	1.800
38	1.0	2.200
173	4.4	2.600
0	0.0	3.000
601	15.4	3.400
1460	37.3	3.800
1072	27.4	4.200
552	14.1	4.600

ITL_P2

Frequency	Percentage	Lower Class Limit
1	0.0	1.000
1	0.0	1.400
6	0.2	1.800
26	0.7	2.200
194	5.0	2.600
0	0.0	3.000
640	16.4	3.400
1666	42.6	3.800
979	25.0	4.200
399	10.2	4.600

ITL_P3

Frequency	Percentage	Lower Class Limit
2	0.1	1.000
9	0.2	1.400
55	1.4	1.800
145	3.7	2.200
526	13.4	2.600
0	0.0	3.000
782	20.0	3.400
1479	37.8	3.800
572	14.6	4.200
342	8.7	4.600

ITL_P4

Frequency	Percentage	Lower Class Limit
1	0.0	1.000
6	0.2	1.400
17	0.4	1.800
75	1.9	2.200
325	8.3	2.600
0	0.0	3.000
784	20.0	3.400
1666	42.6	3.800
665	17.0	4.200
373	9.5	4.600

ITL_P5

Frequency	Percentage	Lower Class Limit
4	0.1	1.000
5	0.1	1.400
11	0.3	1.800

39	1.0	2.200	□
123	3.1	2.600	□□□□
890	22.8	3.000	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
830	21.2	3.400	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
985	25.2	3.800	□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
610	15.6	4.200	□□□□□□□□□□□□□□□□□□□□□□□
415	10.6	4.600	□□□□□□□□□□□□□□□□

Covariance Matrix

	EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
EMP_P1	0.383					
EMP_P2	0.167	0.254				
EMP_P3	0.246	0.153	0.359			
FAC_P1	0.149	0.143	0.128	0.426		
FAC_P2	0.123	0.126	0.100	0.308	0.506	
FAC_P3	0.109	0.129	0.093	0.283	0.401	0.526
FAC_P4	0.150	0.144	0.133	0.291	0.300	0.288
FAC_P5	0.115	0.122	0.098	0.253	0.249	0.229
INT_P1	0.070	0.090	0.062	0.126	0.102	0.137
INT_P2	0.072	0.099	0.072	0.112	0.093	0.123
INT_P3	0.133	0.139	0.136	0.130	0.117	0.131
INT_P4	0.108	0.133	0.105	0.150	0.118	0.136
INT_P5	0.127	0.125	0.122	0.115	0.099	0.105
INT_P6	0.080	0.097	0.074	0.099	0.088	0.114
IPR_P1	0.118	0.114	0.108	0.171	0.170	0.167
IPR_P2	0.145	0.133	0.137	0.206	0.205	0.194
IPR_P3	0.122	0.115	0.107	0.177	0.186	0.163
IPR_P4	0.141	0.139	0.127	0.146	0.126	0.123
SOC_P1	0.175	0.141	0.146	0.204	0.233	0.208
SOC_P2	0.209	0.151	0.186	0.180	0.184	0.168
WAR_P1	0.156	0.135	0.152	0.172	0.147	0.155
WAR_P2	0.177	0.137	0.170	0.165	0.155	0.145
WAR_P3	0.199	0.148	0.194	0.169	0.141	0.135
WAR_P4	0.145	0.135	0.134	0.198	0.194	0.182
WAR_P5	0.146	0.135	0.141	0.177	0.167	0.162
ARR_P1	-0.122	-0.098	-0.118	-0.045	0.029	0.005
ARR_P2	-0.136	-0.115	-0.133	-0.066	-0.008	-0.036
ARR_P3	-0.101	-0.101	-0.089	-0.065	-0.002	-0.029
CON_P1	-0.035	-0.080	-0.050	-0.110	-0.051	-0.120
CON_P2	-0.072	-0.084	-0.072	-0.070	-0.033	-0.071
CON_P3	-0.059	-0.068	-0.062	-0.029	0.011	-0.037
HOS_P1	-0.077	-0.087	-0.084	-0.078	-0.027	-0.076
HOS_P2	-0.077	-0.067	-0.086	-0.031	0.006	-0.025
HOS_P3	-0.106	-0.106	-0.100	-0.091	-0.064	-0.091
HOS_P4	-0.137	-0.116	-0.115	-0.103	-0.051	-0.076
HOS_P5	-0.112	-0.107	-0.111	-0.079	-0.037	-0.073
HOS_P6	-0.085	-0.076	-0.074	-0.100	-0.077	-0.114
HOS_P7	-0.062	-0.081	-0.055	-0.083	-0.059	-0.116
DEC_P1	-0.060	-0.081	-0.054	-0.106	-0.097	-0.158
DEC_P2	-0.032	-0.052	-0.041	-0.077	-0.053	-0.085
DEC_P3	-0.093	-0.116	-0.079	-0.149	-0.133	-0.191
EMO_P1	0.060	0.106	0.045	0.161	0.173	0.241
EMO_P2	0.057	0.077	0.043	0.119	0.122	0.143
EMO_P3	0.060	0.084	0.046	0.144	0.152	0.171
EMO_P4	0.048	0.082	0.029	0.144	0.154	0.184
NEG_P1	0.046	-0.011	0.079	-0.077	-0.054	-0.089
NEG_P2	0.012	-0.040	0.038	-0.141	-0.124	-0.184
NEG_P3	0.064	0.002	0.097	-0.115	-0.119	-0.151
NEG_P4	0.136	0.050	0.158	-0.026	-0.021	-0.075
NEG_P5	-0.057	-0.089	-0.040	-0.138	-0.118	-0.181
PLA_P1	0.091	0.093	0.080	0.116	0.156	0.111
PLA_P2	0.110	0.120	0.113	0.111	0.139	0.114
SOB_P1	0.116	0.129	0.099	0.181	0.214	0.195
SOB_P2	0.145	0.142	0.125	0.183	0.200	0.196
SOB_P3	0.127	0.147	0.106	0.192	0.228	0.220
ACH_P1	0.062	0.085	0.048	0.172	0.162	0.191
ACH_P2	0.066	0.109	0.060	0.189	0.195	0.242
ACH_P3	0.062	0.097	0.057	0.165	0.165	0.217
ACH_P4	0.068	0.088	0.057	0.121	0.118	0.161
ACH_P5	0.057	0.106	0.048	0.191	0.214	0.254
ORD_P1	0.053	0.068	0.061	0.087	0.084	0.136
ORD_P2	0.046	0.063	0.044	0.087	0.085	0.138
ORD_P3	0.058	0.080	0.060	0.133	0.131	0.169

ORD_P4	0.069	0.095	0.061	0.112	0.111	0.181
ORD_P5	0.071	0.085	0.070	0.117	0.114	0.165
ORD_P6	0.050	0.074	0.051	0.104	0.101	0.154
TRA_P1	0.116	0.112	0.111	0.145	0.160	0.187
TRA_P2	0.155	0.146	0.166	0.178	0.174	0.204
BRO_P1	0.088	0.100	0.094	0.123	0.122	0.105
BRO_P2	0.073	0.106	0.076	0.183	0.191	0.181
BRO_P3	0.069	0.094	0.077	0.124	0.127	0.121
EPI_P1	0.066	0.087	0.059	0.112	0.096	0.111
EPI_P2	0.073	0.086	0.080	0.095	0.076	0.060
EPI_P3	0.055	0.085	0.059	0.108	0.096	0.095
ITL_P1	0.075	0.084	0.054	0.130	0.129	0.131
ITL_P2	0.052	0.071	0.037	0.107	0.126	0.116
ITL_P3	0.060	0.093	0.053	0.203	0.213	0.201
ITL_P4	0.066	0.091	0.054	0.163	0.180	0.184
ITL_P5	0.071	0.091	0.050	0.172	0.194	0.210

Covariance Matrix

	FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
FAC_P4	0.418					
FAC_P5	0.253	0.350				
INT_P1	0.106	0.098	0.369			
INT_P2	0.102	0.096	0.166	0.258		
INT_P3	0.125	0.101	0.119	0.129	0.314	
INT_P4	0.149	0.129	0.158	0.139	0.092	0.382
INT_P5	0.116	0.104	0.107	0.107	0.138	0.135
INT_P6	0.105	0.089	0.148	0.131	0.116	0.120
IPR_P1	0.169	0.144	0.089	0.076	0.106	0.106
IPR_P2	0.214	0.171	0.103	0.084	0.115	0.157
IPR_P3	0.181	0.165	0.100	0.091	0.099	0.125
IPR_P4	0.154	0.136	0.096	0.086	0.113	0.153
SOC_P1	0.204	0.174	0.097	0.091	0.137	0.123
SOC_P2	0.183	0.152	0.091	0.089	0.139	0.122
WAR_P1	0.167	0.136	0.114	0.098	0.145	0.127
WAR_P2	0.161	0.130	0.102	0.093	0.148	0.121
WAR_P3	0.171	0.139	0.093	0.088	0.139	0.128
WAR_P4	0.198	0.170	0.097	0.093	0.121	0.144
WAR_P5	0.184	0.155	0.090	0.091	0.126	0.124
ARR_P1	-0.042	-0.016	-0.105	-0.081	-0.083	-0.144
ARR_P2	-0.062	-0.030	-0.103	-0.083	-0.102	-0.149
ARR_P3	-0.071	-0.041	-0.085	-0.075	-0.076	-0.146
CON_P1	-0.104	-0.075	-0.165	-0.113	-0.080	-0.187
CON_P2	-0.064	-0.056	-0.105	-0.092	-0.097	-0.138
CON_P3	-0.032	-0.015	-0.094	-0.078	-0.074	-0.114
HOS_P1	-0.082	-0.052	-0.114	-0.078	-0.079	-0.156
HOS_P2	-0.034	-0.017	-0.087	-0.067	-0.065	-0.119
HOS_P3	-0.091	-0.073	-0.090	-0.082	-0.105	-0.126
HOS_P4	-0.091	-0.075	-0.106	-0.094	-0.114	-0.118
HOS_P5	-0.080	-0.058	-0.108	-0.094	-0.105	-0.146
HOS_P6	-0.102	-0.065	-0.113	-0.085	-0.084	-0.123
HOS_P7	-0.080	-0.060	-0.191	-0.133	-0.094	-0.153
DEC_P1	-0.100	-0.081	-0.195	-0.141	-0.120	-0.127
DEC_P2	-0.060	-0.052	-0.155	-0.102	-0.086	-0.096
DEC_P3	-0.140	-0.105	-0.193	-0.127	-0.129	-0.155
EMO_P1	0.158	0.128	0.145	0.111	0.118	0.124
EMO_P2	0.112	0.114	0.094	0.086	0.081	0.117
EMO_P3	0.140	0.130	0.101	0.101	0.092	0.133
EMO_P4	0.140	0.136	0.108	0.104	0.089	0.121
NEG_P1	-0.071	-0.079	-0.092	-0.070	-0.017	-0.099
NEG_P2	-0.121	-0.097	-0.164	-0.117	-0.057	-0.130
NEG_P3	-0.098	-0.097	-0.104	-0.071	-0.020	-0.074
NEG_P4	-0.013	-0.016	-0.055	-0.026	0.033	-0.033
NEG_P5	-0.128	-0.110	-0.137	-0.115	-0.093	-0.162
PLA_P1	0.114	0.123	0.026	0.036	0.082	0.044
PLA_P2	0.128	0.113	0.053	0.047	0.115	0.075
SOB_P1	0.178	0.158	0.072	0.063	0.111	0.091
SOB_P2	0.175	0.159	0.095	0.100	0.141	0.119
SOB_P3	0.193	0.159	0.093	0.076	0.141	0.129
ACH_P1	0.143	0.120	0.117	0.113	0.102	0.088
ACH_P2	0.170	0.145	0.124	0.129	0.115	0.098
ACH_P3	0.158	0.140	0.134	0.129	0.103	0.129
ACH_P4	0.109	0.110	0.117	0.125	0.104	0.103
ACH_P5	0.182	0.157	0.113	0.116	0.119	0.095
ORD_P1	0.085	0.065	0.140	0.112	0.079	0.103
ORD_P2	0.086	0.081	0.138	0.129	0.095	0.085

ORD_P3	0.123	0.118	0.132	0.130	0.089	0.111
ORD_P4	0.112	0.090	0.151	0.157	0.122	0.117
ORD_P5	0.122	0.104	0.119	0.112	0.091	0.106
ORD_P6	0.104	0.092	0.133	0.124	0.092	0.102
TRA_P1	0.155	0.103	0.088	0.079	0.115	0.108
TRA_P2	0.194	0.127	0.107	0.090	0.146	0.145
BRO_P1	0.112	0.111	0.055	0.061	0.086	0.070
BRO_P2	0.168	0.158	0.085	0.079	0.094	0.100
BRO_P3	0.111	0.121	0.073	0.076	0.091	0.091
EPI_P1	0.096	0.099	0.090	0.081	0.083	0.088
EPI_P2	0.077	0.099	0.060	0.076	0.072	0.065
EPI_P3	0.092	0.109	0.079	0.089	0.078	0.088
ITL_P1	0.115	0.122	0.080	0.081	0.082	0.083
ITL_P2	0.094	0.110	0.092	0.098	0.069	0.086
ITL_P3	0.188	0.181	0.104	0.109	0.076	0.112
ITL_P4	0.153	0.159	0.105	0.104	0.087	0.097
ITL_P5	0.157	0.162	0.109	0.105	0.097	0.085

Covariance Matrix

	INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
INT_P5	0.248					
INT_P6	0.117	0.227				
IPR_P1	0.097	0.074	0.330			
IPR_P2	0.116	0.091	0.150	0.433		
IPR_P3	0.110	0.100	0.125	0.190	0.289	
IPR_P4	0.129	0.097	0.120	0.165	0.141	0.260
SOC_P1	0.117	0.091	0.173	0.176	0.162	0.147
SOC_P2	0.121	0.093	0.157	0.166	0.146	0.149
WAR_P1	0.122	0.092	0.133	0.164	0.127	0.134
WAR_P2	0.120	0.086	0.139	0.170	0.139	0.137
WAR_P3	0.127	0.092	0.121	0.161	0.135	0.140
WAR_P4	0.141	0.098	0.145	0.183	0.163	0.141
WAR_P5	0.124	0.092	0.124	0.166	0.141	0.138
ARR_P1	-0.094	-0.081	-0.053	-0.072	-0.048	-0.097
ARR_P2	-0.112	-0.084	-0.087	-0.103	-0.058	-0.114
ARR_P3	-0.089	-0.072	-0.075	-0.104	-0.068	-0.111
CON_P1	-0.079	-0.116	-0.072	-0.123	-0.079	-0.105
CON_P2	-0.095	-0.107	-0.072	-0.088	-0.067	-0.087
CON_P3	-0.075	-0.095	-0.046	-0.050	-0.043	-0.067
HOS_P1	-0.088	-0.084	-0.080	-0.120	-0.067	-0.108
HOS_P2	-0.080	-0.073	-0.051	-0.090	-0.053	-0.073
HOS_P3	-0.097	-0.083	-0.094	-0.125	-0.078	-0.113
HOS_P4	-0.101	-0.085	-0.097	-0.102	-0.080	-0.112
HOS_P5	-0.109	-0.099	-0.083	-0.109	-0.077	-0.112
HOS_P6	-0.079	-0.077	-0.084	-0.115	-0.082	-0.092
HOS_P7	-0.102	-0.128	-0.075	-0.078	-0.071	-0.084
DEC_P1	-0.101	-0.135	-0.089	-0.089	-0.083	-0.081
DEC_P2	-0.071	-0.095	-0.046	-0.059	-0.052	-0.059
DEC_P3	-0.102	-0.127	-0.136	-0.148	-0.115	-0.137
EMO_P1	0.089	0.118	0.124	0.141	0.103	0.117
EMO_P2	0.083	0.087	0.107	0.126	0.096	0.108
EMO_P3	0.093	0.103	0.113	0.161	0.115	0.129
EMO_P4	0.086	0.111	0.104	0.133	0.118	0.116
NEG_P1	-0.037	-0.065	-0.067	-0.095	-0.051	-0.071
NEG_P2	-0.054	-0.097	-0.085	-0.106	-0.085	-0.077
NEG_P3	-0.008	-0.056	-0.067	-0.077	-0.056	-0.049
NEG_P4	0.024	-0.012	-0.014	-0.027	0.005	0.002
NEG_P5	-0.095	-0.107	-0.121	-0.150	-0.095	-0.122
PLA_P1	0.070	0.032	0.119	0.104	0.114	0.088
PLA_P2	0.095	0.055	0.140	0.128	0.115	0.111
SOB_P1	0.094	0.054	0.201	0.152	0.139	0.131
SOB_P2	0.119	0.084	0.200	0.168	0.149	0.144
SOB_P3	0.119	0.072	0.201	0.187	0.153	0.153
ACH_P1	0.076	0.102	0.106	0.096	0.096	0.091
ACH_P2	0.077	0.119	0.112	0.125	0.102	0.101
ACH_P3	0.095	0.128	0.105	0.131	0.120	0.110
ACH_P4	0.093	0.124	0.078	0.081	0.091	0.085
ACH_P5	0.095	0.122	0.118	0.128	0.123	0.112
ORD_P1	0.077	0.120	0.056	0.095	0.075	0.062
ORD_P2	0.073	0.123	0.056	0.050	0.067	0.063
ORD_P3	0.086	0.131	0.078	0.085	0.108	0.086
ORD_P4	0.099	0.148	0.075	0.074	0.092	0.087
ORD_P5	0.088	0.120	0.077	0.096	0.094	0.082
ORD_P6	0.087	0.130	0.068	0.089	0.088	0.074
TRA_P1	0.099	0.099	0.100	0.162	0.084	0.110

TRA_P2	0.122	0.122	0.133	0.195	0.125	0.149
BRO_P1	0.077	0.064	0.094	0.092	0.093	0.094
BRO_P2	0.086	0.075	0.129	0.134	0.122	0.109
BRO_P3	0.087	0.078	0.106	0.095	0.102	0.101
EPI_P1	0.077	0.083	0.085	0.081	0.086	0.078
EPI_P2	0.080	0.069	0.067	0.052	0.083	0.076
EPI_P3	0.078	0.084	0.072	0.069	0.088	0.084
ITL_P1	0.079	0.085	0.098	0.084	0.099	0.088
ITL_P2	0.068	0.086	0.076	0.069	0.087	0.065
ITL_P3	0.081	0.093	0.121	0.139	0.140	0.102
ITL_P4	0.083	0.105	0.111	0.110	0.132	0.098
ITL_P5	0.088	0.105	0.118	0.117	0.123	0.102

Covariance Matrix

	SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
SOC_P1	0.370					
SOC_P2	0.255	0.357				
WAR_P1	0.154	0.154	0.290			
WAR_P2	0.175	0.180	0.188	0.331		
WAR_P3	0.159	0.171	0.168	0.177	0.283	
WAR_P4	0.174	0.166	0.154	0.154	0.158	0.274
WAR_P5	0.148	0.146	0.161	0.153	0.159	0.156
ARR_P1	-0.044	-0.075	-0.086	-0.098	-0.113	-0.060
ARR_P2	-0.071	-0.099	-0.113	-0.125	-0.125	-0.087
ARR_P3	-0.060	-0.077	-0.091	-0.102	-0.105	-0.079
CON_P1	-0.066	-0.061	-0.089	-0.087	-0.087	-0.086
CON_P2	-0.065	-0.071	-0.087	-0.074	-0.082	-0.079
CON_P3	-0.035	-0.051	-0.059	-0.052	-0.064	-0.055
HOS_P1	-0.071	-0.082	-0.093	-0.096	-0.095	-0.076
HOS_P2	-0.054	-0.060	-0.073	-0.087	-0.086	-0.064
HOS_P3	-0.099	-0.103	-0.104	-0.102	-0.111	-0.097
HOS_P4	-0.097	-0.106	-0.122	-0.120	-0.130	-0.098
HOS_P5	-0.082	-0.103	-0.107	-0.113	-0.116	-0.097
HOS_P6	-0.093	-0.087	-0.101	-0.101	-0.100	-0.088
HOS_P7	-0.076	-0.075	-0.089	-0.074	-0.077	-0.085
DEC_P1	-0.100	-0.088	-0.090	-0.084	-0.080	-0.082
DEC_P2	-0.034	-0.047	-0.055	-0.064	-0.055	-0.049
DEC_P3	-0.138	-0.122	-0.122	-0.132	-0.103	-0.117
EMO_P1	0.140	0.116	0.114	0.102	0.083	0.112
EMO_P2	0.124	0.104	0.090	0.088	0.073	0.107
EMO_P3	0.141	0.124	0.090	0.097	0.075	0.115
EMO_P4	0.136	0.107	0.082	0.080	0.076	0.107
NEG_P1	-0.049	-0.015	-0.014	-0.004	-0.006	-0.046
NEG_P2	-0.083	-0.047	-0.060	-0.038	-0.033	-0.059
NEG_P3	-0.067	-0.024	-0.018	-0.005	0.023	-0.025
NEG_P4	0.014	0.054	0.032	0.046	0.061	0.019
NEG_P5	-0.113	-0.091	-0.104	-0.088	-0.077	-0.108
PLA_P1	0.156	0.128	0.081	0.093	0.079	0.111
PLA_P2	0.184	0.184	0.114	0.130	0.102	0.143
SOB_P1	0.252	0.217	0.142	0.153	0.111	0.174
SOB_P2	0.248	0.218	0.153	0.171	0.133	0.180
SOB_P3	0.268	0.219	0.156	0.177	0.131	0.193
ACH_P1	0.116	0.093	0.099	0.083	0.077	0.092
ACH_P2	0.131	0.118	0.114	0.100	0.091	0.111
ACH_P3	0.119	0.107	0.115	0.097	0.092	0.128
ACH_P4	0.097	0.086	0.091	0.079	0.079	0.099
ACH_P5	0.148	0.119	0.110	0.092	0.080	0.129
ORD_P1	0.067	0.054	0.085	0.084	0.068	0.078
ORD_P2	0.070	0.067	0.078	0.070	0.061	0.065
ORD_P3	0.090	0.084	0.090	0.082	0.083	0.100
ORD_P4	0.096	0.086	0.093	0.093	0.079	0.093
ORD_P5	0.085	0.076	0.092	0.085	0.082	0.102
ORD_P6	0.076	0.068	0.084	0.076	0.070	0.086
TRA_P1	0.125	0.119	0.144	0.133	0.109	0.123
TRA_P2	0.158	0.167	0.171	0.171	0.151	0.152
BRO_P1	0.110	0.116	0.083	0.094	0.081	0.101
BRO_P2	0.137	0.127	0.103	0.106	0.085	0.138
BRO_P3	0.120	0.115	0.090	0.089	0.077	0.110
EPI_P1	0.079	0.079	0.083	0.082	0.076	0.086
EPI_P2	0.078	0.082	0.063	0.065	0.068	0.079
EPI_P3	0.081	0.084	0.076	0.069	0.074	0.092
ITL_P1	0.131	0.112	0.083	0.078	0.072	0.103
ITL_P2	0.096	0.076	0.061	0.048	0.057	0.082
ITL_P3	0.146	0.108	0.094	0.094	0.084	0.135
ITL_P4	0.151	0.124	0.091	0.085	0.088	0.121

ITL_P5	0.158	0.124	0.097	0.091	0.081	0.116

Covariance Matrix

	WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
WAR_P5	0.272					
ARR_P1	-0.066	0.609				
ARR_P2	-0.084	0.365	0.535			
ARR_P3	-0.081	0.293	0.295	0.562		
CON_P1	-0.068	0.239	0.207	0.210	0.728	
CON_P2	-0.060	0.207	0.208	0.171	0.258	0.383
CON_P3	-0.042	0.218	0.207	0.193	0.264	0.224
HOS_P1	-0.064	0.249	0.249	0.192	0.339	0.231
HOS_P2	-0.051	0.228	0.208	0.161	0.232	0.183
HOS_P3	-0.079	0.206	0.221	0.181	0.192	0.210
HOS_P4	-0.103	0.245	0.250	0.214	0.177	0.165
HOS_P5	-0.090	0.260	0.280	0.220	0.239	0.227
HOS_P6	-0.088	0.186	0.191	0.179	0.227	0.171
HOS_P7	-0.053	0.198	0.199	0.183	0.313	0.233
DEC_P1	-0.070	0.157	0.164	0.135	0.249	0.202
DEC_P2	-0.048	0.156	0.138	0.132	0.227	0.154
DEC_P3	-0.106	0.206	0.214	0.191	0.265	0.211
EMO_P1	0.104	-0.050	-0.086	-0.082	-0.145	-0.121
EMO_P2	0.086	-0.040	-0.058	-0.068	-0.102	-0.090
EMO_P3	0.098	-0.039	-0.054	-0.060	-0.100	-0.088
EMO_P4	0.095	-0.029	-0.044	-0.053	-0.111	-0.094
NEG_P1	-0.008	0.063	0.062	0.085	0.183	0.136
NEG_P2	-0.058	0.113	0.099	0.134	0.266	0.153
NEG_P3	-0.016	0.016	0.008	0.058	0.179	0.087
NEG_P4	0.035	0.021	0.014	0.053	0.150	0.068
NEG_P5	-0.085	0.170	0.173	0.182	0.278	0.230
PLA_P1	0.106	0.060	0.038	0.014	0.128	0.031
PLA_P2	0.124	0.015	-0.019	-0.024	0.091	-0.007
SOB_P1	0.131	0.017	-0.021	-0.042	0.005	-0.012
SOB_P2	0.145	-0.039	-0.083	-0.070	-0.046	-0.073
SOB_P3	0.159	-0.002	-0.051	-0.053	-0.038	-0.038
ACH_P1	0.091	-0.031	-0.050	-0.040	-0.101	-0.069
ACH_P2	0.109	-0.039	-0.054	-0.065	-0.117	-0.088
ACH_P3	0.119	-0.036	-0.065	-0.069	-0.144	-0.095
ACH_P4	0.103	-0.048	-0.066	-0.062	-0.101	-0.081
ACH_P5	0.126	0.032	-0.011	-0.024	-0.079	-0.063
ORD_P1	0.081	-0.066	-0.098	-0.062	-0.142	-0.096
ORD_P2	0.082	-0.048	-0.058	-0.048	-0.121	-0.073
ORD_P3	0.100	-0.032	-0.053	-0.043	-0.107	-0.082
ORD_P4	0.101	-0.071	-0.085	-0.066	-0.150	-0.102
ORD_P5	0.110	-0.055	-0.082	-0.052	-0.134	-0.086
ORD_P6	0.095	-0.050	-0.066	-0.037	-0.131	-0.090
TRA_P1	0.141	-0.070	-0.111	-0.075	-0.086	-0.072
TRA_P2	0.176	-0.102	-0.146	-0.113	-0.112	-0.093
BRO_P1	0.094	-0.015	-0.027	-0.027	-0.007	-0.037
BRO_P2	0.128	0.030	0.003	-0.008	-0.054	-0.019
BRO_P3	0.097	-0.004	-0.019	-0.036	-0.030	-0.046
EPI_P1	0.079	-0.064	-0.074	-0.068	-0.079	-0.082
EPI_P2	0.075	-0.038	-0.033	-0.028	-0.006	-0.044
EPI_P3	0.085	-0.029	-0.027	-0.040	-0.051	-0.061
ITL_P1	0.091	-0.016	-0.017	-0.030	-0.054	-0.048
ITL_P2	0.072	0.009	-0.002	-0.008	-0.026	-0.032
ITL_P3	0.120	0.029	0.007	-0.025	-0.079	-0.038
ITL_P4	0.104	-0.006	-0.008	-0.028	-0.069	-0.057
ITL_P5	0.105	0.004	-0.010	-0.019	-0.083	-0.059

Covariance Matrix

	CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
CON_P3	0.394					
HOS_P1	0.232	0.576				
HOS_P2	0.188	0.245	0.497			
HOS_P3	0.173	0.207	0.186	0.376		
HOS_P4	0.154	0.173	0.134	0.191	0.442	
HOS_P5	0.211	0.255	0.214	0.214	0.210	0.412
HOS_P6	0.159	0.234	0.174	0.176	0.191	0.196
HOS_P7	0.225	0.281	0.194	0.183	0.165	0.228
DEC_P1	0.174	0.210	0.161	0.167	0.164	0.188
DEC_P2	0.125	0.168	0.135	0.120	0.133	0.151
DEC_P3	0.168	0.241	0.169	0.203	0.209	0.231

EMO_P1	-0.083	-0.124	-0.060	-0.137	-0.096	-0.105
EMO_P2	-0.069	-0.109	-0.054	-0.108	-0.061	-0.064
EMO_P3	-0.054	-0.088	-0.052	-0.106	-0.070	-0.069
EMO_P4	-0.070	-0.098	-0.049	-0.098	-0.064	-0.068
NEG_P1	0.103	0.173	0.109	0.141	0.082	0.102
NEG_P2	0.126	0.202	0.118	0.132	0.116	0.145
NEG_P3	0.054	0.117	0.023	0.090	0.072	0.055
NEG_P4	0.052	0.095	0.028	0.064	0.041	0.041
NEG_P5	0.193	0.265	0.165	0.229	0.186	0.203
PLA_P1	0.057	0.054	0.049	-0.003	-0.021	0.040
PLA_P2	0.016	0.007	0.015	-0.044	-0.049	-0.014
SOB_P1	0.026	-0.003	0.013	-0.054	-0.083	-0.031
SOB_P2	-0.037	-0.075	-0.042	-0.106	-0.116	-0.095
SOB_P3	0.008	-0.069	-0.017	-0.089	-0.092	-0.062
ACH_P1	-0.042	-0.057	-0.033	-0.074	-0.075	-0.065
ACH_P2	-0.053	-0.071	-0.035	-0.091	-0.093	-0.084
ACH_P3	-0.074	-0.097	-0.042	-0.094	-0.082	-0.090
ACH_P4	-0.068	-0.066	-0.054	-0.070	-0.077	-0.082
ACH_P5	-0.033	-0.038	0.003	-0.065	-0.050	-0.055
ORD_P1	-0.093	-0.103	-0.095	-0.082	-0.061	-0.118
ORD_P2	-0.069	-0.063	-0.051	-0.060	-0.069	-0.072
ORD_P3	-0.054	-0.051	-0.032	-0.055	-0.062	-0.066
ORD_P4	-0.087	-0.095	-0.072	-0.082	-0.084	-0.106
ORD_P5	-0.079	-0.093	-0.069	-0.074	-0.070	-0.093
ORD_P6	-0.074	-0.083	-0.064	-0.068	-0.061	-0.088
TRA_P1	-0.058	-0.103	-0.052	-0.092	-0.089	-0.100
TRA_P2	-0.090	-0.140	-0.078	-0.122	-0.118	-0.141
BRO_P1	-0.012	-0.019	-0.004	-0.050	-0.044	-0.038
BRO_P2	0.002	-0.031	0.012	-0.037	-0.029	-0.017
BRO_P3	-0.029	-0.031	-0.014	-0.057	-0.046	-0.038
EPI_P1	-0.063	-0.056	-0.051	-0.088	-0.078	-0.078
EPI_P2	-0.029	-0.010	-0.013	-0.051	-0.057	-0.035
EPI_P3	-0.040	-0.035	-0.031	-0.060	-0.055	-0.050
ITL_P1	-0.037	-0.031	-0.013	-0.058	-0.050	-0.032
ITL_P2	-0.017	-0.011	-0.004	-0.033	-0.047	-0.020
ITL_P3	-0.012	-0.032	-0.006	-0.045	-0.044	-0.018
ITL_P4	-0.032	-0.036	-0.017	-0.058	-0.052	-0.040
ITL_P5	-0.017	-0.042	-0.014	-0.062	-0.066	-0.044

Covariance Matrix

	HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
HOS_P6	0.451					
HOS_P7	0.251	0.698				
DEC_P1	0.195	0.325	0.478			
DEC_P2	0.151	0.243	0.215	0.513		
DEC_P3	0.214	0.275	0.284	0.248	0.609	
EMO_P1	-0.111	-0.132	-0.175	-0.120	-0.253	0.513
EMO_P2	-0.087	-0.105	-0.121	-0.047	-0.112	0.178
EMO_P3	-0.085	-0.101	-0.133	-0.072	-0.149	0.214
EMO_P4	-0.094	-0.116	-0.133	-0.071	-0.138	0.208
NEG_P1	0.162	0.188	0.177	0.118	0.162	-0.159
NEG_P2	0.185	0.238	0.250	0.215	0.307	-0.256
NEG_P3	0.130	0.140	0.165	0.143	0.212	-0.212
NEG_P4	0.104	0.122	0.126	0.115	0.159	-0.146
NEG_P5	0.232	0.280	0.252	0.174	0.279	-0.242
PLA_P1	0.010	0.027	0.012	0.021	-0.017	0.046
PLA_P2	-0.015	0.001	-0.028	0.004	-0.075	0.091
SOB_P1	-0.046	-0.047	-0.061	-0.025	-0.158	0.140
SOB_P2	-0.090	-0.081	-0.102	-0.037	-0.180	0.155
SOB_P3	-0.100	-0.084	-0.095	-0.038	-0.206	0.172
ACH_P1	-0.076	-0.107	-0.131	-0.089	-0.154	0.191
ACH_P2	-0.095	-0.118	-0.144	-0.105	-0.193	0.238
ACH_P3	-0.105	-0.139	-0.144	-0.104	-0.189	0.210
ACH_P4	-0.065	-0.108	-0.122	-0.082	-0.129	0.142
ACH_P5	-0.062	-0.082	-0.119	-0.075	-0.165	0.233
ORD_P1	-0.090	-0.149	-0.130	-0.095	-0.144	0.125
ORD_P2	-0.071	-0.126	-0.141	-0.091	-0.129	0.130
ORD_P3	-0.069	-0.107	-0.119	-0.088	-0.135	0.143
ORD_P4	-0.094	-0.147	-0.165	-0.112	-0.178	0.176
ORD_P5	-0.077	-0.121	-0.112	-0.093	-0.144	0.132
ORD_P6	-0.079	-0.130	-0.130	-0.096	-0.137	0.132
TRA_P1	-0.104	-0.079	-0.064	-0.064	-0.157	0.174
TRA_P2	-0.126	-0.098	-0.103	-0.086	-0.194	0.210
BRO_P1	-0.017	-0.018	-0.033	-0.023	-0.052	0.092
BRO_P2	-0.032	-0.035	-0.066	-0.042	-0.079	0.128

BRO_P3	-0.037	-0.047	-0.054	-0.035	-0.075	0.115
EPI_P1	-0.053	-0.069	-0.088	-0.070	-0.104	0.138
EPI_P2	-0.007	-0.026	-0.048	-0.029	-0.031	0.058
EPI_P3	-0.036	-0.052	-0.065	-0.048	-0.064	0.093
ITL_P1	-0.035	-0.054	-0.082	-0.035	-0.067	0.129
ITL_P2	-0.029	-0.053	-0.075	-0.030	-0.046	0.091
ITL_P3	-0.064	-0.079	-0.092	-0.060	-0.095	0.144
ITL_P4	-0.061	-0.076	-0.106	-0.050	-0.084	0.124
ITL_P5	-0.066	-0.099	-0.129	-0.074	-0.144	0.164

Covariance Matrix

	EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
EMO_P2	0.458					
EMO_P3	0.254	0.482				
EMO_P4	0.231	0.263	0.415			
NEG_P1	-0.248	-0.246	-0.267	0.819		
NEG_P2	-0.177	-0.192	-0.199	0.313	0.726	
NEG_P3	-0.227	-0.244	-0.218	0.389	0.428	0.887
NEG_P4	-0.124	-0.149	-0.138	0.346	0.330	0.450
NEG_P5	-0.231	-0.233	-0.236	0.392	0.320	0.332
PLA_P1	0.103	0.094	0.062	-0.004	-0.003	-0.042
PLA_P2	0.128	0.106	0.076	-0.002	-0.008	-0.024
SOB_P1	0.108	0.113	0.086	0.004	-0.067	-0.088
SOB_P2	0.153	0.140	0.133	-0.068	-0.105	-0.115
SOB_P3	0.155	0.150	0.128	-0.060	-0.106	-0.137
ACH_P1	0.090	0.124	0.137	-0.082	-0.145	-0.088
ACH_P2	0.120	0.157	0.161	-0.098	-0.177	-0.141
ACH_P3	0.138	0.154	0.159	-0.115	-0.166	-0.123
ACH_P4	0.088	0.113	0.127	-0.051	-0.107	-0.053
ACH_P5	0.127	0.151	0.172	-0.096	-0.153	-0.126
ORD_P1	0.054	0.071	0.081	-0.031	-0.099	-0.002
ORD_P2	0.067	0.092	0.108	-0.044	-0.122	-0.057
ORD_P3	0.077	0.113	0.117	-0.056	-0.116	-0.060
ORD_P4	0.082	0.117	0.131	-0.064	-0.150	-0.085
ORD_P5	0.067	0.092	0.103	-0.033	-0.104	-0.025
ORD_P6	0.070	0.099	0.110	-0.055	-0.126	-0.059
TRA_P1	0.070	0.085	0.077	-0.001	-0.081	-0.034
TRA_P2	0.097	0.117	0.101	-0.008	-0.100	-0.041
BRO_P1	0.084	0.074	0.083	0.005	-0.026	-0.014
BRO_P2	0.135	0.126	0.126	-0.058	-0.083	-0.105
BRO_P3	0.128	0.111	0.108	-0.051	-0.069	-0.066
EPI_P1	0.079	0.089	0.095	-0.062	-0.079	-0.038
EPI_P2	0.071	0.074	0.073	-0.031	-0.024	-0.010
EPI_P3	0.090	0.101	0.100	-0.056	-0.064	-0.044
ITL_P1	0.150	0.160	0.153	-0.076	-0.098	-0.108
ITL_P2	0.094	0.109	0.114	-0.058	-0.070	-0.069
ITL_P3	0.148	0.167	0.171	-0.120	-0.139	-0.156
ITL_P4	0.131	0.143	0.156	-0.096	-0.106	-0.118
ITL_P5	0.127	0.152	0.164	-0.096	-0.150	-0.157

Covariance Matrix

	NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
NEG_P4	0.665					
NEG_P5	0.237	0.662				
PLA_P1	0.041	-0.003	0.695			
PLA_P2	0.046	-0.032	0.364	0.492		
SOB_P1	-0.004	-0.054	0.301	0.312	0.710	
SOB_P2	-0.014	-0.128	0.224	0.250	0.381	0.480
SOB_P3	-0.043	-0.125	0.290	0.335	0.512	0.396
ACH_P1	-0.047	-0.126	0.052	0.048	0.114	0.100
ACH_P2	-0.086	-0.177	0.061	0.080	0.140	0.137
ACH_P3	-0.087	-0.173	0.041	0.070	0.133	0.125
ACH_P4	-0.022	-0.118	0.036	0.051	0.086	0.097
ACH_P5	-0.065	-0.139	0.098	0.123	0.182	0.160
ORD_P1	0.000	-0.095	0.003	0.021	0.044	0.064
ORD_P2	-0.021	-0.101	0.007	0.016	0.046	0.066
ORD_P3	-0.022	-0.100	0.044	0.050	0.080	0.085
ORD_P4	-0.047	-0.134	0.002	0.032	0.082	0.093
ORD_P5	0.006	-0.094	0.025	0.043	0.073	0.085
ORD_P6	-0.031	-0.104	0.016	0.031	0.056	0.077
TRA_P1	0.045	-0.098	0.054	0.106	0.165	0.156
TRA_P2	0.043	-0.127	0.068	0.133	0.185	0.174
BRO_P1	0.053	-0.040	0.162	0.137	0.144	0.124

BRO_P2	-0.014	-0.075	0.180	0.184	0.195	0.160
BRO_P3	0.001	-0.082	0.144	0.160	0.153	0.135
EPI_P1	-0.010	-0.105	0.042	0.052	0.082	0.092
EPI_P2	0.041	-0.044	0.096	0.085	0.070	0.080
EPI_P3	-0.001	-0.086	0.071	0.080	0.067	0.081
ITL_P1	-0.036	-0.106	0.092	0.105	0.124	0.135
ITL_P2	-0.008	-0.080	0.092	0.064	0.071	0.093
ITL_P3	-0.068	-0.135	0.140	0.106	0.131	0.125
ITL_P4	-0.037	-0.107	0.125	0.097	0.131	0.139
ITL_P5	-0.061	-0.132	0.144	0.106	0.191	0.181

Covariance Matrix

	SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
SOB_P3	0.741					
ACH_P1	0.108	0.377				
ACH_P2	0.155	0.238	0.423			
ACH_P3	0.147	0.205	0.274	0.461		
ACH_P4	0.091	0.154	0.179	0.204	0.296	
ACH_P5	0.207	0.229	0.263	0.261	0.192	0.421
ORD_P1	0.061	0.118	0.131	0.142	0.124	0.133
ORD_P2	0.060	0.153	0.164	0.183	0.175	0.157
ORD_P3	0.090	0.161	0.178	0.205	0.174	0.184
ORD_P4	0.091	0.186	0.211	0.230	0.209	0.206
ORD_P5	0.095	0.137	0.144	0.178	0.149	0.158
ORD_P6	0.078	0.149	0.155	0.178	0.161	0.163
TRA_P1	0.195	0.120	0.142	0.136	0.091	0.170
TRA_P2	0.226	0.131	0.163	0.166	0.117	0.186
BRO_P1	0.139	0.091	0.089	0.072	0.070	0.123
BRO_P2	0.215	0.144	0.136	0.135	0.111	0.200
BRO_P3	0.168	0.105	0.104	0.108	0.092	0.144
EPI_P1	0.079	0.139	0.131	0.133	0.128	0.135
EPI_P2	0.064	0.079	0.066	0.068	0.080	0.086
EPI_P3	0.070	0.105	0.107	0.117	0.115	0.123
ITL_P1	0.138	0.110	0.120	0.130	0.123	0.142
ITL_P2	0.071	0.106	0.102	0.101	0.106	0.109
ITL_P3	0.150	0.172	0.168	0.174	0.133	0.196
ITL_P4	0.127	0.129	0.135	0.140	0.127	0.154
ITL_P5	0.178	0.168	0.180	0.154	0.132	0.189

Covariance Matrix

	ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
ORD_P1	0.426					
ORD_P2	0.183	0.357				
ORD_P3	0.169	0.206	0.368			
ORD_P4	0.183	0.255	0.213	0.439		
ORD_P5	0.268	0.207	0.206	0.194	0.450	
ORD_P6	0.249	0.230	0.209	0.224	0.289	0.370
TRA_P1	0.185	0.071	0.108	0.126	0.148	0.117
TRA_P2	0.170	0.091	0.125	0.140	0.160	0.121
BRO_P1	0.014	0.032	0.059	0.040	0.045	0.031
BRO_P2	0.030	0.062	0.090	0.079	0.086	0.070
BRO_P3	0.029	0.048	0.074	0.059	0.063	0.053
EPI_P1	0.079	0.089	0.100	0.112	0.084	0.087
EPI_P2	0.017	0.047	0.065	0.052	0.050	0.049
EPI_P3	0.045	0.076	0.098	0.088	0.072	0.077
ITL_P1	0.049	0.108	0.100	0.097	0.078	0.085
ITL_P2	0.054	0.098	0.107	0.094	0.076	0.090
ITL_P3	0.052	0.097	0.136	0.113	0.105	0.100
ITL_P4	0.071	0.126	0.135	0.115	0.096	0.119
ITL_P5	0.097	0.132	0.140	0.149	0.125	0.146

Covariance Matrix

	TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
TRA_P1	0.868					
TRA_P2	0.589	0.733				
BRO_P1	0.058	0.093	0.389			
BRO_P2	0.088	0.126	0.259	0.508		
BRO_P3	0.062	0.104	0.193	0.255	0.372	
EPI_P1	0.077	0.098	0.111	0.117	0.113	0.299
EPI_P2	-0.003	0.029	0.157	0.169	0.164	0.117
EPI_P3	0.028	0.061	0.124	0.156	0.160	0.133

ITL_P1	0.041	0.067	0.105	0.156	0.139	0.112
ITL_P2	0.016	0.029	0.087	0.116	0.115	0.094
ITL_P3	0.056	0.085	0.178	0.285	0.183	0.109
ITL_P4	0.045	0.064	0.108	0.145	0.125	0.101
ITL_P5	0.086	0.106	0.105	0.148	0.113	0.097

Covariance Matrix

	EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
EPI_P2	0.285					
EPI_P3	0.157	0.248				
ITL_P1	0.115	0.120	0.320			
ITL_P2	0.108	0.110	0.121	0.273		
ITL_P3	0.131	0.153	0.163	0.154	0.440	
ITL_P4	0.104	0.120	0.178	0.142	0.192	0.341
ITL_P5	0.085	0.098	0.134	0.123	0.172	0.173

Covariance Matrix

	ITL_P5
ITL_P5	0.326

Means

EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
3.936	4.165	3.992	3.870	3.620	3.616

Means

FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
3.774	3.909	4.067	4.209	4.286	4.003

Means

INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
4.206	4.182	4.023	3.764	3.969	3.995

Means

SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
3.883	3.997	4.114	4.029	4.046	4.061

Means

WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
3.945	2.088	1.877	2.107	2.565	1.742

Means

CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
2.043	2.538	2.247	1.721	1.966	1.747

Means

HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
2.697	2.015	2.028	2.325	2.257	4.143

Means

EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
3.739	3.798	3.847	2.700	3.006	3.261

Means

NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
3.530	2.246	3.463	3.777	3.480	3.945

Means

SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
3.409	4.086	4.058	3.926	4.262	3.911

Means

ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
3.986	4.038	3.928	4.011	3.922	3.974

Means

TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
3.453	3.796	4.156	3.779	4.078	4.453

Means

EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
4.303	4.283	4.133	4.081	3.835	3.955

Means

ITL_P5
3.816

Standard Deviations

EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
0.619	0.504	0.599	0.652	0.711	0.725

Standard Deviations

FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
0.647	0.592	0.607	0.508	0.560	0.618

Standard Deviations

INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
0.498	0.477	0.575	0.658	0.538	0.510

Standard Deviations

SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
0.608	0.597	0.539	0.576	0.532	0.523

Standard Deviations

WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
0.521	0.780	0.731	0.750	0.853	0.619

Standard Deviations

CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
0.628	0.759	0.705	0.613	0.665	0.642

Standard Deviations

HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
0.672	0.835	0.691	0.716	0.781	0.716

Standard Deviations

EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3

0.677	0.694	0.644	0.905	0.852	0.942

Standard Deviations

NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
0.815	0.813	0.834	0.701	0.842	0.693

Standard Deviations

SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
0.861	0.614	0.650	0.679	0.544	0.649

Standard Deviations

ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
0.653	0.597	0.607	0.663	0.671	0.609

Standard Deviations

TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
0.932	0.856	0.623	0.713	0.610	0.547

Standard Deviations

EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
0.534	0.498	0.565	0.523	0.663	0.584

Standard Deviations

ITL_P5
0.571

The Problem used 447472 Bytes (= 0.7% of available workspace)

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                              DATE: 05/12/2017
                                TIME: 09:21

                             P R E L I S  2.80

                                     BY

                        Karl G. Jöreskog & Dag Sörbom


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 The following lines were read from file C:\LISREL88\SAPIP2.PR2:

 !PRELIS SYNTAX: Can be edited
 SY='C:\LISREL88\SAPIP2.PSF'
 NS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66
67 68 69 70 71 72 73 74 75 76 77 78 79
 OU MA=CM RA=SAPIP2N.PSF XT


 Total Sample Size =   3912

 Univariate Summary Statistics for Continuous Variables
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Variable	Mean	St. Dev.	T-Value	Skewness	Kurtosis	Minimum	Freq.	Maximum	Freq.
EMP_P1	3.936	0.619	397.889	-0.101	-0.059	1.650	2	5.080	375
EMP_P2	4.165	0.504	516.815	-0.086	-0.139	2.173	1	5.008	561
EMP_P3	3.992	0.599	417.016	-0.088	-0.174	1.708	1	5.096	355
FAC_P1	3.870	0.652	371.025	-0.094	-0.117	1.815	12	5.095	345
FAC_P2	3.620	0.711	318.265	-0.061	-0.145	1.251	6	5.049	250
FAC_P3	3.616	0.725	311.764	-0.069	-0.135	1.327	11	5.067	257
FAC_P4	3.774	0.647	365.127	-0.075	-0.100	1.394	2	5.040	294
FAC_P5	3.909	0.592	413.308	-0.085	-0.008	1.722	2	5.065	301
INT_P1	4.067	0.607	419.035	-0.133	-0.295	1.707	1	5.045	598
INT_P2	4.209	0.508	518.174	-0.120	-0.263	2.209	1	5.013	651
INT_P3	4.286	0.560	478.282	-0.234	-0.439	2.172	2	5.038	992
INT_P4	4.003	0.618	405.078	-0.116	-0.225	1.727	2	5.061	486
INT_P5	4.206	0.498	528.253	-0.097	-0.172	2.233	1	5.008	633
INT_P6	4.182	0.477	548.477	-0.082	-0.223	2.349	1	5.022	431
IPR_P1	4.023	0.575	437.902	-0.096	-0.091	1.899	2	5.098	358
IPR_P2	3.764	0.658	357.616	-0.067	-0.099	1.487	4	5.116	229
IPR_P3	3.969	0.538	461.403	-0.061	-0.071	2.038	3	5.024	298
IPR_P4	3.995	0.510	490.132	-0.058	-0.059	2.041	1	5.011	262
SOC_P1	3.883	0.608	399.488	-0.089	-0.019	1.794	5	5.062	311
SOC_P2	3.997	0.597	418.591	-0.111	0.004	1.920	5	5.051	463
WAR_P1	4.114	0.539	477.691	-0.104	-0.150	2.012	1	5.058	464
WAR_P2	4.029	0.576	437.858	-0.098	-0.117	2.051	5	5.075	400
WAR_P3	4.046	0.532	475.620	-0.082	0.065	1.944	1	5.013	424
WAR_P4	4.061	0.523	485.587	-0.077	-0.071	2.017	1	5.028	385
WAR_P5	3.945	0.521	473.529	-0.050	-0.073	1.958	1	5.024	215
ARR_P1	2.088	0.780	167.327	0.150	-0.334	0.814	552	4.513	13
ARR_P2	1.877	0.731	160.523	0.254	-0.476	0.873	906	4.288	8
ARR_P3	2.107	0.750	175.740	0.140	-0.349	0.887	559	4.579	7
CON_P1	2.565	0.853	188.093	0.049	-0.227	0.877	259	5.117	17
CON_P2	1.742	0.619	176.136	0.275	-0.484	0.925	1005	4.052	2
CON_P3	2.043	0.628	203.565	0.076	-0.222	0.846	301	4.239	3
HOS_P1	2.538	0.759	209.070	0.037	-0.110	0.790	121	5.053	6
HOS_P2	2.247	0.705	199.360	0.071	-0.174	0.844	260	4.676	4
HOS_P3	1.721	0.613	175.600	0.286	-0.490	0.919	1029	3.818	6
HOS_P4	1.966	0.665	184.911	0.151	-0.296	0.898	593	4.206	6
HOS_P5	1.747	0.642	170.336	0.289	-0.486	0.915	1046	3.944	6
HOS_P6	2.697	0.672	251.160	0.002	-0.002	1.022	76	4.812	11
HOS_P7	2.015	0.835	150.925	0.256	-0.530	0.883	924	4.705	10
DEC_P1	2.028	0.691	183.501	0.130	-0.266	0.837	466	4.283	8

DEC_P2	2.325	0.716	203.007	0.059	-0.159	0.896	256	4.577	11
DEC_P3	2.257	0.781	180.884	0.086	-0.269	0.825	348	4.734	9
EMO_P1	4.143	0.716	361.795	-0.244	-0.440	1.633	4	5.145	866
EMO_P2	3.739	0.677	345.604	-0.068	-0.093	1.445	5	5.167	200
EMO_P3	3.798	0.694	342.317	-0.083	-0.170	1.401	4	5.120	317
EMO_P4	3.847	0.644	373.629	-0.080	-0.125	1.689	6	5.091	304
NEG_P1	2.700	0.905	186.626	0.036	-0.189	0.730	161	5.031	57
NEG_P2	3.006	0.852	220.668	0.002	-0.124	0.816	58	5.207	56
NEG_P3	3.261	0.942	216.504	-0.035	-0.246	0.846	59	5.182	223
NEG_P4	3.530	0.815	270.831	-0.056	-0.204	0.929	9	5.160	248
NEG_P5	2.246	0.813	172.724	0.114	-0.290	0.831	440	4.804	11
PLA_P1	3.463	0.834	259.769	-0.056	-0.193	0.967	17	5.142	240
PLA_P2	3.777	0.701	336.810	-0.085	-0.190	1.517	8	5.101	316
SOB_P1	3.480	0.842	258.421	-0.055	-0.197	0.992	19	5.186	233
SOB_P2	3.945	0.693	356.229	-0.128	-0.232	1.482	3	5.128	483
SOB_P3	3.409	0.861	247.703	-0.040	-0.172	0.824	15	5.234	179
ACH_P1	4.086	0.614	416.407	-0.142	-0.271	1.709	1	5.099	548
ACH_P2	4.058	0.650	390.194	-0.151	-0.295	1.790	4	5.110	582
ACH_P3	3.926	0.679	361.764	-0.116	-0.239	1.440	2	5.104	455
ACH_P4	4.262	0.544	490.247	-0.192	-0.371	2.116	1	5.038	858
ACH_P5	3.911	0.649	377.154	-0.082	-0.235	1.570	2	5.114	338
ORD_P1	3.986	0.653	381.757	-0.120	-0.266	1.666	3	5.109	471
ORD_P2	4.038	0.598	422.728	-0.117	-0.210	1.720	1	5.055	502
ORD_P3	3.928	0.607	404.917	-0.087	-0.130	1.695	2	5.054	363
ORD_P4	4.011	0.663	378.649	-0.145	-0.302	1.744	5	5.078	588
ORD_P5	3.922	0.671	365.792	-0.112	-0.225	1.340	1	5.095	445
ORD_P6	3.974	0.609	408.388	-0.089	-0.220	1.769	2	5.085	364
TRA_P1	3.453	0.932	231.807	-0.058	-0.229	1.142	75	5.355	224
TRA_P2	3.796	0.856	277.298	-0.132	-0.310	1.248	19	5.250	480
BRO_P1	4.156	0.623	416.903	-0.192	-0.389	1.735	1	5.091	727
BRO_P2	3.779	0.713	331.532	-0.084	-0.188	1.463	8	5.126	325
BRO_P3	4.078	0.610	418.102	-0.145	-0.278	1.821	2	5.053	611
EPI_P1	4.453	0.547	509.097	-0.440	-0.578	2.357	2	5.055	1450
EPI_P2	4.303	0.534	503.787	-0.224	-0.443	2.183	1	5.023	986
EPI_P3	4.283	0.498	538.390	-0.137	-0.334	2.524	5	5.003	855
ITL_P1	4.133	0.565	457.259	-0.130	-0.248	2.103	3	5.069	552
ITL_P2	4.081	0.523	488.115	-0.082	-0.116	2.040	1	5.037	399
ITL_P3	3.835	0.663	361.638	-0.089	-0.144	1.404	2	5.080	342
ITL_P4	3.955	0.584	423.306	-0.088	-0.091	1.687	1	5.037	373
ITL_P5	3.816	0.571	417.760	-0.035	-0.079	1.756	2	5.111	129

Test of Univariate Normality for Continuous Variables

	Skewness		Kurtosis		Skewness and Kurtosis	
Variable	Z-Score	P-Value	Z-Score	P-Value	Chi-Square	P-Value
EMP_P1	-2.574	0.010	-0.750	0.453	7.191	0.027
EMP_P2	-2.198	0.028	-1.771	0.077	7.967	0.019
EMP_P3	-2.256	0.024	-2.224	0.026	10.036	0.007
FAC_P1	-2.397	0.017	-1.496	0.135	7.980	0.018
FAC_P2	-1.555	0.120	-1.849	0.064	5.836	0.054
FAC_P3	-1.758	0.079	-1.723	0.085	6.061	0.048
FAC_P4	-1.907	0.056	-1.276	0.202	5.265	0.072
FAC_P5	-2.161	0.031	-0.102	0.918	4.681	0.096
INT_P1	-3.383	0.001	-3.770	0.000	25.655	0.000
INT_P2	-3.068	0.002	-3.354	0.001	20.658	0.000
INT_P3	-5.910	0.000	-5.609	0.000	66.390	0.000
INT_P4	-2.947	0.003	-2.874	0.004	16.946	0.000
INT_P5	-2.481	0.013	-2.198	0.028	10.987	0.004
INT_P6	-2.104	0.035	-2.855	0.004	12.579	0.002
IPR_P1	-2.444	0.015	-1.166	0.244	7.332	0.026
IPR_P2	-1.723	0.085	-1.267	0.205	4.575	0.102
IPR_P3	-1.556	0.120	-0.904	0.366	3.238	0.198
IPR_P4	-1.484	0.138	-0.756	0.450	2.773	0.250
SOC_P1	-2.276	0.023	-0.247	0.805	5.240	0.073
SOC_P2	-2.837	0.005	0.051	0.959	8.051	0.018
WAR_P1	-2.656	0.008	-1.916	0.055	10.723	0.005
WAR_P2	-2.496	0.013	-1.489	0.137	8.447	0.015
WAR_P3	-2.100	0.036	0.826	0.409	5.094	0.078
WAR_P4	-1.965	0.049	-0.905	0.366	4.679	0.096
WAR_P5	-1.282	0.200	-0.937	0.349	2.521	0.283
ARR_P1	3.806	0.000	-4.263	0.000	32.659	0.000
ARR_P2	6.399	0.000	-6.084	0.000	77.957	0.000
ARR_P3	3.555	0.000	-4.455	0.000	32.483	0.000
CON_P1	1.253	0.210	-2.905	0.004	10.010	0.007
CON_P2	6.915	0.000	-6.184	0.000	86.067	0.000

CON_P3	1.949	0.051	-2.838	0.005	11.851	0.003
HOS_P1	0.954	0.340	-1.401	0.161	2.872	0.238
HOS_P2	1.809	0.071	-2.217	0.027	8.187	0.017
HOS_P3	7.163	0.000	-6.264	0.000	90.546	0.000
HOS_P4	3.837	0.000	-3.788	0.000	29.073	0.000
HOS_P5	7.237	0.000	-6.212	0.000	90.962	0.000
HOS_P6	0.052	0.958	-0.022	0.983	0.003	0.998
HOS_P7	6.448	0.000	-6.766	0.000	87.360	0.000
DEC_P1	3.302	0.001	-3.395	0.001	22.428	0.000
DEC_P2	1.510	0.131	-2.036	0.042	6.426	0.040
DEC_P3	2.191	0.028	-3.431	0.001	16.570	0.000
EMO_P1	-6.145	0.000	-5.626	0.000	69.416	0.000
EMO_P2	-1.735	0.083	-1.183	0.237	4.408	0.110
EMO_P3	-2.127	0.033	-2.174	0.030	9.251	0.010
EMO_P4	-2.048	0.041	-1.595	0.111	6.739	0.034
NEG_P1	0.926	0.354	-2.415	0.016	6.692	0.035
NEG_P2	0.055	0.956	-1.581	0.114	2.502	0.286
NEG_P3	-0.906	0.365	-3.140	0.002	10.678	0.005
NEG_P4	-1.429	0.153	-2.601	0.009	8.809	0.012
NEG_P5	2.913	0.004	-3.704	0.000	22.201	0.000
PLA_P1	-1.429	0.153	-2.470	0.014	8.145	0.017
PLA_P2	-2.180	0.029	-2.428	0.015	10.648	0.005
SOB_P1	-1.409	0.159	-2.521	0.012	8.341	0.015
SOB_P2	-3.255	0.001	-2.968	0.003	19.405	0.000
SOB_P3	-1.030	0.303	-2.199	0.028	5.897	0.052
ACH_P1	-3.609	0.000	-3.459	0.001	24.984	0.000
ACH_P2	-3.839	0.000	-3.771	0.000	28.957	0.000
ACH_P3	-2.969	0.003	-3.047	0.002	18.099	0.000
ACH_P4	-4.855	0.000	-4.735	0.000	45.993	0.000
ACH_P5	-2.104	0.035	-3.002	0.003	13.440	0.001
ORD_P1	-3.060	0.002	-3.400	0.001	20.925	0.000
ORD_P2	-2.971	0.003	-2.680	0.007	16.009	0.000
ORD_P3	-2.228	0.026	-1.662	0.097	7.726	0.021
ORD_P4	-3.685	0.000	-3.854	0.000	28.431	0.000
ORD_P5	-2.858	0.004	-2.878	0.004	16.454	0.000
ORD_P6	-2.260	0.024	-2.815	0.005	13.036	0.001
TRA_P1	-1.487	0.137	-2.929	0.003	10.791	0.005
TRA_P2	-3.352	0.001	-3.962	0.000	26.931	0.000
BRO_P1	-4.854	0.000	-4.970	0.000	48.266	0.000
BRO_P2	-2.144	0.032	-2.405	0.016	10.381	0.006
BRO_P3	-3.686	0.000	-3.550	0.000	26.188	0.000
EPI_P1	-10.781	0.000	-7.378	0.000	170.673	0.000
EPI_P2	-5.663	0.000	-5.657	0.000	64.074	0.000
EPI_P3	-3.489	0.000	-4.264	0.000	30.360	0.000
ITL_P1	-3.309	0.001	-3.162	0.002	20.952	0.000
ITL_P2	-2.091	0.037	-1.484	0.138	6.576	0.037
ITL_P3	-2.270	0.023	-1.833	0.067	8.516	0.014
ITL_P4	-2.252	0.024	-1.160	0.246	6.416	0.040
ITL_P5	-0.888	0.375	-1.010	0.312	1.809	0.405

Relative Multivariate Kurtosis = 1.156

Test of Multivariate Normality for Continuous Variables

Skewness			Kurtosis			Skewness and Kurtosis	
Value	Z-Score	P-Value	Value	Z-Score	P-Value	Chi-Square	P-Value
244.071	143.100	0.000	7395.373	95.093	0.000	29520.500	0.000

Histograms for Continuous Variables

EMP_P1

Frequency	Percentage	Lower Class Limit
2	0.1	1.650
8	0.2	1.993
147	3.8	2.336
0	0.0	2.679
347	8.9	3.022
668	17.1	3.365
1722	44.0	3.708
0	0.0	4.051
643	16.4	4.394
375	9.6	4.737

EMP_P2

Frequency Percentage Lower Class Limit

3	0.1	2.173
14	0.4	2.457
0	0.0	2.740
157	4.0	3.023
404	10.3	3.307
0	0.0	3.590
1833	46.9	3.874
0	0.0	4.157
940	24.0	4.441
561	14.3	4.724

EMP_P3

Frequency	Percentage	Lower Class Limit
1	0.0	1.708
9	0.2	2.047
58	1.5	2.386
93	2.4	2.724
520	13.3	3.063
549	14.0	3.402
1323	33.8	3.741
624	16.0	4.079
380	9.7	4.418
355	9.1	4.757

FAC_P1

Frequency	Percentage	Lower Class Limit
12	0.3	1.815
53	1.4	2.143
140	3.6	2.471
450	11.5	2.799
726	18.6	3.127
0	0.0	3.455
1577	40.3	3.783
0	0.0	4.111
609	15.6	4.439
345	8.8	4.767

FAC_P2

Frequency	Percentage	Lower Class Limit
6	0.2	1.251
15	0.4	1.631
109	2.8	2.011
289	7.4	2.390
718	18.4	2.770
995	25.4	3.150
0	0.0	3.530
1157	29.6	3.910
373	9.5	4.289
250	6.4	4.669

FAC_P3

Frequency	Percentage	Lower Class Limit
29	0.7	1.327
0	0.0	1.701
112	2.9	2.075
272	7.0	2.449
822	21.0	2.823
795	20.3	3.197
0	0.0	3.571
1283	32.8	3.945
342	8.7	4.319
257	6.6	4.693

FAC_P4

Frequency	Percentage	Lower Class Limit
4	0.1	1.394
54	1.4	1.759
0	0.0	2.123
141	3.6	2.488
689	17.6	2.852
733	18.7	3.217
0	0.0	3.581
1580	40.4	3.946
417	10.7	4.310
294	7.5	4.675

FAC_P5

Frequency	Percentage	Lower Class Limit
8	0.2	1.722
32	0.8	2.056
89	2.3	2.390
373	9.5	2.725
0	0.0	3.059
753	19.2	3.393
1736	44.4	3.728
0	0.0	4.062
620	15.8	4.396
301	7.7	4.731

INT_P1

Frequency	Percentage	Lower Class Limit
2	0.1	1.707
14	0.4	2.041
46	1.2	2.375
0	0.0	2.708
345	8.8	3.042
570	14.6	3.376
1541	39.4	3.710
0	0.0	4.044
796	20.3	4.378
598	15.3	4.712

INT_P2

Frequency	Percentage	Lower Class Limit
3	0.1	2.209
17	0.4	2.490
0	0.0	2.770
98	2.5	3.050
455	11.6	3.331
0	0.0	3.611
1641	41.9	3.892
0	0.0	4.172
1047	26.8	4.452
651	16.6	4.733

INT_P3

Frequency	Percentage	Lower Class Limit
2	0.1	2.172
5	0.1	2.458
27	0.7	2.745
148	3.8	3.032
288	7.4	3.318
0	0.0	3.605
1501	38.4	3.892
0	0.0	4.178
949	24.3	4.465
992	25.4	4.751

INT_P4

Frequency	Percentage	Lower Class Limit
4	0.1	1.727
20	0.5	2.060
92	2.4	2.394
314	8.0	2.727
0	0.0	3.061
725	18.5	3.394
1490	38.1	3.727
0	0.0	4.061
781	20.0	4.394
486	12.4	4.728

INT_P5

Frequency	Percentage	Lower Class Limit
2	0.1	2.233
20	0.5	2.510
0	0.0	2.788
98	2.5	3.065
371	9.5	3.343
0	0.0	3.620
1802	46.1	3.898
0	0.0	4.175
986	25.2	4.453
633	16.2	4.730

INT_P6

Frequency	Percentage	Lower Class Limit
3	0.1	2.349
12	0.3	2.616
69	1.8	2.884
187	4.8	3.151
457	11.7	3.418
0	0.0	3.686
1347	34.4	3.953
855	21.9	4.220
551	14.1	4.488
431	11.0	4.755

IPR_P1

Frequency	Percentage	Lower Class Limit
5	0.1	1.899
15	0.4	2.219
86	2.2	2.539
249	6.4	2.859
639	16.3	3.179
0	0.0	3.499
1615	41.3	3.819
0	0.0	4.138
945	24.2	4.458
358	9.2	4.778

IPR_P2

Frequency	Percentage	Lower Class Limit
15	0.4	1.487
55	1.4	1.850
0	0.0	2.213
198	5.1	2.576
525	13.4	2.939
956	24.4	3.302
1337	34.2	3.665
0	0.0	4.028
597	15.3	4.391
229	5.9	4.754

IPR_P3

Frequency	Percentage	Lower Class Limit
10	0.3	2.038
41	1.0	2.337
0	0.0	2.635
299	7.6	2.934
838	21.4	3.232
0	0.0	3.531
1665	42.6	3.830
0	0.0	4.128
761	19.5	4.427
298	7.6	4.725

IPR_P4

Frequency	Percentage	Lower Class Limit
4	0.1	2.041
19	0.5	2.338
39	1.0	2.635
152	3.9	2.932
355	9.1	3.229
652	16.7	3.526
1518	38.8	3.823
562	14.4	4.120
349	8.9	4.417
262	6.7	4.714

SOC_P1

Frequency	Percentage	Lower Class Limit
10	0.3	1.794
31	0.8	2.121
109	2.8	2.448
417	10.7	2.775
0	0.0	3.101
749	19.1	3.428
1732	44.3	3.755
0	0.0	4.082
553	14.1	4.408
311	7.9	4.735

SOC_P2

Frequency	Percentage	Lower Class Limit
10	0.3	1.920
29	0.7	2.233
66	1.7	2.546
320	8.2	2.859
512	13.1	3.173
0	0.0	3.486
1938	49.5	3.799
0	0.0	4.112
574	14.7	4.425
463	11.8	4.738

WAR_P1

Frequency	Percentage	Lower Class Limit
1	0.0	2.012
9	0.2	2.316
38	1.0	2.621
201	5.1	2.925
525	13.4	3.230
0	0.0	3.535
1626	41.6	3.839
0	0.0	4.144
1048	26.8	4.449
464	11.9	4.753

WAR_P2

Frequency	Percentage	Lower Class Limit
5	0.1	2.051
17	0.4	2.353
68	1.7	2.656
266	6.8	2.958
633	16.2	3.261
0	0.0	3.563
1634	41.8	3.865
0	0.0	4.168
889	22.7	4.470
400	10.2	4.773

WAR_P3

Frequency	Percentage	Lower Class Limit
1	0.0	1.944
12	0.3	2.251
47	1.2	2.558
233	6.0	2.865
512	13.1	3.172
0	0.0	3.479
2003	51.2	3.786
0	0.0	4.092
680	17.4	4.399
424	10.8	4.706

WAR_P4

Frequency	Percentage	Lower Class Limit
1	0.0	2.017
9	0.2	2.318
32	0.8	2.619
198	5.1	2.920
648	16.6	3.221
0	0.0	3.522
1747	44.7	3.824
0	0.0	4.125
892	22.8	4.426
385	9.8	4.727

WAR_P5

Frequency	Percentage	Lower Class Limit
4	0.1	1.958
24	0.6	2.264
59	1.5	2.571
180	4.6	2.877
418	10.7	3.184
751	19.2	3.491
1350	34.5	3.797
593	15.2	4.104
318	8.1	4.411

215	5.5	4.717

ARR_P1

Frequency	Percentage	Lower Class Limit
552	14.1	0.814
827	21.1	1.184
0	0.0	1.554
1152	29.4	1.924
642	16.4	2.294
435	11.1	2.663
162	4.1	3.033
102	2.6	3.403
27	0.7	3.773
13	0.3	4.143

ARR_P2

Frequency	Percentage	Lower Class Limit
906	23.2	0.873
0	0.0	1.215
900	23.0	1.556
1112	28.4	1.898
517	13.2	2.239
0	0.0	2.581
303	7.7	2.922
103	2.6	3.264
63	1.6	3.605
8	0.2	3.947

ARR_P3

Frequency	Percentage	Lower Class Limit
559	14.3	0.887
715	18.3	1.257
0	0.0	1.626
1130	28.9	1.995
715	18.3	2.364
539	13.8	2.733
171	4.4	3.102
60	1.5	3.472
16	0.4	3.841
7	0.2	4.210

CON_P1

Frequency	Percentage	Lower Class Limit
259	6.6	0.877
428	10.9	1.301
789	20.2	1.725
782	20.0	2.149
830	21.2	2.573
0	0.0	2.997
458	11.7	3.421
293	7.5	3.845
56	1.4	4.269
17	0.4	4.693

CON_P2

Frequency	Percentage	Lower Class Limit
1005	25.7	0.925
0	0.0	1.238
1030	26.3	1.550
1207	30.9	1.863
0	0.0	2.176
414	10.6	2.489
187	4.8	2.801
52	1.3	3.114
11	0.3	3.427
6	0.2	3.740

CON_P3

Frequency	Percentage	Lower Class Limit
301	7.7	0.846
540	13.8	1.185
629	16.1	1.524
884	22.6	1.864
676	17.3	2.203
462	11.8	2.542
264	6.7	2.882
130	3.3	3.221

18	0.5	3.560
8	0.2	3.900

HOS_P1

Frequency	Percentage	Lower Class Limit
121	3.1	0.790
455	11.6	1.216
894	22.9	1.642
0	0.0	2.069
955	24.4	2.495
849	21.7	2.921
370	9.5	3.348
205	5.2	3.774
57	1.5	4.200
6	0.2	4.627

HOS_P2

Frequency	Percentage	Lower Class Limit
260	6.6	0.844
729	18.6	1.228
0	0.0	1.611
1061	27.1	1.994
962	24.6	2.377
595	15.2	2.760
217	5.5	3.144
64	1.6	3.527
20	0.5	3.910
4	0.1	4.293

HOS_P3

Frequency	Percentage	Lower Class Limit
1029	26.3	0.919
0	0.0	1.209
1089	27.8	1.499
1165	29.8	1.789
0	0.0	2.079
394	10.1	2.369
165	4.2	2.659
48	1.2	2.949
16	0.4	3.239
6	0.2	3.528

HOS_P4

Frequency	Percentage	Lower Class Limit
593	15.2	0.898
836	21.4	1.228
0	0.0	1.559
1401	35.8	1.890
0	0.0	2.221
615	15.7	2.552
333	8.5	2.883
83	2.1	3.213
45	1.2	3.544
6	0.2	3.875

HOS_P5

Frequency	Percentage	Lower Class Limit
1046	26.7	0.915
0	0.0	1.218
948	24.2	1.521
1263	32.3	1.824
0	0.0	2.127
390	10.0	2.430
172	4.4	2.733
58	1.5	3.036
26	0.7	3.339
9	0.2	3.641

HOS_P6

Frequency	Percentage	Lower Class Limit
76	1.9	1.022
220	5.6	1.401
668	17.1	1.780
1012	25.9	2.159
0	0.0	2.538
1256	32.1	2.917
475	12.1	3.296

157	4.0	3.675
37	0.9	4.054
11	0.3	4.433

HOS_P7

Frequency	Percentage	Lower Class Limit
924	23.6	0.883
637	16.3	1.265
0	0.0	1.647
1010	25.8	2.029
585	15.0	2.411
422	10.8	2.794
193	4.9	3.176
118	3.0	3.558
13	0.3	3.940
10	0.3	4.322

DEC_P1

Frequency	Percentage	Lower Class Limit
466	11.9	0.837
975	24.9	1.181
0	0.0	1.526
1184	30.3	1.871
738	18.9	2.215
0	0.0	2.560
362	9.3	2.904
113	2.9	3.249
55	1.4	3.594
19	0.5	3.938

DEC_P2

Frequency	Percentage	Lower Class Limit
256	6.5	0.896
545	13.9	1.264
0	0.0	1.632
1042	26.6	2.000
1054	26.9	2.368
665	17.0	2.736
0	0.0	3.104
226	5.8	3.472
96	2.5	3.840
28	0.7	4.208

DEC_P3

Frequency	Percentage	Lower Class Limit
348	8.9	0.825
335	8.6	1.216
496	12.7	1.607
758	19.4	1.998
1070	27.4	2.389
388	9.9	2.780
255	6.5	3.170
222	5.7	3.561
21	0.5	3.952
19	0.5	4.343

EMO_P1

Frequency	Percentage	Lower Class Limit
4	0.1	1.633
18	0.5	1.984
50	1.3	2.335
105	2.7	2.686
277	7.1	3.038
432	11.0	3.389
1160	29.7	3.740
1000	25.6	4.091
0	0.0	4.443
866	22.1	4.794

EMO_P2

Frequency	Percentage	Lower Class Limit
5	0.1	1.445
14	0.4	1.817
87	2.2	2.190
196	5.0	2.562
545	13.9	2.934
938	24.0	3.306

1303	33.3	3.678
0	0.0	4.051
624	16.0	4.423
200	5.1	4.795

EMO_P3

Frequency	Percentage	Lower Class Limit
4	0.1	1.401
20	0.5	1.772
57	1.5	2.144
182	4.7	2.516
560	14.3	2.888
831	21.2	3.260
1303	33.3	3.632
0	0.0	4.004
638	16.3	4.376
317	8.1	4.748

EMO_P4

Frequency	Percentage	Lower Class Limit
9	0.2	1.689
51	1.3	2.029
134	3.4	2.369
453	11.6	2.709
0	0.0	3.050
877	22.4	3.390
1448	37.0	3.730
0	0.0	4.071
636	16.3	4.411
304	7.8	4.751

NEG_P1

Frequency	Percentage	Lower Class Limit
161	4.1	0.730
398	10.2	1.160
0	0.0	1.590
792	20.2	2.021
774	19.8	2.451
736	18.8	2.881
525	13.4	3.311
308	7.9	3.741
161	4.1	4.171
57	1.5	4.601

NEG_P2

Frequency	Percentage	Lower Class Limit
58	1.5	0.816
189	4.8	1.255
603	15.4	1.694
621	15.9	2.133
895	22.9	2.572
0	0.0	3.012
745	19.0	3.451
530	13.5	3.890
215	5.5	4.329
56	1.4	4.768

NEG_P3

Frequency	Percentage	Lower Class Limit
59	1.5	0.846
127	3.2	1.280
455	11.6	1.713
544	13.9	2.147
0	0.0	2.580
756	19.3	3.014
660	16.9	3.448
705	18.0	3.881
383	9.8	4.315
223	5.7	4.748

NEG_P4

Frequency	Percentage	Lower Class Limit
9	0.2	0.929
49	1.3	1.352
221	5.6	1.775
369	9.4	2.199
776	19.8	2.622

0	0.0	3.045
841	21.5	3.468
889	22.7	3.891
510	13.0	4.314
248	6.3	4.737

NEG_P5

Frequency	Percentage	Lower Class Limit
440	11.2	0.831
632	16.2	1.228
0	0.0	1.625
1123	28.7	2.023
695	17.8	2.420
564	14.4	2.817
279	7.1	3.215
128	3.3	3.612
40	1.0	4.009
11	0.3	4.407

PLA_P1

Frequency	Percentage	Lower Class Limit
17	0.4	0.967
67	1.7	1.385
271	6.9	1.802
400	10.2	2.220
747	19.1	2.637
845	21.6	3.055
0	0.0	3.472
949	24.3	3.890
376	9.6	4.307
240	6.1	4.724

PLA_P2

Frequency	Percentage	Lower Class Limit
13	0.3	1.517
71	1.8	1.875
98	2.5	2.234
180	4.6	2.592
868	22.2	2.950
573	14.6	3.309
1174	30.0	3.667
0	0.0	4.026
619	15.8	4.384
316	8.1	4.743

SOB_P1

Frequency	Percentage	Lower Class Limit
19	0.5	0.992
81	2.1	1.411
216	5.5	1.831
432	11.0	2.250
753	19.2	2.670
837	21.4	3.089
0	0.0	3.508
850	21.7	3.928
491	12.6	4.347
233	6.0	4.767

SOB_P2

Frequency	Percentage	Lower Class Limit
3	0.1	1.482
14	0.4	1.847
68	1.7	2.211
136	3.5	2.576
355	9.1	2.941
676	17.3	3.305
1423	36.4	3.670
0	0.0	4.034
754	19.3	4.399
483	12.3	4.763

SOB_P3

Frequency	Percentage	Lower Class Limit
15	0.4	0.824
46	1.2	1.265
311	7.9	1.706
259	6.6	2.147

833	21.3	2.588
548	14.0	3.029
550	14.1	3.470
944	24.1	3.911
227	5.8	4.352
179	4.6	4.793

ACH_P1

Frequency	Percentage	Lower Class Limit
4	0.1	1.709
17	0.4	2.048
84	2.1	2.387
0	0.0	2.726
262	6.7	3.065
594	15.2	3.404
1369	35.0	3.743
0	0.0	4.082
1034	26.4	4.421
548	14.0	4.760

ACH_P2

Frequency	Percentage	Lower Class Limit
4	0.1	1.790
30	0.8	2.122
103	2.6	2.454
285	7.3	2.786
615	15.7	3.118
0	0.0	3.450
1354	34.6	3.782
0	0.0	4.114
939	24.0	4.446
582	14.9	4.778

ACH_P3

Frequency	Percentage	Lower Class Limit
2	0.1	1.440
7	0.2	1.806
47	1.2	2.173
158	4.0	2.539
394	10.1	2.906
735	18.8	3.272
1373	35.1	3.639
0	0.0	4.005
741	18.9	4.371
455	11.6	4.738

ACH_P4

Frequency	Percentage	Lower Class Limit
1	0.0	2.116
8	0.2	2.408
23	0.6	2.701
123	3.1	2.993
339	8.7	3.285
0	0.0	3.577
1529	39.1	3.869
0	0.0	4.161
1031	26.4	4.454
858	21.9	4.746

ACH_P5

Frequency	Percentage	Lower Class Limit
4	0.1	1.570
29	0.7	1.925
45	1.2	2.279
133	3.4	2.633
751	19.2	2.988
696	17.8	3.342
941	24.1	3.696
553	14.1	4.051
422	10.8	4.405
338	8.6	4.759

ORD_P1

Frequency	Percentage	Lower Class Limit
3	0.1	1.666
38	1.0	2.010
93	2.4	2.355

363	9.3	2.699
0	0.0	3.043
786	20.1	3.388
1239	31.7	3.732
0	0.0	4.076
919	23.5	4.421
471	12.0	4.765

ORD_P2

Frequency	Percentage	Lower Class Limit
1	0.0	1.720
14	0.4	2.053
76	1.9	2.387
0	0.0	2.720
287	7.3	3.054
649	16.6	3.387
1569	40.1	3.721
0	0.0	4.054
814	20.8	4.388
502	12.8	4.721

ORD_P3

Frequency	Percentage	Lower Class Limit
2	0.1	1.695
23	0.6	2.031
97	2.5	2.367
382	9.8	2.703
0	0.0	3.039
805	20.6	3.374
1561	39.9	3.710
0	0.0	4.046
679	17.4	4.382
363	9.3	4.718

ORD_P4

Frequency	Percentage	Lower Class Limit
7	0.2	1.744
42	1.1	2.077
85	2.2	2.411
362	9.3	2.744
0	0.0	3.078
653	16.7	3.411
1427	36.5	3.744
0	0.0	4.078
748	19.1	4.411
588	15.0	4.745

ORD_P5

Frequency	Percentage	Lower Class Limit
1	0.0	1.340
10	0.3	1.716
50	1.3	2.091
121	3.1	2.467
432	11.0	2.842
731	18.7	3.218
1405	35.9	3.593
0	0.0	3.969
717	18.3	4.344
445	11.4	4.720

ORD_P6

Frequency	Percentage	Lower Class Limit
3	0.1	1.769
16	0.4	2.101
120	3.1	2.432
229	5.9	2.764
424	10.8	3.096
622	15.9	3.427
1171	29.9	3.759
525	13.4	4.090
438	11.2	4.422
364	9.3	4.753

TRA_P1

Frequency	Percentage	Lower Class Limit
75	1.9	1.142
160	4.1	1.563

253	6.5	1.984
323	8.3	2.406
605	15.5	2.827
790	20.2	3.248
980	25.1	3.670
0	0.0	4.091
502	12.8	4.512
224	5.7	4.934

TRA_P2

Frequency	Percentage	Lower Class Limit
19	0.5	1.248
67	1.7	1.648
172	4.4	2.048
230	5.9	2.448
410	10.5	2.849
646	16.5	3.249
1155	29.5	3.649
0	0.0	4.049
733	18.7	4.449
480	12.3	4.850

BRO_P1

Frequency	Percentage	Lower Class Limit
3	0.1	1.735
20	0.5	2.071
57	1.5	2.406
239	6.1	2.742
0	0.0	3.078
584	14.9	3.413
1187	30.3	3.749
0	0.0	4.084
1095	28.0	4.420
727	18.6	4.756

BRO_P2

Frequency	Percentage	Lower Class Limit
8	0.2	1.463
16	0.4	1.830
81	2.1	2.196
190	4.9	2.562
553	14.1	2.928
883	22.6	3.295
1228	31.4	3.661
0	0.0	4.027
628	16.1	4.393
325	8.3	4.760

BRO_P3

Frequency	Percentage	Lower Class Limit
2	0.1	1.821
16	0.4	2.144
78	2.0	2.467
265	6.8	2.790
0	0.0	3.114
590	15.1	3.437
1537	39.3	3.760
0	0.0	4.083
813	20.8	4.406
611	15.6	4.730

EPI_P1

Frequency	Percentage	Lower Class Limit
3	0.1	2.357
22	0.6	2.627
0	0.0	2.897
102	2.6	3.167
223	5.7	3.436
953	24.4	3.706
0	0.0	3.976
1159	29.6	4.246
0	0.0	4.516
1450	37.1	4.786

EPI_P2

Frequency	Percentage	Lower Class Limit
1	0.0	2.183

5	0.1	2.467
15	0.4	2.751
104	2.7	3.035
312	8.0	3.319
0	0.0	3.603
1502	38.4	3.887
0	0.0	4.171
987	25.2	4.455
986	25.2	4.739

EPI_P3

Frequency	Percentage	Lower Class Limit
13	0.3	2.524
0	0.0	2.771
82	2.1	3.019
257	6.6	3.267
0	0.0	3.515
1736	44.4	3.763
0	0.0	4.011
969	24.8	4.259
0	0.0	4.507
855	21.9	4.755

ITL_P1

Frequency	Percentage	Lower Class Limit
8	0.2	2.103
8	0.2	2.399
38	1.0	2.696
173	4.4	2.993
601	15.4	3.289
0	0.0	3.586
1460	37.3	3.882
0	0.0	4.179
1072	27.4	4.476
552	14.1	4.772

ITL_P2

Frequency	Percentage	Lower Class Limit
2	0.1	2.040
6	0.2	2.340
26	0.7	2.639
194	5.0	2.939
640	16.4	3.239
0	0.0	3.539
1666	42.6	3.838
0	0.0	4.138
979	25.0	4.438
399	10.2	4.738

ITL_P3

Frequency	Percentage	Lower Class Limit
2	0.1	1.404
9	0.2	1.772
55	1.4	2.140
145	3.7	2.507
526	13.4	2.875
782	20.0	3.242
1479	37.8	3.610
0	0.0	3.978
572	14.6	4.345
342	8.7	4.713

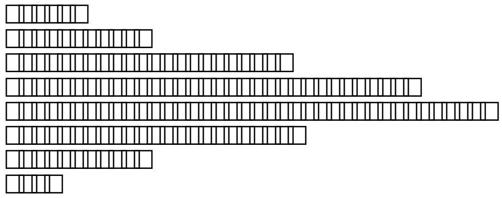
ITL_P4

Frequency	Percentage	Lower Class Limit
1	0.0	1.687
23	0.6	2.022
75	1.9	2.357
325	8.3	2.692
0	0.0	3.027
784	20.0	3.362
1666	42.6	3.697
0	0.0	4.032
665	17.0	4.367
373	9.5	4.702

ITL_P5

Frequency Percentage Lower Class Limit

4	0.1	1.756
16	0.4	2.091
162	4.1	2.427
301	7.7	2.762
589	15.1	3.098
830	21.2	3.433
985	25.2	3.769
610	15.6	4.104
286	7.3	4.440
129	3.3	4.775



Covariance Matrix

	EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
EMP_P1	0.383					
EMP_P2	0.169	0.254				
EMP_P3	0.247	0.157	0.359			
FAC_P1	0.154	0.146	0.131	0.426		
FAC_P2	0.127	0.127	0.102	0.309	0.506	
FAC_P3	0.112	0.131	0.095	0.285	0.404	0.526
FAC_P4	0.153	0.145	0.136	0.291	0.301	0.291
FAC_P5	0.118	0.124	0.102	0.253	0.251	0.231
INT_P1	0.073	0.091	0.064	0.131	0.104	0.140
INT_P2	0.075	0.100	0.075	0.116	0.095	0.125
INT_P3	0.136	0.141	0.140	0.132	0.117	0.132
INT_P4	0.112	0.135	0.108	0.154	0.122	0.141
INT_P5	0.131	0.126	0.126	0.119	0.101	0.109
INT_P6	0.084	0.097	0.079	0.103	0.091	0.117
IPR_P1	0.123	0.118	0.113	0.173	0.173	0.170
IPR_P2	0.146	0.134	0.136	0.207	0.207	0.196
IPR_P3	0.125	0.115	0.109	0.179	0.188	0.166
IPR_P4	0.142	0.140	0.128	0.148	0.127	0.125
SOC_P1	0.177	0.143	0.149	0.204	0.233	0.208
SOC_P2	0.210	0.154	0.191	0.183	0.187	0.171
WAR_P1	0.160	0.137	0.154	0.174	0.149	0.158
WAR_P2	0.177	0.138	0.170	0.168	0.157	0.148
WAR_P3	0.202	0.149	0.196	0.172	0.142	0.138
WAR_P4	0.147	0.136	0.136	0.199	0.196	0.185
WAR_P5	0.149	0.135	0.142	0.178	0.168	0.164
ARR_P1	-0.132	-0.108	-0.127	-0.055	0.022	-0.001
ARR_P2	-0.141	-0.122	-0.137	-0.075	-0.015	-0.043
ARR_P3	-0.106	-0.106	-0.092	-0.072	-0.007	-0.035
CON_P1	-0.038	-0.082	-0.050	-0.111	-0.053	-0.122
CON_P2	-0.078	-0.091	-0.078	-0.077	-0.039	-0.077
CON_P3	-0.065	-0.072	-0.067	-0.034	0.008	-0.040
HOS_P1	-0.079	-0.090	-0.083	-0.080	-0.031	-0.079
HOS_P2	-0.081	-0.070	-0.087	-0.035	0.002	-0.029
HOS_P3	-0.112	-0.112	-0.104	-0.096	-0.069	-0.095
HOS_P4	-0.142	-0.123	-0.118	-0.108	-0.056	-0.079
HOS_P5	-0.118	-0.115	-0.115	-0.087	-0.045	-0.081
HOS_P6	-0.087	-0.078	-0.073	-0.100	-0.077	-0.114
HOS_P7	-0.068	-0.087	-0.059	-0.090	-0.064	-0.119
DEC_P1	-0.069	-0.087	-0.061	-0.115	-0.104	-0.163
DEC_P2	-0.036	-0.056	-0.043	-0.082	-0.057	-0.089
DEC_P3	-0.097	-0.121	-0.082	-0.154	-0.137	-0.194
EMO_P1	0.066	0.115	0.053	0.167	0.178	0.242
EMO_P2	0.063	0.081	0.047	0.122	0.125	0.144
EMO_P3	0.064	0.088	0.051	0.148	0.154	0.172
EMO_P4	0.053	0.084	0.034	0.148	0.156	0.185
NEG_P1	0.043	-0.015	0.078	-0.078	-0.056	-0.090
NEG_P2	0.010	-0.041	0.038	-0.143	-0.126	-0.185
NEG_P3	0.067	0.003	0.101	-0.113	-0.117	-0.148
NEG_P4	0.140	0.052	0.163	-0.025	-0.019	-0.072
NEG_P5	-0.061	-0.094	-0.043	-0.141	-0.122	-0.183
PLA_P1	0.094	0.096	0.084	0.119	0.160	0.114
PLA_P2	0.114	0.122	0.118	0.115	0.143	0.117
SOB_P1	0.117	0.131	0.102	0.180	0.214	0.195
SOB_P2	0.146	0.144	0.126	0.184	0.201	0.198
SOB_P3	0.128	0.150	0.109	0.192	0.230	0.221
ACH_P1	0.067	0.088	0.054	0.175	0.164	0.193
ACH_P2	0.072	0.114	0.065	0.192	0.198	0.242
ACH_P3	0.067	0.101	0.061	0.169	0.169	0.218
ACH_P4	0.072	0.089	0.062	0.124	0.119	0.161
ACH_P5	0.061	0.108	0.054	0.194	0.216	0.256

ORD_P1	0.058	0.072	0.063	0.095	0.090	0.141
ORD_P2	0.050	0.065	0.047	0.090	0.087	0.138
ORD_P3	0.063	0.083	0.064	0.138	0.135	0.171
ORD_P4	0.075	0.097	0.066	0.117	0.114	0.183
ORD_P5	0.076	0.089	0.074	0.124	0.119	0.169
ORD_P6	0.054	0.075	0.054	0.109	0.104	0.156
TRA_P1	0.122	0.122	0.113	0.151	0.167	0.195
TRA_P2	0.161	0.157	0.172	0.186	0.184	0.213
BRO_P1	0.093	0.103	0.101	0.125	0.124	0.106
BRO_P2	0.080	0.109	0.083	0.187	0.195	0.186
BRO_P3	0.073	0.096	0.084	0.125	0.128	0.123
EPI_P1	0.069	0.090	0.064	0.117	0.100	0.115
EPI_P2	0.077	0.085	0.086	0.098	0.078	0.062
EPI_P3	0.059	0.086	0.064	0.110	0.098	0.097
ITL_P1	0.078	0.085	0.060	0.133	0.130	0.132
ITL_P2	0.056	0.071	0.042	0.110	0.128	0.118
ITL_P3	0.067	0.096	0.059	0.207	0.215	0.205
ITL_P4	0.072	0.092	0.060	0.163	0.181	0.184
ITL_P5	0.075	0.092	0.053	0.174	0.196	0.210

Covariance Matrix

	FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
	--------	--------	--------	--------	--------	--------
FAC_P4	0.418					
FAC_P5	0.254	0.350				
INT_P1	0.107	0.099	0.369			
INT_P2	0.103	0.098	0.167	0.258		
INT_P3	0.126	0.103	0.121	0.131	0.314	
INT_P4	0.152	0.132	0.159	0.141	0.096	0.382
INT_P5	0.118	0.106	0.108	0.107	0.139	0.136
INT_P6	0.107	0.092	0.148	0.132	0.119	0.121
IPR_P1	0.173	0.145	0.093	0.080	0.108	0.114
IPR_P2	0.216	0.171	0.106	0.086	0.117	0.161
IPR_P3	0.182	0.166	0.101	0.092	0.100	0.128
IPR_P4	0.155	0.137	0.095	0.087	0.112	0.154
SOC_P1	0.205	0.174	0.099	0.093	0.137	0.127
SOC_P2	0.187	0.156	0.092	0.092	0.142	0.127
WAR_P1	0.169	0.138	0.117	0.102	0.148	0.130
WAR_P2	0.163	0.132	0.104	0.095	0.150	0.125
WAR_P3	0.172	0.141	0.094	0.090	0.141	0.131
WAR_P4	0.200	0.171	0.098	0.095	0.122	0.145
WAR_P5	0.184	0.156	0.092	0.092	0.128	0.126
ARR_P1	-0.051	-0.025	-0.110	-0.088	-0.094	-0.150
ARR_P2	-0.070	-0.038	-0.106	-0.088	-0.108	-0.151
ARR_P3	-0.075	-0.046	-0.087	-0.078	-0.081	-0.148
CON_P1	-0.106	-0.076	-0.167	-0.114	-0.083	-0.189
CON_P2	-0.071	-0.062	-0.107	-0.095	-0.102	-0.141
CON_P3	-0.036	-0.018	-0.095	-0.079	-0.078	-0.116
HOS_P1	-0.085	-0.054	-0.115	-0.080	-0.081	-0.158
HOS_P2	-0.038	-0.021	-0.089	-0.069	-0.068	-0.122
HOS_P3	-0.096	-0.076	-0.094	-0.086	-0.110	-0.132
HOS_P4	-0.097	-0.079	-0.111	-0.098	-0.118	-0.124
HOS_P5	-0.088	-0.066	-0.111	-0.098	-0.111	-0.152
HOS_P6	-0.103	-0.065	-0.114	-0.085	-0.084	-0.123
HOS_P7	-0.085	-0.066	-0.193	-0.137	-0.098	-0.158
DEC_P1	-0.108	-0.088	-0.196	-0.144	-0.124	-0.133
DEC_P2	-0.064	-0.057	-0.155	-0.103	-0.089	-0.099
DEC_P3	-0.145	-0.108	-0.194	-0.129	-0.132	-0.159
EMO_P1	0.164	0.132	0.151	0.121	0.124	0.136
EMO_P2	0.114	0.116	0.098	0.091	0.085	0.122
EMO_P3	0.143	0.132	0.103	0.104	0.095	0.137
EMO_P4	0.143	0.139	0.109	0.107	0.091	0.126
NEG_P1	-0.073	-0.079	-0.095	-0.074	-0.021	-0.103
NEG_P2	-0.122	-0.098	-0.164	-0.118	-0.058	-0.131
NEG_P3	-0.097	-0.095	-0.103	-0.070	-0.019	-0.073
NEG_P4	-0.011	-0.013	-0.053	-0.025	0.036	-0.031
NEG_P5	-0.132	-0.112	-0.140	-0.119	-0.096	-0.165
PLA_P1	0.117	0.127	0.028	0.038	0.085	0.047
PLA_P2	0.133	0.117	0.056	0.051	0.118	0.080
SOB_P1	0.178	0.159	0.073	0.064	0.114	0.093
SOB_P2	0.176	0.159	0.097	0.104	0.143	0.123
SOB_P3	0.194	0.160	0.094	0.078	0.142	0.133
ACH_P1	0.146	0.122	0.122	0.116	0.106	0.093
ACH_P2	0.173	0.149	0.129	0.137	0.121	0.106
ACH_P3	0.161	0.144	0.137	0.134	0.108	0.136
ACH_P4	0.110	0.111	0.117	0.126	0.105	0.106

ACH_P5	0.184	0.158	0.115	0.116	0.119	0.101
ORD_P1	0.091	0.072	0.145	0.117	0.084	0.109
ORD_P2	0.087	0.081	0.141	0.131	0.098	0.088
ORD_P3	0.126	0.120	0.134	0.132	0.093	0.115
ORD_P4	0.114	0.093	0.153	0.159	0.124	0.122
ORD_P5	0.126	0.110	0.123	0.116	0.096	0.112
ORD_P6	0.106	0.095	0.135	0.126	0.095	0.105
TRA_P1	0.161	0.109	0.097	0.090	0.125	0.116
TRA_P2	0.204	0.137	0.119	0.104	0.158	0.156
BRO_P1	0.113	0.112	0.058	0.062	0.089	0.074
BRO_P2	0.172	0.162	0.088	0.083	0.099	0.106
BRO_P3	0.111	0.122	0.075	0.078	0.094	0.094
EPI_P1	0.098	0.100	0.092	0.083	0.084	0.094
EPI_P2	0.078	0.100	0.062	0.076	0.073	0.068
EPI_P3	0.093	0.112	0.081	0.090	0.080	0.091
ITL_P1	0.116	0.124	0.083	0.083	0.082	0.088
ITL_P2	0.095	0.111	0.093	0.099	0.070	0.089
ITL_P3	0.190	0.184	0.108	0.112	0.078	0.118
ITL_P4	0.154	0.160	0.107	0.105	0.089	0.101
ITL_P5	0.158	0.163	0.110	0.106	0.097	0.089

Covariance Matrix

	INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
	--------	--------	--------	--------	--------	--------
INT_P5	0.248					
INT_P6	0.116	0.227				
IPR_P1	0.103	0.079	0.330			
IPR_P2	0.118	0.095	0.154	0.433		
IPR_P3	0.111	0.101	0.129	0.191	0.289	
IPR_P4	0.128	0.098	0.121	0.166	0.141	0.260
SOC_P1	0.119	0.093	0.175	0.178	0.164	0.148
SOC_P2	0.125	0.094	0.162	0.169	0.150	0.150
WAR_P1	0.125	0.095	0.137	0.163	0.129	0.135
WAR_P2	0.123	0.088	0.143	0.170	0.140	0.137
WAR_P3	0.129	0.093	0.125	0.162	0.136	0.141
WAR_P4	0.142	0.098	0.149	0.184	0.164	0.141
WAR_P5	0.125	0.094	0.128	0.167	0.142	0.138
ARR_P1	-0.104	-0.088	-0.066	-0.078	-0.056	-0.104
ARR_P2	-0.118	-0.091	-0.095	-0.106	-0.063	-0.117
ARR_P3	-0.093	-0.076	-0.081	-0.107	-0.072	-0.115
CON_P1	-0.081	-0.117	-0.076	-0.127	-0.081	-0.108
CON_P2	-0.099	-0.111	-0.080	-0.094	-0.072	-0.093
CON_P3	-0.079	-0.097	-0.052	-0.055	-0.046	-0.070
HOS_P1	-0.091	-0.086	-0.086	-0.124	-0.069	-0.110
HOS_P2	-0.083	-0.076	-0.057	-0.095	-0.057	-0.076
HOS_P3	-0.101	-0.089	-0.100	-0.128	-0.083	-0.117
HOS_P4	-0.108	-0.090	-0.102	-0.105	-0.086	-0.118
HOS_P5	-0.115	-0.105	-0.092	-0.115	-0.084	-0.117
HOS_P6	-0.080	-0.079	-0.087	-0.115	-0.082	-0.093
HOS_P7	-0.107	-0.131	-0.084	-0.086	-0.077	-0.090
DEC_P1	-0.107	-0.138	-0.098	-0.096	-0.090	-0.088
DEC_P2	-0.074	-0.097	-0.053	-0.064	-0.055	-0.062
DEC_P3	-0.107	-0.131	-0.142	-0.153	-0.118	-0.140
EMO_P1	0.099	0.125	0.129	0.146	0.110	0.122
EMO_P2	0.087	0.092	0.110	0.128	0.100	0.110
EMO_P3	0.096	0.107	0.114	0.164	0.118	0.131
EMO_P4	0.089	0.113	0.105	0.137	0.121	0.117
NEG_P1	-0.041	-0.068	-0.069	-0.098	-0.055	-0.075
NEG_P2	-0.055	-0.099	-0.088	-0.108	-0.086	-0.078
NEG_P3	-0.009	-0.057	-0.066	-0.077	-0.056	-0.050
NEG_P4	0.027	-0.012	-0.012	-0.027	0.007	0.003
NEG_P5	-0.099	-0.112	-0.124	-0.154	-0.100	-0.127
PLA_P1	0.074	0.035	0.124	0.106	0.116	0.090
PLA_P2	0.100	0.060	0.145	0.128	0.118	0.112
SOB_P1	0.097	0.055	0.205	0.152	0.141	0.132
SOB_P2	0.123	0.088	0.203	0.168	0.151	0.143
SOB_P3	0.122	0.077	0.206	0.187	0.156	0.154
ACH_P1	0.080	0.106	0.108	0.100	0.099	0.093
ACH_P2	0.084	0.125	0.116	0.129	0.107	0.105
ACH_P3	0.100	0.133	0.112	0.136	0.125	0.113
ACH_P4	0.093	0.124	0.081	0.084	0.092	0.086
ACH_P5	0.097	0.124	0.122	0.133	0.125	0.114
ORD_P1	0.082	0.123	0.064	0.101	0.079	0.066
ORD_P2	0.074	0.123	0.059	0.052	0.069	0.063
ORD_P3	0.087	0.132	0.085	0.089	0.110	0.088
ORD_P4	0.101	0.149	0.082	0.078	0.096	0.088

ORD_P5	0.092	0.124	0.084	0.099	0.098	0.085
ORD_P6	0.088	0.132	0.074	0.092	0.091	0.074
TRA_P1	0.109	0.108	0.109	0.166	0.092	0.117
TRA_P2	0.132	0.135	0.143	0.202	0.137	0.156
BRO_P1	0.080	0.065	0.097	0.095	0.095	0.094
BRO_P2	0.092	0.078	0.134	0.139	0.126	0.113
BRO_P3	0.090	0.080	0.108	0.097	0.104	0.102
EPI_P1	0.080	0.085	0.088	0.085	0.090	0.080
EPI_P2	0.080	0.069	0.070	0.054	0.084	0.076
EPI_P3	0.078	0.085	0.076	0.073	0.089	0.085
ITL_P1	0.081	0.087	0.100	0.087	0.102	0.089
ITL_P2	0.069	0.086	0.078	0.072	0.088	0.066
ITL_P3	0.084	0.096	0.125	0.143	0.144	0.104
ITL_P4	0.084	0.106	0.113	0.113	0.134	0.099
ITL_P5	0.089	0.106	0.119	0.119	0.125	0.103

Covariance Matrix

	SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
SOC_P1	0.370					
SOC_P2	0.255	0.357				
WAR_P1	0.156	0.158	0.290			
WAR_P2	0.177	0.181	0.189	0.331		
WAR_P3	0.161	0.173	0.169	0.178	0.283	
WAR_P4	0.175	0.168	0.156	0.157	0.159	0.274
WAR_P5	0.150	0.149	0.162	0.155	0.159	0.156
ARR_P1	-0.054	-0.085	-0.093	-0.107	-0.122	-0.068
ARR_P2	-0.079	-0.106	-0.117	-0.129	-0.132	-0.092
ARR_P3	-0.066	-0.084	-0.096	-0.108	-0.108	-0.083
CON_P1	-0.067	-0.061	-0.092	-0.089	-0.089	-0.088
CON_P2	-0.070	-0.077	-0.092	-0.079	-0.087	-0.085
CON_P3	-0.040	-0.056	-0.063	-0.057	-0.068	-0.059
HOS_P1	-0.073	-0.084	-0.095	-0.097	-0.096	-0.079
HOS_P2	-0.057	-0.065	-0.077	-0.089	-0.089	-0.067
HOS_P3	-0.103	-0.109	-0.107	-0.106	-0.115	-0.101
HOS_P4	-0.101	-0.111	-0.125	-0.123	-0.134	-0.103
HOS_P5	-0.090	-0.110	-0.112	-0.118	-0.122	-0.104
HOS_P6	-0.093	-0.087	-0.102	-0.101	-0.101	-0.089
HOS_P7	-0.082	-0.079	-0.095	-0.078	-0.082	-0.091
DEC_P1	-0.106	-0.095	-0.098	-0.090	-0.087	-0.090
DEC_P2	-0.038	-0.052	-0.059	-0.067	-0.057	-0.053
DEC_P3	-0.141	-0.127	-0.126	-0.135	-0.107	-0.122
EMO_P1	0.143	0.120	0.122	0.108	0.090	0.119
EMO_P2	0.127	0.110	0.095	0.092	0.078	0.111
EMO_P3	0.142	0.129	0.095	0.101	0.079	0.118
EMO_P4	0.138	0.110	0.087	0.084	0.079	0.109
NEG_P1	-0.053	-0.021	-0.019	-0.008	-0.010	-0.050
NEG_P2	-0.082	-0.048	-0.061	-0.039	-0.034	-0.062
NEG_P3	-0.065	-0.022	-0.016	-0.004	0.025	-0.025
NEG_P4	0.019	0.058	0.034	0.048	0.065	0.020
NEG_P5	-0.115	-0.096	-0.109	-0.092	-0.082	-0.112
PLA_P1	0.159	0.134	0.085	0.096	0.082	0.115
PLA_P2	0.188	0.189	0.118	0.131	0.105	0.145
SOB_P1	0.250	0.217	0.144	0.155	0.113	0.175
SOB_P2	0.246	0.219	0.156	0.170	0.134	0.182
SOB_P3	0.267	0.219	0.158	0.178	0.132	0.196
ACH_P1	0.119	0.097	0.104	0.087	0.081	0.097
ACH_P2	0.135	0.123	0.120	0.105	0.096	0.117
ACH_P3	0.124	0.112	0.120	0.103	0.097	0.132
ACH_P4	0.099	0.088	0.095	0.083	0.081	0.099
ACH_P5	0.149	0.121	0.114	0.096	0.083	0.132
ORD_P1	0.074	0.060	0.091	0.090	0.072	0.084
ORD_P2	0.072	0.070	0.082	0.073	0.064	0.067
ORD_P3	0.095	0.087	0.094	0.086	0.086	0.103
ORD_P4	0.100	0.090	0.100	0.096	0.082	0.097
ORD_P5	0.090	0.079	0.097	0.089	0.087	0.107
ORD_P6	0.079	0.071	0.088	0.079	0.073	0.089
TRA_P1	0.133	0.125	0.148	0.139	0.116	0.133
TRA_P2	0.165	0.173	0.179	0.178	0.161	0.163
BRO_P1	0.112	0.119	0.086	0.097	0.084	0.103
BRO_P2	0.143	0.132	0.108	0.112	0.089	0.142
BRO_P3	0.122	0.118	0.093	0.093	0.079	0.112
EPI_P1	0.081	0.083	0.086	0.085	0.079	0.090
EPI_P2	0.080	0.085	0.066	0.068	0.069	0.080
EPI_P3	0.084	0.089	0.079	0.073	0.076	0.093
ITL_P1	0.132	0.116	0.087	0.080	0.075	0.105

ITL_P2	0.099	0.079	0.064	0.050	0.060	0.084
ITL_P3	0.151	0.116	0.099	0.099	0.089	0.138
ITL_P4	0.153	0.128	0.095	0.088	0.091	0.123
ITL_P5	0.158	0.127	0.100	0.093	0.083	0.117

Covariance Matrix

	WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
WAR_P5	0.272					
ARR_P1	-0.075	0.609				
ARR_P2	-0.091	0.367	0.535			
ARR_P3	-0.086	0.298	0.295	0.562		
CON_P1	-0.071	0.242	0.209	0.211	0.728	
CON_P2	-0.066	0.213	0.213	0.175	0.259	0.383
CON_P3	-0.047	0.221	0.209	0.194	0.262	0.223
HOS_P1	-0.068	0.250	0.247	0.193	0.341	0.231
HOS_P2	-0.054	0.232	0.209	0.162	0.234	0.184
HOS_P3	-0.085	0.215	0.226	0.185	0.196	0.212
HOS_P4	-0.108	0.250	0.254	0.219	0.178	0.170
HOS_P5	-0.097	0.264	0.279	0.223	0.242	0.230
HOS_P6	-0.090	0.189	0.192	0.179	0.228	0.172
HOS_P7	-0.061	0.205	0.203	0.189	0.315	0.236
DEC_P1	-0.077	0.159	0.171	0.137	0.250	0.203
DEC_P2	-0.051	0.158	0.140	0.135	0.229	0.155
DEC_P3	-0.111	0.210	0.218	0.196	0.269	0.214
EMO_P1	0.113	-0.063	-0.100	-0.091	-0.150	-0.130
EMO_P2	0.089	-0.048	-0.065	-0.071	-0.103	-0.094
EMO_P3	0.101	-0.047	-0.063	-0.065	-0.103	-0.094
EMO_P4	0.097	-0.038	-0.053	-0.058	-0.113	-0.099
NEG_P1	-0.011	0.065	0.067	0.083	0.183	0.138
NEG_P2	-0.058	0.114	0.100	0.134	0.266	0.153
NEG_P3	-0.015	0.013	0.008	0.057	0.177	0.086
NEG_P4	0.037	0.014	0.010	0.048	0.147	0.063
NEG_P5	-0.090	0.177	0.177	0.184	0.281	0.234
PLA_P1	0.109	0.053	0.028	0.009	0.127	0.027
PLA_P2	0.127	0.004	-0.028	-0.031	0.088	-0.013
SOB_P1	0.132	0.008	-0.030	-0.047	0.005	-0.019
SOB_P2	0.147	-0.051	-0.090	-0.075	-0.047	-0.081
SOB_P3	0.161	-0.010	-0.056	-0.057	-0.039	-0.044
ACH_P1	0.095	-0.038	-0.057	-0.046	-0.105	-0.075
ACH_P2	0.112	-0.047	-0.063	-0.073	-0.121	-0.096
ACH_P3	0.123	-0.043	-0.073	-0.076	-0.148	-0.103
ACH_P4	0.104	-0.057	-0.075	-0.068	-0.101	-0.086
ACH_P5	0.128	0.023	-0.021	-0.031	-0.081	-0.069
ORD_P1	0.086	-0.071	-0.100	-0.067	-0.147	-0.101
ORD_P2	0.084	-0.053	-0.064	-0.051	-0.123	-0.077
ORD_P3	0.101	-0.040	-0.059	-0.049	-0.109	-0.086
ORD_P4	0.103	-0.080	-0.094	-0.072	-0.153	-0.106
ORD_P5	0.114	-0.062	-0.088	-0.058	-0.136	-0.093
ORD_P6	0.097	-0.056	-0.072	-0.041	-0.133	-0.095
TRA_P1	0.150	-0.075	-0.113	-0.081	-0.089	-0.082
TRA_P2	0.188	-0.114	-0.151	-0.121	-0.121	-0.106
BRO_P1	0.096	-0.023	-0.038	-0.032	-0.006	-0.042
BRO_P2	0.132	0.021	-0.005	-0.014	-0.055	-0.025
BRO_P3	0.098	-0.012	-0.028	-0.040	-0.031	-0.051
EPI_P1	0.080	-0.071	-0.082	-0.075	-0.081	-0.087
EPI_P2	0.076	-0.046	-0.042	-0.032	-0.008	-0.050
EPI_P3	0.086	-0.039	-0.036	-0.045	-0.052	-0.066
ITL_P1	0.092	-0.024	-0.026	-0.036	-0.057	-0.054
ITL_P2	0.073	0.001	-0.012	-0.013	-0.027	-0.036
ITL_P3	0.122	0.020	-0.002	-0.030	-0.080	-0.045
ITL_P4	0.105	-0.016	-0.019	-0.033	-0.069	-0.062
ITL_P5	0.105	-0.004	-0.017	-0.024	-0.085	-0.064

Covariance Matrix

	CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
CON_P3	0.394					
HOS_P1	0.230	0.576				
HOS_P2	0.187	0.244	0.497			
HOS_P3	0.174	0.209	0.187	0.376		
HOS_P4	0.157	0.176	0.138	0.195	0.442	
HOS_P5	0.211	0.254	0.213	0.219	0.214	0.412
HOS_P6	0.157	0.234	0.174	0.176	0.191	0.196
HOS_P7	0.225	0.280	0.197	0.187	0.172	0.232

DEC_P1	0.174	0.213	0.163	0.171	0.165	0.192
DEC_P2	0.125	0.170	0.135	0.123	0.133	0.150
DEC_P3	0.169	0.241	0.170	0.206	0.212	0.234
EMO_P1	-0.091	-0.129	-0.068	-0.144	-0.101	-0.117
EMO_P2	-0.073	-0.110	-0.057	-0.108	-0.063	-0.071
EMO_P3	-0.059	-0.091	-0.056	-0.111	-0.075	-0.078
EMO_P4	-0.074	-0.100	-0.053	-0.102	-0.069	-0.077
NEG_P1	0.104	0.174	0.108	0.141	0.083	0.103
NEG_P2	0.123	0.202	0.119	0.134	0.117	0.147
NEG_P3	0.050	0.116	0.022	0.089	0.070	0.057
NEG_P4	0.046	0.092	0.023	0.060	0.037	0.037
NEG_P5	0.194	0.265	0.165	0.232	0.189	0.207
PLA_P1	0.052	0.052	0.046	-0.007	-0.026	0.034
PLA_P2	0.010	0.003	0.010	-0.048	-0.053	-0.021
SOB_P1	0.021	-0.003	0.010	-0.058	-0.088	-0.038
SOB_P2	-0.042	-0.077	-0.047	-0.110	-0.123	-0.103
SOB_P3	0.002	-0.070	-0.020	-0.094	-0.098	-0.068
ACH_P1	-0.047	-0.060	-0.038	-0.078	-0.076	-0.073
ACH_P2	-0.059	-0.075	-0.040	-0.097	-0.096	-0.093
ACH_P3	-0.080	-0.099	-0.047	-0.100	-0.087	-0.098
ACH_P4	-0.071	-0.066	-0.058	-0.075	-0.082	-0.089
ACH_P5	-0.038	-0.043	-0.002	-0.071	-0.053	-0.063
ORD_P1	-0.096	-0.108	-0.100	-0.088	-0.065	-0.121
ORD_P2	-0.072	-0.065	-0.054	-0.066	-0.073	-0.078
ORD_P3	-0.059	-0.054	-0.036	-0.061	-0.068	-0.072
ORD_P4	-0.091	-0.097	-0.075	-0.087	-0.090	-0.114
ORD_P5	-0.084	-0.095	-0.073	-0.079	-0.075	-0.100
ORD_P6	-0.080	-0.087	-0.069	-0.073	-0.065	-0.094
TRA_P1	-0.065	-0.107	-0.057	-0.099	-0.095	-0.108
TRA_P2	-0.099	-0.146	-0.087	-0.136	-0.127	-0.153
BRO_P1	-0.017	-0.020	-0.006	-0.056	-0.049	-0.044
BRO_P2	-0.001	-0.033	0.007	-0.043	-0.033	-0.026
BRO_P3	-0.034	-0.034	-0.018	-0.061	-0.050	-0.044
EPI_P1	-0.066	-0.059	-0.054	-0.093	-0.081	-0.086
EPI_P2	-0.033	-0.013	-0.018	-0.056	-0.062	-0.042
EPI_P3	-0.042	-0.039	-0.035	-0.066	-0.062	-0.057
ITL_P1	-0.041	-0.035	-0.017	-0.062	-0.054	-0.041
ITL_P2	-0.020	-0.013	-0.007	-0.038	-0.051	-0.027
ITL_P3	-0.016	-0.035	-0.010	-0.051	-0.049	-0.026
ITL_P4	-0.036	-0.040	-0.022	-0.063	-0.059	-0.049
ITL_P5	-0.022	-0.044	-0.018	-0.066	-0.069	-0.052

Covariance Matrix

	HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
HOS_P6	0.451					
HOS_P7	0.253	0.698				
DEC_P1	0.196	0.322	0.478			
DEC_P2	0.151	0.241	0.213	0.513		
DEC_P3	0.215	0.277	0.284	0.249	0.609	
EMO_P1	-0.111	-0.139	-0.178	-0.125	-0.253	0.513
EMO_P2	-0.087	-0.108	-0.123	-0.051	-0.112	0.176
EMO_P3	-0.085	-0.105	-0.135	-0.075	-0.153	0.213
EMO_P4	-0.095	-0.120	-0.137	-0.074	-0.140	0.207
NEG_P1	0.162	0.190	0.179	0.118	0.162	-0.158
NEG_P2	0.185	0.238	0.251	0.216	0.307	-0.257
NEG_P3	0.130	0.139	0.164	0.142	0.209	-0.208
NEG_P4	0.103	0.116	0.122	0.112	0.155	-0.138
NEG_P5	0.232	0.285	0.254	0.175	0.280	-0.243
PLA_P1	0.012	0.023	0.007	0.019	-0.019	0.052
PLA_P2	-0.015	-0.006	-0.036	0.000	-0.079	0.096
SOB_P1	-0.046	-0.051	-0.065	-0.029	-0.161	0.140
SOB_P2	-0.090	-0.090	-0.109	-0.043	-0.183	0.158
SOB_P3	-0.099	-0.089	-0.101	-0.042	-0.208	0.171
ACH_P1	-0.076	-0.112	-0.137	-0.094	-0.159	0.193
ACH_P2	-0.095	-0.125	-0.148	-0.110	-0.196	0.239
ACH_P3	-0.106	-0.146	-0.149	-0.107	-0.192	0.213
ACH_P4	-0.065	-0.112	-0.124	-0.083	-0.130	0.146
ACH_P5	-0.062	-0.087	-0.124	-0.080	-0.168	0.236
ORD_P1	-0.093	-0.156	-0.137	-0.100	-0.150	0.137
ORD_P2	-0.073	-0.131	-0.144	-0.093	-0.131	0.132
ORD_P3	-0.070	-0.113	-0.124	-0.090	-0.138	0.147
ORD_P4	-0.096	-0.154	-0.169	-0.115	-0.181	0.178
ORD_P5	-0.078	-0.129	-0.121	-0.096	-0.148	0.138
ORD_P6	-0.081	-0.136	-0.137	-0.099	-0.141	0.136
TRA_P1	-0.105	-0.088	-0.075	-0.075	-0.166	0.189

TRA_P2	-0.129	-0.111	-0.117	-0.101	-0.207	0.226
BRO_P1	-0.015	-0.020	-0.037	-0.025	-0.052	0.098
BRO_P2	-0.032	-0.039	-0.073	-0.044	-0.085	0.136
BRO_P3	-0.037	-0.051	-0.059	-0.037	-0.077	0.121
EPI_P1	-0.054	-0.074	-0.091	-0.075	-0.107	0.146
EPI_P2	-0.008	-0.032	-0.054	-0.031	-0.036	0.067
EPI_P3	-0.038	-0.058	-0.070	-0.051	-0.068	0.102
ITL_P1	-0.035	-0.060	-0.088	-0.038	-0.072	0.133
ITL_P2	-0.030	-0.057	-0.078	-0.032	-0.048	0.097
ITL_P3	-0.063	-0.085	-0.100	-0.063	-0.099	0.149
ITL_P4	-0.062	-0.082	-0.112	-0.054	-0.088	0.129
ITL_P5	-0.066	-0.105	-0.134	-0.076	-0.147	0.165

Covariance Matrix

	EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
EMO_P2	0.458					
EMO_P3	0.254	0.482				
EMO_P4	0.230	0.263	0.415			
NEG_P1	-0.250	-0.247	-0.269	0.819		
NEG_P2	-0.176	-0.192	-0.199	0.312	0.726	
NEG_P3	-0.223	-0.242	-0.217	0.389	0.425	0.887
NEG_P4	-0.119	-0.146	-0.134	0.345	0.329	0.451
NEG_P5	-0.224	-0.232	-0.234	0.387	0.320	0.330
PLA_P1	0.105	0.095	0.063	-0.005	0.000	-0.041
PLA_P2	0.132	0.110	0.079	-0.007	-0.009	-0.022
SOB_P1	0.106	0.113	0.085	0.002	-0.066	-0.085
SOB_P2	0.155	0.142	0.136	-0.075	-0.105	-0.114
SOB_P3	0.155	0.150	0.129	-0.060	-0.104	-0.135
ACH_P1	0.093	0.125	0.139	-0.085	-0.147	-0.086
ACH_P2	0.121	0.158	0.164	-0.100	-0.178	-0.139
ACH_P3	0.140	0.157	0.162	-0.116	-0.167	-0.121
ACH_P4	0.090	0.115	0.128	-0.053	-0.107	-0.050
ACH_P5	0.127	0.153	0.171	-0.098	-0.152	-0.124
ORD_P1	0.061	0.079	0.088	-0.036	-0.102	-0.002
ORD_P2	0.071	0.094	0.108	-0.045	-0.122	-0.054
ORD_P3	0.083	0.118	0.120	-0.059	-0.116	-0.060
ORD_P4	0.086	0.121	0.133	-0.066	-0.151	-0.082
ORD_P5	0.073	0.097	0.108	-0.033	-0.105	-0.024
ORD_P6	0.074	0.102	0.113	-0.057	-0.128	-0.057
TRA_P1	0.078	0.094	0.088	-0.003	-0.083	-0.031
TRA_P2	0.106	0.128	0.113	-0.011	-0.107	-0.043
BRO_P1	0.086	0.078	0.084	0.005	-0.025	-0.009
BRO_P2	0.138	0.131	0.130	-0.059	-0.084	-0.101
BRO_P3	0.129	0.114	0.110	-0.053	-0.067	-0.061
EPI_P1	0.082	0.091	0.097	-0.067	-0.083	-0.038
EPI_P2	0.076	0.078	0.076	-0.034	-0.025	-0.009
EPI_P3	0.094	0.105	0.103	-0.060	-0.065	-0.043
ITL_P1	0.152	0.161	0.153	-0.080	-0.099	-0.108
ITL_P2	0.098	0.111	0.116	-0.060	-0.070	-0.068
ITL_P3	0.150	0.171	0.173	-0.121	-0.139	-0.154
ITL_P4	0.133	0.144	0.155	-0.098	-0.106	-0.115
ITL_P5	0.129	0.153	0.165	-0.100	-0.151	-0.157

Covariance Matrix

	NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
NEG_P4	0.665					
NEG_P5	0.234	0.662				
PLA_P1	0.044	-0.003	0.695			
PLA_P2	0.049	-0.034	0.364	0.492		
SOB_P1	-0.002	-0.054	0.305	0.315	0.710	
SOB_P2	-0.012	-0.131	0.230	0.253	0.382	0.480
SOB_P3	-0.040	-0.125	0.294	0.336	0.509	0.396
ACH_P1	-0.044	-0.130	0.055	0.053	0.116	0.104
ACH_P2	-0.083	-0.180	0.064	0.082	0.141	0.141
ACH_P3	-0.083	-0.174	0.044	0.072	0.135	0.130
ACH_P4	-0.018	-0.118	0.039	0.055	0.087	0.101
ACH_P5	-0.063	-0.142	0.102	0.127	0.184	0.164
ORD_P1	0.001	-0.102	0.007	0.027	0.048	0.071
ORD_P2	-0.019	-0.104	0.009	0.021	0.046	0.069
ORD_P3	-0.020	-0.105	0.050	0.056	0.084	0.091
ORD_P4	-0.046	-0.138	0.006	0.037	0.086	0.097
ORD_P5	0.010	-0.098	0.029	0.048	0.075	0.090
ORD_P6	-0.029	-0.108	0.018	0.035	0.058	0.081

TRA_P1	0.051	-0.104	0.066	0.118	0.170	0.163
TRA_P2	0.045	-0.135	0.077	0.145	0.190	0.180
BRO_P1	0.058	-0.042	0.167	0.140	0.144	0.126
BRO_P2	-0.009	-0.078	0.186	0.190	0.198	0.168
BRO_P3	0.006	-0.082	0.146	0.164	0.154	0.139
EPI_P1	-0.009	-0.111	0.045	0.055	0.084	0.096
EPI_P2	0.044	-0.048	0.100	0.090	0.072	0.084
EPI_P3	0.001	-0.091	0.075	0.084	0.070	0.086
ITL_P1	-0.035	-0.109	0.096	0.111	0.125	0.139
ITL_P2	-0.005	-0.082	0.098	0.070	0.073	0.099
ITL_P3	-0.066	-0.139	0.144	0.113	0.133	0.131
ITL_P4	-0.034	-0.111	0.130	0.102	0.133	0.144
ITL_P5	-0.059	-0.136	0.147	0.110	0.191	0.183

Covariance Matrix

	SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
SOB_P3	0.741					
ACH_P1	0.109	0.377				
ACH_P2	0.155	0.239	0.423			
ACH_P3	0.149	0.208	0.273	0.461		
ACH_P4	0.094	0.157	0.183	0.207	0.296	
ACH_P5	0.209	0.229	0.262	0.261	0.192	0.421
ORD_P1	0.066	0.125	0.139	0.151	0.129	0.140
ORD_P2	0.062	0.157	0.166	0.185	0.175	0.158
ORD_P3	0.095	0.164	0.183	0.207	0.176	0.186
ORD_P4	0.094	0.192	0.217	0.235	0.210	0.206
ORD_P5	0.101	0.143	0.150	0.182	0.151	0.163
ORD_P6	0.082	0.153	0.159	0.181	0.162	0.165
TRA_P1	0.200	0.131	0.156	0.146	0.101	0.183
TRA_P2	0.231	0.143	0.176	0.180	0.130	0.197
BRO_P1	0.140	0.094	0.091	0.076	0.073	0.125
BRO_P2	0.218	0.149	0.142	0.143	0.117	0.205
BRO_P3	0.170	0.108	0.106	0.111	0.095	0.146
EPI_P1	0.082	0.141	0.138	0.140	0.129	0.138
EPI_P2	0.067	0.084	0.073	0.073	0.083	0.088
EPI_P3	0.073	0.109	0.113	0.121	0.116	0.125
ITL_P1	0.141	0.113	0.122	0.134	0.125	0.144
ITL_P2	0.075	0.109	0.106	0.105	0.107	0.110
ITL_P3	0.154	0.174	0.171	0.179	0.136	0.197
ITL_P4	0.132	0.130	0.138	0.144	0.128	0.155
ITL_P5	0.181	0.170	0.181	0.156	0.133	0.188

Covariance Matrix

	ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
ORD_P1	0.426					
ORD_P2	0.186	0.357				
ORD_P3	0.172	0.206	0.368			
ORD_P4	0.187	0.255	0.214	0.439		
ORD_P5	0.270	0.208	0.208	0.198	0.450	
ORD_P6	0.251	0.231	0.209	0.225	0.290	0.370
TRA_P1	0.194	0.080	0.119	0.138	0.154	0.126
TRA_P2	0.178	0.102	0.139	0.154	0.172	0.132
BRO_P1	0.019	0.034	0.063	0.042	0.052	0.036
BRO_P2	0.039	0.068	0.096	0.086	0.093	0.076
BRO_P3	0.035	0.052	0.079	0.063	0.069	0.056
EPI_P1	0.086	0.091	0.105	0.114	0.089	0.089
EPI_P2	0.023	0.050	0.068	0.055	0.055	0.052
EPI_P3	0.051	0.079	0.101	0.091	0.077	0.079
ITL_P1	0.056	0.111	0.105	0.101	0.082	0.089
ITL_P2	0.060	0.099	0.109	0.096	0.080	0.091
ITL_P3	0.059	0.100	0.141	0.118	0.111	0.104
ITL_P4	0.078	0.128	0.138	0.119	0.102	0.122
ITL_P5	0.102	0.131	0.142	0.150	0.130	0.147

Covariance Matrix

	TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
TRA_P1	0.868					
TRA_P2	0.566	0.733				
BRO_P1	0.068	0.106	0.389			
BRO_P2	0.100	0.139	0.259	0.508		
BRO_P3	0.072	0.119	0.194	0.255	0.372	

EPI_P1	0.087	0.111	0.114	0.121	0.116	0.299
EPI_P2	0.007	0.042	0.161	0.173	0.167	0.120
EPI_P3	0.041	0.077	0.126	0.158	0.161	0.136
ITL_P1	0.053	0.081	0.109	0.160	0.142	0.114
ITL_P2	0.030	0.044	0.091	0.120	0.118	0.096
ITL_P3	0.068	0.101	0.179	0.286	0.185	0.113
ITL_P4	0.059	0.079	0.111	0.150	0.127	0.103
ITL_P5	0.097	0.118	0.106	0.153	0.115	0.097

Covariance Matrix

	EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
EPI_P2	0.285					
EPI_P3	0.158	0.248				
ITL_P1	0.116	0.123	0.320			
ITL_P2	0.111	0.112	0.124	0.273		
ITL_P3	0.135	0.155	0.166	0.157	0.440	
ITL_P4	0.106	0.122	0.179	0.144	0.195	0.341
ITL_P5	0.087	0.099	0.134	0.123	0.174	0.172

Covariance Matrix

	ITL_P5
ITL_P5	0.326

Means

EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
3.936	4.165	3.992	3.870	3.620	3.616

Means

FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
3.774	3.909	4.067	4.209	4.286	4.003

Means

INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
4.206	4.182	4.023	3.764	3.969	3.995

Means

SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
3.883	3.997	4.114	4.029	4.046	4.061

Means

WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
3.945	2.088	1.877	2.107	2.565	1.742

Means

CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
2.043	2.538	2.247	1.721	1.966	1.747

Means

HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
2.697	2.015	2.028	2.325	2.257	4.143

Means

EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
3.739	3.798	3.847	2.700	3.006	3.261

Means

NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
3.530	2.246	3.463	3.777	3.480	3.945

Means

SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
3.409	4.086	4.058	3.926	4.262	3.911

Means

ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
3.986	4.038	3.928	4.011	3.922	3.974

Means

TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
3.453	3.796	4.156	3.779	4.078	4.453

Means

EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
4.303	4.283	4.133	4.081	3.835	3.955

Means

ITL_P5
3.816

Standard Deviations

EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
0.619	0.504	0.599	0.652	0.711	0.725

Standard Deviations

FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
0.647	0.592	0.607	0.508	0.560	0.618

Standard Deviations

INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
0.498	0.477	0.575	0.658	0.538	0.510

Standard Deviations

SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
0.608	0.597	0.539	0.576	0.532	0.523

Standard Deviations

WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
0.521	0.780	0.731	0.750	0.853	0.619

Standard Deviations

CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
0.628	0.759	0.705	0.613	0.665	0.642

Standard Deviations

HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
0.672	0.835	0.691	0.716	0.781	0.716

Standard Deviations

EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
0.677	0.694	0.644	0.905	0.852	0.942

Standard Deviations

NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
0.815	0.813	0.834	0.701	0.842	0.693

Standard Deviations

SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
0.861	0.614	0.650	0.679	0.544	0.649

Standard Deviations

ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
0.653	0.598	0.607	0.663	0.671	0.609

Standard Deviations

TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
0.932	0.856	0.623	0.713	0.610	0.547

Standard Deviations

EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
0.534	0.498	0.565	0.523	0.663	0.584

Standard Deviations

ITL_P5
0.571

The Problem used 447472 Bytes (= 0.7% of available workspace)

```
                                DATE:  6/ 1/2017
                                  TIME: 11:54


                             L I S R E L  8.8 (64 bit)

                                         BY

                         Karl G. Joreskog & Dag Sorbom



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 The following lines were read from file SAPIP2.SPJ:

 SAPI FIRST-ORDER MEASUREMENT MODEL WITH ITEM PAQRCELS AS INDICATORS
 Raw Data from file C:\LISREL88\SAPIP2N.psf
 Asymptotic Covariance Matrix From File C:\LISREL88\SAPIP2N.ACM
 Sample Size = 3912
 Latent Variables  EMPATHY FACILIT INTEGRIT INTERPER SOC_INT WARMHEAR ARROGAN CONFLICTS
HOSTILE
 DECEIT EMOTIONB NEGATIVE PLAYFULL SOCIABIL ACHIEVEM ORDILIN TRAD_REL BROADMIN
 EPISTEM INTELLEC
 Relationships
 EMP_P1 = EMPATHY
 EMP_P2 = EMPATHY
 EMP_P3 = EMPATHY
 FAC_P1 = FACILIT
 FAC_P2 = FACILIT
 FAC_P3 = FACILIT
 FAC_P4 = FACILIT
 FAC_P5 = FACILIT
 INT_P1 = INTEGRIT
 INT_P2 = INTEGRIT
 INT_P3 = INTEGRIT
 INT_P4 = INTEGRIT
 INT_P5 = INTEGRIT
 INT_P6 = INTEGRIT
 IPR_P1 = INTERPER
 IPR_P2 = INTERPER
 IPR_P3 = INTERPER
 IPR_P4 = INTERPER
 SOC_P1 = SOC_INT
 SOC_P2 = SOC_INT
 WAR_P1 = WARMHEAR
 WAR_P2 = WARMHEAR
 WAR_P3 = WARMHEAR
 WAR_P4 = WARMHEAR
 WAR_P5 = WARMHEAR
 ARR_P1 = ARROGAN
 ARR_P2 = ARROGAN
 ARR_P3 = ARROGAN
 CON_P1 = CONFLICTS
 CON_P2 = CONFLICTS
 CON_P3 = CONFLICTS
 HOS_P1 = HOSTILE
 HOS_P2 = HOSTILE
 HOS_P3 = HOSTILE
 HOS_P4 = HOSTILE
 HOS_P5 = HOSTILE
 HOS_P6 = HOSTILE
 HOS_P7 = HOSTILE
 DEC_P1 = DECEIT
 DEC_P2 = DECEIT
 DEC_P3 = DECEIT
 EMO_P1 = EMOTIONB
 EMO_P2 = EMOTIONB
```

```
EMO_P3 = EMOTIONB
EMO_P4 = EMOTIONB
NEG_P1 = NEGATIVE
NEG_P2 = NEGATIVE
NEG_P3 = NEGATIVE
NEG_P4 = NEGATIVE
NEG_P5 = NEGATIVE
PLA_P1 = PLAYFULL
PLA_P2 = PLAYFULL
SOB_P1 = SOCIABIL
SOB_P2 = SOCIABIL
SOB_P3 = SOCIABIL
ACH_P1 = ACHIEVEM
ACH_P2 = ACHIEVEM
ACH_P3 = ACHIEVEM
ACH_P4 = ACHIEVEM
ACH_P5 = ACHIEVEM
ORD_P1 = ORDILIN
ORD_P2 = ORDILIN
ORD_P3 = ORDILIN
ORD_P4 = ORDILIN
ORD_P5 = ORDILIN
ORD_P6 = ORDILIN
TRA_P1 = TRAD_REL
TRA_P2 = TRAD_REL
BRO_P1 = BROADMIN
BRO_P2 = BROADMIN
BRO_P3 = BROADMIN
EPI_P1 = EPISTEM
EPI_P2 = EPISTEM
EPI_P3 = EPISTEM
ITL_P1 = INTELLEC
ITL_P2 = INTELLEC
ITL_P2 = INTELLEC
ITL_P3 = INTELLEC
ITL_P4 = INTELLEC
ITL_P5 = INTELLEC
Path Diagram
LISREL OUTPUT: SS SC MI RS ND=3 AD=900 IT=900
End of Problem
```

SAPI FIRST-ORDER MEASUREMENT MODEL WITH ITEM PAQRCELS AS INDICATORS

Covariance Matrix

	EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
EMP_P1	0.383					
EMP_P2	0.169	0.254				
EMP_P3	0.247	0.157	0.359			
FAC_P1	0.154	0.146	0.131	0.426		
FAC_P2	0.127	0.127	0.102	0.309	0.506	
FAC_P3	0.112	0.131	0.095	0.285	0.404	0.526
FAC_P4	0.153	0.145	0.136	0.291	0.301	0.291
FAC_P5	0.118	0.124	0.102	0.253	0.251	0.231
INT_P1	0.073	0.091	0.064	0.131	0.104	0.140
INT_P2	0.075	0.100	0.075	0.116	0.095	0.125
INT_P3	0.136	0.141	0.140	0.132	0.117	0.132
INT_P4	0.112	0.135	0.108	0.154	0.122	0.141
INT_P5	0.131	0.126	0.126	0.119	0.101	0.109
INT_P6	0.084	0.097	0.079	0.103	0.091	0.117
IPR_P1	0.123	0.118	0.113	0.173	0.173	0.170
IPR_P2	0.146	0.134	0.136	0.207	0.207	0.196
IPR_P3	0.125	0.115	0.109	0.179	0.188	0.166
IPR_P4	0.142	0.140	0.128	0.148	0.127	0.125
SOC_P1	0.177	0.143	0.149	0.204	0.233	0.208
SOC_P2	0.210	0.154	0.191	0.183	0.187	0.171
WAR_P1	0.160	0.137	0.154	0.174	0.149	0.158
WAR_P2	0.177	0.138	0.170	0.168	0.157	0.148
WAR_P3	0.202	0.149	0.196	0.172	0.142	0.138
WAR_P4	0.147	0.136	0.136	0.199	0.196	0.185
WAR_P5	0.149	0.135	0.142	0.178	0.168	0.164
ARR_P1	-0.132	-0.108	-0.127	-0.055	0.022	-0.001
ARR_P2	-0.141	-0.122	-0.137	-0.075	-0.015	-0.043
ARR_P3	-0.106	-0.106	-0.092	-0.072	-0.007	-0.035
CON_P1	-0.038	-0.082	-0.050	-0.111	-0.053	-0.122
CON_P2	-0.078	-0.091	-0.078	-0.077	-0.039	-0.077

CON_P3	-0.065	-0.072	-0.067	-0.034	0.008	-0.040
HOS_P1	-0.079	-0.090	-0.083	-0.080	-0.031	-0.079
HOS_P2	-0.081	-0.070	-0.087	-0.035	0.002	-0.029
HOS_P3	-0.112	-0.112	-0.104	-0.096	-0.069	-0.095
HOS_P4	-0.142	-0.123	-0.118	-0.108	-0.056	-0.079
HOS_P5	-0.118	-0.115	-0.115	-0.087	-0.045	-0.081
HOS_P6	-0.087	-0.078	-0.073	-0.100	-0.077	-0.114
HOS_P7	-0.068	-0.087	-0.059	-0.090	-0.064	-0.119
DEC_P1	-0.069	-0.087	-0.061	-0.115	-0.104	-0.163
DEC_P2	-0.036	-0.056	-0.043	-0.082	-0.057	-0.089
DEC_P3	-0.097	-0.121	-0.082	-0.154	-0.137	-0.194
EMO_P1	0.066	0.115	0.053	0.167	0.178	0.242
EMO_P2	0.063	0.081	0.047	0.122	0.125	0.144
EMO_P3	0.064	0.088	0.051	0.148	0.154	0.172
EMO_P4	0.053	0.084	0.034	0.148	0.156	0.185
NEG_P1	0.043	-0.015	0.078	-0.078	-0.056	-0.090
NEG_P2	0.010	-0.041	0.038	-0.143	-0.126	-0.185
NEG_P3	0.067	0.003	0.101	-0.113	-0.117	-0.148
NEG_P4	0.140	0.052	0.163	-0.025	-0.019	-0.072
NEG_P5	-0.061	-0.094	-0.043	-0.141	-0.122	-0.183
PLA_P1	0.094	0.096	0.084	0.119	0.160	0.114
PLA_P2	0.114	0.122	0.118	0.115	0.143	0.117
SOB_P1	0.117	0.131	0.102	0.180	0.214	0.195
SOB_P2	0.146	0.144	0.126	0.184	0.201	0.198
SOB_P3	0.128	0.150	0.109	0.192	0.230	0.221
ACH_P1	0.067	0.088	0.054	0.175	0.164	0.193
ACH_P2	0.072	0.114	0.065	0.192	0.198	0.242
ACH_P3	0.067	0.101	0.061	0.169	0.169	0.218
ACH_P4	0.072	0.089	0.062	0.124	0.119	0.161
ACH_P5	0.061	0.108	0.054	0.194	0.216	0.256
ORD_P1	0.058	0.072	0.063	0.095	0.090	0.141
ORD_P2	0.050	0.065	0.047	0.090	0.087	0.138
ORD_P3	0.063	0.083	0.064	0.138	0.135	0.171
ORD_P4	0.075	0.097	0.066	0.117	0.114	0.183
ORD_P5	0.076	0.089	0.074	0.124	0.119	0.169
ORD_P6	0.054	0.075	0.054	0.109	0.104	0.156
TRA_P1	0.122	0.122	0.113	0.151	0.167	0.195
TRA_P2	0.161	0.157	0.172	0.186	0.184	0.213
BRO_P1	0.093	0.103	0.101	0.125	0.124	0.106
BRO_P2	0.080	0.109	0.083	0.187	0.195	0.186
BRO_P3	0.073	0.096	0.084	0.125	0.128	0.123
EPI_P1	0.069	0.090	0.064	0.117	0.100	0.115
EPI_P2	0.077	0.085	0.086	0.098	0.078	0.062
EPI_P3	0.059	0.086	0.064	0.110	0.098	0.097
ITL_P1	0.078	0.085	0.060	0.133	0.130	0.132
ITL_P2	0.056	0.071	0.042	0.110	0.128	0.118
ITL_P3	0.067	0.096	0.059	0.207	0.215	0.205
ITL_P4	0.072	0.092	0.060	0.163	0.181	0.184
ITL_P5	0.075	0.092	0.053	0.174	0.196	0.210

Covariance Matrix

	FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
FAC_P4	0.418					
FAC_P5	0.254	0.350				
INT_P1	0.107	0.099	0.369			
INT_P2	0.103	0.098	0.167	0.258		
INT_P3	0.126	0.103	0.121	0.131	0.314	
INT_P4	0.152	0.132	0.159	0.141	0.096	0.382
INT_P5	0.118	0.106	0.108	0.107	0.139	0.136
INT_P6	0.107	0.092	0.148	0.132	0.119	0.121
IPR_P1	0.173	0.145	0.093	0.080	0.108	0.114
IPR_P2	0.216	0.171	0.106	0.086	0.117	0.161
IPR_P3	0.182	0.166	0.101	0.092	0.100	0.128
IPR_P4	0.155	0.137	0.095	0.087	0.112	0.154
SOC_P1	0.205	0.174	0.099	0.093	0.137	0.127
SOC_P2	0.187	0.156	0.092	0.092	0.142	0.127
WAR_P1	0.169	0.138	0.117	0.102	0.148	0.130
WAR_P2	0.163	0.132	0.104	0.095	0.150	0.125
WAR_P3	0.172	0.141	0.094	0.090	0.141	0.131
WAR_P4	0.200	0.171	0.098	0.095	0.122	0.145
WAR_P5	0.184	0.156	0.092	0.092	0.128	0.126
ARR_P1	-0.051	-0.025	-0.110	-0.088	-0.094	-0.150
ARR_P2	-0.070	-0.038	-0.106	-0.088	-0.108	-0.151
ARR_P3	-0.075	-0.046	-0.087	-0.078	-0.081	-0.148
CON_P1	-0.106	-0.076	-0.167	-0.114	-0.083	-0.189

CON_P2	-0.071	-0.062	-0.107	-0.095	-0.102	-0.141
CON_P3	-0.036	-0.018	-0.095	-0.079	-0.078	-0.116
HOS_P1	-0.085	-0.054	-0.115	-0.080	-0.081	-0.158
HOS_P2	-0.038	-0.021	-0.089	-0.069	-0.068	-0.122
HOS_P3	-0.096	-0.076	-0.094	-0.086	-0.110	-0.132
HOS_P4	-0.097	-0.079	-0.111	-0.098	-0.118	-0.124
HOS_P5	-0.088	-0.066	-0.111	-0.098	-0.111	-0.152
HOS_P6	-0.103	-0.065	-0.114	-0.085	-0.084	-0.123
HOS_P7	-0.085	-0.066	-0.193	-0.137	-0.098	-0.158
DEC_P1	-0.108	-0.088	-0.196	-0.144	-0.124	-0.133
DEC_P2	-0.064	-0.057	-0.155	-0.103	-0.089	-0.099
DEC_P3	-0.145	-0.108	-0.194	-0.129	-0.132	-0.159
EMO_P1	0.164	0.132	0.151	0.121	0.124	0.136
EMO_P2	0.114	0.116	0.098	0.091	0.085	0.122
EMO_P3	0.143	0.132	0.103	0.104	0.095	0.137
EMO_P4	0.143	0.139	0.109	0.107	0.091	0.126
NEG_P1	-0.073	-0.079	-0.095	-0.074	-0.021	-0.103
NEG_P2	-0.122	-0.098	-0.164	-0.118	-0.058	-0.131
NEG_P3	-0.097	-0.095	-0.103	-0.070	-0.019	-0.073
NEG_P4	-0.011	-0.013	-0.053	-0.025	0.036	-0.031
NEG_P5	-0.132	-0.112	-0.140	-0.119	-0.096	-0.165
PLA_P1	0.117	0.127	0.028	0.038	0.085	0.047
PLA_P2	0.133	0.117	0.056	0.051	0.118	0.080
SOB_P1	0.178	0.159	0.073	0.064	0.114	0.093
SOB_P2	0.176	0.159	0.097	0.104	0.143	0.123
SOB_P3	0.194	0.160	0.094	0.078	0.142	0.133
ACH_P1	0.146	0.122	0.122	0.116	0.106	0.093
ACH_P2	0.173	0.149	0.129	0.137	0.121	0.106
ACH_P3	0.161	0.144	0.137	0.134	0.108	0.136
ACH_P4	0.110	0.111	0.117	0.126	0.105	0.106
ACH_P5	0.184	0.158	0.115	0.116	0.119	0.101
ORD_P1	0.091	0.072	0.145	0.117	0.084	0.109
ORD_P2	0.087	0.081	0.141	0.131	0.098	0.088
ORD_P3	0.126	0.120	0.134	0.132	0.093	0.115
ORD_P4	0.114	0.093	0.153	0.159	0.124	0.122
ORD_P5	0.126	0.110	0.123	0.116	0.096	0.112
ORD_P6	0.106	0.095	0.135	0.126	0.095	0.105
TRA_P1	0.161	0.109	0.097	0.090	0.125	0.116
TRA_P2	0.204	0.137	0.119	0.104	0.158	0.156
BRO_P1	0.113	0.112	0.058	0.062	0.089	0.074
BRO_P2	0.172	0.162	0.088	0.083	0.099	0.106
BRO_P3	0.111	0.122	0.075	0.078	0.094	0.094
EPI_P1	0.098	0.100	0.092	0.083	0.084	0.094
EPI_P2	0.078	0.100	0.062	0.076	0.073	0.068
EPI_P3	0.093	0.112	0.081	0.090	0.080	0.091
ITL_P1	0.116	0.124	0.083	0.083	0.082	0.088
ITL_P2	0.095	0.111	0.093	0.099	0.070	0.089
ITL_P3	0.190	0.184	0.108	0.112	0.078	0.118
ITL_P4	0.154	0.160	0.107	0.105	0.089	0.101
ITL_P5	0.158	0.163	0.110	0.106	0.097	0.089

Covariance Matrix

	INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
INT_P5	0.248					
INT_P6	0.116	0.227				
IPR_P1	0.103	0.079	0.330			
IPR_P2	0.118	0.095	0.154	0.433		
IPR_P3	0.111	0.101	0.129	0.191	0.289	
IPR_P4	0.128	0.098	0.121	0.166	0.141	0.260
SOC_P1	0.119	0.093	0.175	0.178	0.164	0.148
SOC_P2	0.125	0.094	0.162	0.169	0.150	0.150
WAR_P1	0.125	0.095	0.137	0.163	0.129	0.135
WAR_P2	0.123	0.088	0.143	0.170	0.140	0.137
WAR_P3	0.129	0.093	0.125	0.162	0.136	0.141
WAR_P4	0.142	0.098	0.149	0.184	0.164	0.141
WAR_P5	0.125	0.094	0.128	0.167	0.142	0.138
ARR_P1	-0.104	-0.088	-0.066	-0.078	-0.056	-0.104
ARR_P2	-0.118	-0.091	-0.095	-0.106	-0.063	-0.117
ARR_P3	-0.093	-0.076	-0.081	-0.107	-0.072	-0.115
CON_P1	-0.081	-0.117	-0.076	-0.127	-0.081	-0.108
CON_P2	-0.099	-0.111	-0.080	-0.094	-0.072	-0.093
CON_P3	-0.079	-0.097	-0.052	-0.055	-0.046	-0.070
HOS_P1	-0.091	-0.086	-0.086	-0.124	-0.069	-0.110
HOS_P2	-0.083	-0.076	-0.057	-0.095	-0.057	-0.076
HOS_P3	-0.101	-0.089	-0.100	-0.128	-0.083	-0.117

HOS_P4	-0.108	-0.090	-0.102	-0.105	-0.086	-0.118
HOS_P5	-0.115	-0.105	-0.092	-0.115	-0.084	-0.117
HOS_P6	-0.080	-0.079	-0.087	-0.115	-0.082	-0.093
HOS_P7	-0.107	-0.131	-0.084	-0.086	-0.077	-0.090
DEC_P1	-0.107	-0.138	-0.098	-0.096	-0.090	-0.088
DEC_P2	-0.074	-0.097	-0.053	-0.064	-0.055	-0.062
DEC_P3	-0.107	-0.131	-0.142	-0.153	-0.118	-0.140
EMO_P1	0.099	0.125	0.129	0.146	0.110	0.122
EMO_P2	0.087	0.092	0.110	0.128	0.100	0.110
EMO_P3	0.096	0.107	0.114	0.164	0.118	0.131
EMO_P4	0.089	0.113	0.105	0.137	0.121	0.117
NEG_P1	-0.041	-0.068	-0.069	-0.098	-0.055	-0.075
NEG_P2	-0.055	-0.099	-0.088	-0.108	-0.086	-0.078
NEG_P3	-0.009	-0.057	-0.066	-0.077	-0.056	-0.050
NEG_P4	0.027	-0.012	-0.012	-0.027	0.007	0.003
NEG_P5	-0.099	-0.112	-0.124	-0.154	-0.100	-0.127
PLA_P1	0.074	0.035	0.124	0.106	0.116	0.090
PLA_P2	0.100	0.060	0.145	0.128	0.118	0.112
SOB_P1	0.097	0.055	0.205	0.152	0.141	0.132
SOB_P2	0.123	0.088	0.203	0.168	0.151	0.143
SOB_P3	0.122	0.077	0.206	0.187	0.156	0.154
ACH_P1	0.080	0.106	0.108	0.100	0.099	0.093
ACH_P2	0.084	0.125	0.116	0.129	0.107	0.105
ACH_P3	0.100	0.133	0.112	0.136	0.125	0.113
ACH_P4	0.093	0.124	0.081	0.084	0.092	0.086
ACH_P5	0.097	0.124	0.122	0.133	0.125	0.114
ORD_P1	0.082	0.123	0.064	0.101	0.079	0.066
ORD_P2	0.074	0.123	0.059	0.052	0.069	0.063
ORD_P3	0.087	0.132	0.085	0.089	0.110	0.088
ORD_P4	0.101	0.149	0.082	0.078	0.096	0.088
ORD_P5	0.092	0.124	0.084	0.099	0.098	0.085
ORD_P6	0.088	0.132	0.074	0.092	0.091	0.074
TRA_P1	0.109	0.108	0.109	0.166	0.092	0.117
TRA_P2	0.132	0.135	0.143	0.202	0.137	0.156
BRO_P1	0.080	0.065	0.097	0.095	0.095	0.094
BRO_P2	0.092	0.078	0.134	0.139	0.126	0.113
BRO_P3	0.090	0.080	0.108	0.097	0.104	0.102
EPI_P1	0.080	0.085	0.088	0.085	0.090	0.080
EPI_P2	0.080	0.069	0.070	0.054	0.084	0.076
EPI_P3	0.078	0.085	0.076	0.073	0.089	0.085
ITL_P1	0.081	0.087	0.100	0.087	0.102	0.089
ITL_P2	0.069	0.086	0.078	0.072	0.088	0.066
ITL_P3	0.084	0.096	0.125	0.143	0.144	0.104
ITL_P4	0.084	0.106	0.113	0.113	0.134	0.099
ITL_P5	0.089	0.106	0.119	0.119	0.125	0.103

Covariance Matrix

	SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
SOC_P1	0.370					
SOC_P2	0.255	0.357				
WAR_P1	0.156	0.158	0.290			
WAR_P2	0.177	0.181	0.189	0.331		
WAR_P3	0.161	0.173	0.169	0.178	0.283	
WAR_P4	0.175	0.168	0.156	0.157	0.159	0.274
WAR_P5	0.150	0.149	0.162	0.155	0.159	0.156
ARR_P1	-0.054	-0.085	-0.093	-0.107	-0.122	-0.068
ARR_P2	-0.079	-0.106	-0.117	-0.129	-0.132	-0.092
ARR_P3	-0.066	-0.084	-0.096	-0.108	-0.108	-0.083
CON_P1	-0.067	-0.061	-0.092	-0.089	-0.089	-0.088
CON_P2	-0.070	-0.077	-0.092	-0.079	-0.087	-0.085
CON_P3	-0.040	-0.056	-0.063	-0.057	-0.068	-0.059
HOS_P1	-0.073	-0.084	-0.095	-0.097	-0.096	-0.079
HOS_P2	-0.057	-0.065	-0.077	-0.089	-0.089	-0.067
HOS_P3	-0.103	-0.109	-0.107	-0.106	-0.115	-0.101
HOS_P4	-0.101	-0.111	-0.125	-0.123	-0.134	-0.103
HOS_P5	-0.090	-0.110	-0.112	-0.118	-0.122	-0.104
HOS_P6	-0.093	-0.087	-0.102	-0.101	-0.101	-0.089
HOS_P7	-0.082	-0.079	-0.095	-0.078	-0.082	-0.091
DEC_P1	-0.106	-0.095	-0.098	-0.090	-0.087	-0.090
DEC_P2	-0.038	-0.052	-0.059	-0.067	-0.057	-0.053
DEC_P3	-0.141	-0.127	-0.126	-0.135	-0.107	-0.122
EMO_P1	0.143	0.120	0.122	0.108	0.090	0.119
EMO_P2	0.127	0.110	0.095	0.092	0.078	0.111
EMO_P3	0.142	0.129	0.095	0.101	0.079	0.118
EMO_P4	0.138	0.110	0.087	0.084	0.079	0.109

NEG_P1	-0.053	-0.021	-0.019	-0.008	-0.010	-0.050
NEG_P2	-0.082	-0.048	-0.061	-0.039	-0.034	-0.062
NEG_P3	-0.065	-0.022	-0.016	-0.004	0.025	-0.025
NEG_P4	0.019	0.058	0.034	0.048	0.065	0.020
NEG_P5	-0.115	-0.096	-0.109	-0.092	-0.082	-0.112
PLA_P1	0.159	0.134	0.085	0.096	0.082	0.115
PLA_P2	0.188	0.189	0.118	0.131	0.105	0.145
SOB_P1	0.250	0.217	0.144	0.155	0.113	0.175
SOB_P2	0.246	0.219	0.156	0.170	0.134	0.182
SOB_P3	0.267	0.219	0.158	0.178	0.132	0.196
ACH_P1	0.119	0.097	0.104	0.087	0.081	0.097
ACH_P2	0.135	0.123	0.120	0.105	0.096	0.117
ACH_P3	0.124	0.112	0.120	0.103	0.097	0.132
ACH_P4	0.099	0.088	0.095	0.083	0.081	0.099
ACH_P5	0.149	0.121	0.114	0.096	0.083	0.132
ORD_P1	0.074	0.060	0.091	0.090	0.072	0.084
ORD_P2	0.072	0.070	0.082	0.073	0.064	0.067
ORD_P3	0.095	0.087	0.094	0.086	0.086	0.103
ORD_P4	0.100	0.090	0.100	0.096	0.082	0.097
ORD_P5	0.090	0.079	0.097	0.089	0.087	0.107
ORD_P6	0.079	0.071	0.088	0.079	0.073	0.089
TRA_P1	0.133	0.125	0.148	0.139	0.116	0.133
TRA_P2	0.165	0.173	0.179	0.178	0.161	0.163
BRO_P1	0.112	0.119	0.086	0.097	0.084	0.103
BRO_P2	0.143	0.132	0.108	0.112	0.089	0.142
BRO_P3	0.122	0.118	0.093	0.093	0.079	0.112
EPI_P1	0.081	0.083	0.086	0.085	0.079	0.090
EPI_P2	0.080	0.085	0.066	0.068	0.069	0.080
EPI_P3	0.084	0.089	0.079	0.073	0.076	0.093
ITL_P1	0.132	0.116	0.087	0.080	0.075	0.105
ITL_P2	0.099	0.079	0.064	0.050	0.060	0.084
ITL_P3	0.151	0.116	0.099	0.099	0.089	0.138
ITL_P4	0.153	0.128	0.095	0.088	0.091	0.123
ITL_P5	0.158	0.127	0.100	0.093	0.083	0.117

Covariance Matrix

	WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
WAR_P5	0.272					
ARR_P1	-0.075	0.609				
ARR_P2	-0.091	0.367	0.535			
ARR_P3	-0.086	0.298	0.295	0.562		
CON_P1	-0.071	0.242	0.209	0.211	0.728	
CON_P2	-0.066	0.213	0.213	0.175	0.259	0.383
CON_P3	-0.047	0.221	0.209	0.194	0.262	0.223
HOS_P1	-0.068	0.250	0.247	0.193	0.341	0.231
HOS_P2	-0.054	0.232	0.209	0.162	0.234	0.184
HOS_P3	-0.085	0.215	0.226	0.185	0.196	0.212
HOS_P4	-0.108	0.250	0.254	0.219	0.178	0.170
HOS_P5	-0.097	0.264	0.279	0.223	0.242	0.230
HOS_P6	-0.090	0.189	0.192	0.179	0.228	0.172
HOS_P7	-0.061	0.205	0.203	0.189	0.315	0.236
DEC_P1	-0.077	0.159	0.171	0.137	0.250	0.203
DEC_P2	-0.051	0.158	0.140	0.135	0.229	0.155
DEC_P3	-0.111	0.210	0.218	0.196	0.269	0.214
EMO_P1	0.113	-0.063	-0.100	-0.091	-0.150	-0.130
EMO_P2	0.089	-0.048	-0.065	-0.071	-0.103	-0.094
EMO_P3	0.101	-0.047	-0.063	-0.065	-0.103	-0.094
EMO_P4	0.097	-0.038	-0.053	-0.058	-0.113	-0.099
NEG_P1	-0.011	0.065	0.067	0.083	0.183	0.138
NEG_P2	-0.058	0.114	0.100	0.134	0.266	0.153
NEG_P3	-0.015	0.013	0.008	0.057	0.177	0.086
NEG_P4	0.037	0.014	0.010	0.048	0.147	0.063
NEG_P5	-0.090	0.177	0.177	0.184	0.281	0.234
PLA_P1	0.109	0.053	0.028	0.009	0.127	0.027
PLA_P2	0.127	0.004	-0.028	-0.031	0.088	-0.013
SOB_P1	0.132	0.008	-0.030	-0.047	0.005	-0.019
SOB_P2	0.147	-0.051	-0.090	-0.075	-0.047	-0.081
SOB_P3	0.161	-0.010	-0.056	-0.057	-0.039	-0.044
ACH_P1	0.095	-0.038	-0.057	-0.046	-0.105	-0.075
ACH_P2	0.112	-0.047	-0.063	-0.073	-0.121	-0.096
ACH_P3	0.123	-0.043	-0.073	-0.076	-0.148	-0.103
ACH_P4	0.104	-0.057	-0.075	-0.068	-0.101	-0.086
ACH_P5	0.128	0.023	-0.021	-0.031	-0.081	-0.069
ORD_P1	0.086	-0.071	-0.100	-0.067	-0.147	-0.101
ORD_P2	0.084	-0.053	-0.064	-0.051	-0.123	-0.077

ORD_P3	0.101	-0.040	-0.059	-0.049	-0.109	-0.086
ORD_P4	0.103	-0.080	-0.094	-0.072	-0.153	-0.106
ORD_P5	0.114	-0.062	-0.088	-0.058	-0.136	-0.093
ORD_P6	0.097	-0.056	-0.072	-0.041	-0.133	-0.095
TRA_P1	0.150	-0.075	-0.113	-0.081	-0.089	-0.082
TRA_P2	0.188	-0.114	-0.151	-0.121	-0.121	-0.106
BRO_P1	0.096	-0.023	-0.038	-0.032	-0.006	-0.042
BRO_P2	0.132	0.021	-0.005	-0.014	-0.055	-0.025
BRO_P3	0.098	-0.012	-0.028	-0.040	-0.031	-0.051
EPI_P1	0.080	-0.071	-0.082	-0.075	-0.081	-0.087
EPI_P2	0.076	-0.046	-0.042	-0.032	-0.008	-0.050
EPI_P3	0.086	-0.039	-0.036	-0.045	-0.052	-0.066
ITL_P1	0.092	-0.024	-0.026	-0.036	-0.057	-0.054
ITL_P2	0.073	0.001	-0.012	-0.013	-0.027	-0.036
ITL_P3	0.122	0.020	-0.002	-0.030	-0.080	-0.045
ITL_P4	0.105	-0.016	-0.019	-0.033	-0.069	-0.062
ITL_P5	0.105	-0.004	-0.017	-0.024	-0.085	-0.064

Covariance Matrix

	CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
CON_P3	0.394					
HOS_P1	0.230	0.576				
HOS_P2	0.187	0.244	0.497			
HOS_P3	0.174	0.209	0.187	0.376		
HOS_P4	0.157	0.176	0.138	0.195	0.442	
HOS_P5	0.211	0.254	0.213	0.219	0.214	0.412
HOS_P6	0.157	0.234	0.174	0.176	0.191	0.196
HOS_P7	0.225	0.280	0.197	0.187	0.172	0.232
DEC_P1	0.174	0.213	0.163	0.171	0.165	0.192
DEC_P2	0.125	0.170	0.135	0.123	0.133	0.150
DEC_P3	0.169	0.241	0.170	0.206	0.212	0.234
EMO_P1	-0.091	-0.129	-0.068	-0.144	-0.101	-0.117
EMO_P2	-0.073	-0.110	-0.057	-0.108	-0.063	-0.071
EMO_P3	-0.059	-0.091	-0.056	-0.111	-0.075	-0.078
EMO_P4	-0.074	-0.100	-0.053	-0.102	-0.069	-0.077
NEG_P1	0.104	0.174	0.108	0.141	0.083	0.103
NEG_P2	0.123	0.202	0.119	0.134	0.117	0.147
NEG_P3	0.050	0.116	0.022	0.089	0.070	0.057
NEG_P4	0.046	0.092	0.023	0.060	0.037	0.037
NEG_P5	0.194	0.265	0.165	0.232	0.189	0.207
PLA_P1	0.052	0.052	0.046	-0.007	-0.026	0.034
PLA_P2	0.010	0.003	0.010	-0.048	-0.053	-0.021
SOB_P1	0.021	-0.003	0.010	-0.058	-0.088	-0.038
SOB_P2	-0.042	-0.077	-0.047	-0.110	-0.123	-0.103
SOB_P3	0.002	-0.070	-0.020	-0.094	-0.098	-0.068
ACH_P1	-0.047	-0.060	-0.038	-0.078	-0.076	-0.073
ACH_P2	-0.059	-0.075	-0.040	-0.097	-0.096	-0.093
ACH_P3	-0.080	-0.099	-0.047	-0.100	-0.087	-0.098
ACH_P4	-0.071	-0.066	-0.058	-0.075	-0.082	-0.089
ACH_P5	-0.038	-0.043	-0.002	-0.071	-0.053	-0.063
ORD_P1	-0.096	-0.108	-0.100	-0.088	-0.065	-0.121
ORD_P2	-0.072	-0.065	-0.054	-0.066	-0.073	-0.078
ORD_P3	-0.059	-0.054	-0.036	-0.061	-0.068	-0.072
ORD_P4	-0.091	-0.097	-0.075	-0.087	-0.090	-0.114
ORD_P5	-0.084	-0.095	-0.073	-0.079	-0.075	-0.100
ORD_P6	-0.080	-0.087	-0.069	-0.073	-0.065	-0.094
TRA_P1	-0.065	-0.107	-0.057	-0.099	-0.095	-0.108
TRA_P2	-0.099	-0.146	-0.087	-0.136	-0.127	-0.153
BRO_P1	-0.017	-0.020	-0.006	-0.056	-0.049	-0.044
BRO_P2	-0.001	-0.033	0.007	-0.043	-0.033	-0.026
BRO_P3	-0.034	-0.034	-0.018	-0.061	-0.050	-0.044
EPI_P1	-0.066	-0.059	-0.054	-0.093	-0.081	-0.086
EPI_P2	-0.033	-0.013	-0.018	-0.056	-0.062	-0.042
EPI_P3	-0.042	-0.039	-0.035	-0.066	-0.062	-0.057
ITL_P1	-0.041	-0.035	-0.017	-0.062	-0.054	-0.041
ITL_P2	-0.020	-0.013	-0.007	-0.038	-0.051	-0.027
ITL_P3	-0.016	-0.035	-0.010	-0.051	-0.049	-0.026
ITL_P4	-0.036	-0.040	-0.022	-0.063	-0.059	-0.049
ITL_P5	-0.022	-0.044	-0.018	-0.066	-0.069	-0.052

Covariance Matrix

	HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
HOS_P6	0.451					

HOS_P7	0.253	0.698				
DEC_P1	0.196	0.322	0.478			
DEC_P2	0.151	0.241	0.213	0.513		
DEC_P3	0.215	0.277	0.284	0.249	0.609	
EMO_P1	-0.111	-0.139	-0.178	-0.125	-0.253	0.513
EMO_P2	-0.087	-0.108	-0.123	-0.051	-0.112	0.176
EMO_P3	-0.085	-0.105	-0.135	-0.075	-0.153	0.213
EMO_P4	-0.095	-0.120	-0.137	-0.074	-0.140	0.207
NEG_P1	0.162	0.190	0.179	0.118	0.162	-0.158
NEG_P2	0.185	0.238	0.251	0.216	0.307	-0.257
NEG_P3	0.130	0.139	0.164	0.142	0.209	-0.208
NEG_P4	0.103	0.116	0.122	0.112	0.155	-0.138
NEG_P5	0.232	0.285	0.254	0.175	0.280	-0.243
PLA_P1	0.012	0.023	0.007	0.019	-0.019	0.052
PLA_P2	-0.015	-0.006	-0.036	0.000	-0.079	0.096
SOB_P1	-0.046	-0.051	-0.065	-0.029	-0.161	0.140
SOB_P2	-0.090	-0.090	-0.109	-0.043	-0.183	0.158
SOB_P3	-0.099	-0.089	-0.101	-0.042	-0.208	0.171
ACH_P1	-0.076	-0.112	-0.137	-0.094	-0.159	0.193
ACH_P2	-0.095	-0.125	-0.148	-0.110	-0.196	0.239
ACH_P3	-0.106	-0.146	-0.149	-0.107	-0.192	0.213
ACH_P4	-0.065	-0.112	-0.124	-0.083	-0.130	0.146
ACH_P5	-0.062	-0.087	-0.124	-0.080	-0.168	0.236
ORD_P1	-0.093	-0.156	-0.137	-0.100	-0.150	0.137
ORD_P2	-0.073	-0.131	-0.144	-0.093	-0.131	0.132
ORD_P3	-0.070	-0.113	-0.124	-0.090	-0.138	0.147
ORD_P4	-0.096	-0.154	-0.169	-0.115	-0.181	0.178
ORD_P5	-0.078	-0.129	-0.121	-0.096	-0.148	0.138
ORD_P6	-0.081	-0.136	-0.137	-0.099	-0.141	0.136
TRA_P1	-0.105	-0.088	-0.075	-0.075	-0.166	0.189
TRA_P2	-0.129	-0.111	-0.117	-0.101	-0.207	0.226
BRO_P1	-0.015	-0.020	-0.037	-0.025	-0.052	0.098
BRO_P2	-0.032	-0.039	-0.073	-0.044	-0.085	0.136
BRO_P3	-0.037	-0.051	-0.059	-0.037	-0.077	0.121
EPI_P1	-0.054	-0.074	-0.091	-0.075	-0.107	0.146
EPI_P2	-0.008	-0.032	-0.054	-0.031	-0.036	0.067
EPI_P3	-0.038	-0.058	-0.070	-0.051	-0.068	0.102
ITL_P1	-0.035	-0.060	-0.088	-0.038	-0.072	0.133
ITL_P2	-0.030	-0.057	-0.078	-0.032	-0.048	0.097
ITL_P3	-0.063	-0.085	-0.100	-0.063	-0.099	0.149
ITL_P4	-0.062	-0.082	-0.112	-0.054	-0.088	0.129
ITL_P5	-0.066	-0.105	-0.134	-0.076	-0.147	0.165

Covariance Matrix

	EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
EMO_P2	0.458					
EMO_P3	0.254	0.482				
EMO_P4	0.230	0.263	0.415			
NEG_P1	-0.250	-0.247	-0.269	0.819		
NEG_P2	-0.176	-0.192	-0.199	0.312	0.726	
NEG_P3	-0.223	-0.242	-0.217	0.389	0.425	0.887
NEG_P4	-0.119	-0.146	-0.134	0.345	0.329	0.451
NEG_P5	-0.224	-0.232	-0.234	0.387	0.320	0.330
PLA_P1	0.105	0.095	0.063	-0.005	0.000	-0.041
PLA_P2	0.132	0.110	0.079	-0.007	-0.009	-0.022
SOB_P1	0.106	0.113	0.085	0.002	-0.066	-0.085
SOB_P2	0.155	0.142	0.136	-0.075	-0.105	-0.114
SOB_P3	0.155	0.150	0.129	-0.060	-0.104	-0.135
ACH_P1	0.093	0.125	0.139	-0.085	-0.147	-0.086
ACH_P2	0.121	0.158	0.164	-0.100	-0.178	-0.139
ACH_P3	0.140	0.157	0.162	-0.116	-0.167	-0.121
ACH_P4	0.090	0.115	0.128	-0.053	-0.107	-0.050
ACH_P5	0.127	0.153	0.171	-0.098	-0.152	-0.124
ORD_P1	0.061	0.079	0.088	-0.036	-0.102	-0.002
ORD_P2	0.071	0.094	0.108	-0.045	-0.122	-0.054
ORD_P3	0.083	0.118	0.120	-0.059	-0.116	-0.060
ORD_P4	0.086	0.121	0.133	-0.066	-0.151	-0.082
ORD_P5	0.073	0.097	0.108	-0.033	-0.105	-0.024
ORD_P6	0.074	0.102	0.113	-0.057	-0.128	-0.057
TRA_P1	0.078	0.094	0.088	-0.003	-0.083	-0.031
TRA_P2	0.106	0.128	0.113	-0.011	-0.107	-0.043
BRO_P1	0.086	0.078	0.084	0.005	-0.025	-0.009
BRO_P2	0.138	0.131	0.130	-0.059	-0.084	-0.101
BRO_P3	0.129	0.114	0.110	-0.053	-0.067	-0.061
EPI_P1	0.082	0.091	0.097	-0.067	-0.083	-0.038

EPI_P2	0.076	0.078	0.076	-0.034	-0.025	-0.009
EPI_P3	0.094	0.105	0.103	-0.060	-0.065	-0.043
ITL_P1	0.152	0.161	0.153	-0.080	-0.099	-0.108
ITL_P2	0.098	0.111	0.116	-0.060	-0.070	-0.068
ITL_P3	0.150	0.171	0.173	-0.121	-0.139	-0.154
ITL_P4	0.133	0.144	0.155	-0.098	-0.106	-0.115
ITL_P5	0.129	0.153	0.165	-0.100	-0.151	-0.157

Covariance Matrix

	NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
NEG_P4	0.665					
NEG_P5	0.234	0.662				
PLA_P1	0.044	-0.003	0.695			
PLA_P2	0.049	-0.034	0.364	0.492		
SOB_P1	-0.002	-0.054	0.305	0.315	0.710	
SOB_P2	-0.012	-0.131	0.230	0.253	0.382	0.480
SOB_P3	-0.040	-0.125	0.294	0.336	0.509	0.396
ACH_P1	-0.044	-0.130	0.055	0.053	0.116	0.104
ACH_P2	-0.083	-0.180	0.064	0.082	0.141	0.141
ACH_P3	-0.083	-0.174	0.044	0.072	0.135	0.130
ACH_P4	-0.018	-0.118	0.039	0.055	0.087	0.101
ACH_P5	-0.063	-0.142	0.102	0.127	0.184	0.164
ORD_P1	0.001	-0.102	0.007	0.027	0.048	0.071
ORD_P2	-0.019	-0.104	0.009	0.021	0.046	0.069
ORD_P3	-0.020	-0.105	0.050	0.056	0.084	0.091
ORD_P4	-0.046	-0.138	0.006	0.037	0.086	0.097
ORD_P5	0.010	-0.098	0.029	0.048	0.075	0.090
ORD_P6	-0.029	-0.108	0.018	0.035	0.058	0.081
TRA_P1	0.051	-0.104	0.066	0.118	0.170	0.163
TRA_P2	0.045	-0.135	0.077	0.145	0.190	0.180
BRO_P1	0.058	-0.042	0.167	0.140	0.144	0.126
BRO_P2	-0.009	-0.078	0.186	0.190	0.198	0.168
BRO_P3	0.006	-0.082	0.146	0.164	0.154	0.139
EPI_P1	-0.009	-0.111	0.045	0.055	0.084	0.096
EPI_P2	0.044	-0.048	0.100	0.090	0.072	0.084
EPI_P3	0.001	-0.091	0.075	0.084	0.070	0.086
ITL_P1	-0.035	-0.109	0.096	0.111	0.125	0.139
ITL_P2	-0.005	-0.082	0.098	0.070	0.073	0.099
ITL_P3	-0.066	-0.139	0.144	0.113	0.133	0.131
ITL_P4	-0.034	-0.111	0.130	0.102	0.133	0.144
ITL_P5	-0.059	-0.136	0.147	0.110	0.191	0.183

Covariance Matrix

	SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
SOB_P3	0.741					
ACH_P1	0.109	0.377				
ACH_P2	0.155	0.239	0.423			
ACH_P3	0.149	0.208	0.273	0.461		
ACH_P4	0.094	0.157	0.183	0.207	0.296	
ACH_P5	0.209	0.229	0.262	0.261	0.192	0.421
ORD_P1	0.066	0.125	0.139	0.151	0.129	0.140
ORD_P2	0.062	0.157	0.166	0.185	0.175	0.158
ORD_P3	0.095	0.164	0.183	0.207	0.176	0.186
ORD_P4	0.094	0.192	0.217	0.235	0.210	0.206
ORD_P5	0.101	0.143	0.150	0.182	0.151	0.163
ORD_P6	0.082	0.153	0.159	0.181	0.162	0.165
TRA_P1	0.200	0.131	0.156	0.146	0.101	0.183
TRA_P2	0.231	0.143	0.176	0.180	0.130	0.197
BRO_P1	0.140	0.094	0.091	0.076	0.073	0.125
BRO_P2	0.218	0.149	0.142	0.143	0.117	0.205
BRO_P3	0.170	0.108	0.106	0.111	0.095	0.146
EPI_P1	0.082	0.141	0.138	0.140	0.129	0.138
EPI_P2	0.067	0.084	0.073	0.073	0.083	0.088
EPI_P3	0.073	0.109	0.113	0.121	0.116	0.125
ITL_P1	0.141	0.113	0.122	0.134	0.125	0.144
ITL_P2	0.075	0.109	0.106	0.105	0.107	0.110
ITL_P3	0.154	0.174	0.171	0.179	0.136	0.197
ITL_P4	0.132	0.130	0.138	0.144	0.128	0.155
ITL_P5	0.181	0.170	0.181	0.156	0.133	0.188

Covariance Matrix

	ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6

ORD_P1	0.426					
ORD_P2	0.186	0.357				
ORD_P3	0.172	0.206	0.368			
ORD_P4	0.187	0.255	0.214	0.439		
ORD_P5	0.270	0.208	0.208	0.198	0.450	
ORD_P6	0.251	0.231	0.209	0.225	0.290	0.370
TRA_P1	0.194	0.080	0.119	0.138	0.154	0.126
TRA_P2	0.178	0.102	0.139	0.154	0.172	0.132
BRO_P1	0.019	0.034	0.063	0.042	0.052	0.036
BRO_P2	0.039	0.068	0.096	0.086	0.093	0.076
BRO_P3	0.035	0.052	0.079	0.063	0.069	0.056
EPI_P1	0.086	0.091	0.105	0.114	0.089	0.089
EPI_P2	0.023	0.050	0.068	0.055	0.055	0.052
EPI_P3	0.051	0.079	0.101	0.091	0.077	0.079
ITL_P1	0.056	0.111	0.105	0.101	0.082	0.089
ITL_P2	0.060	0.099	0.109	0.096	0.080	0.091
ITL_P3	0.059	0.100	0.141	0.118	0.111	0.104
ITL_P4	0.078	0.128	0.138	0.119	0.102	0.122
ITL_P5	0.102	0.131	0.142	0.150	0.130	0.147

Covariance Matrix

	TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
TRA_P1	0.868					
TRA_P2	0.566	0.733				
BRO_P1	0.068	0.106	0.389			
BRO_P2	0.100	0.139	0.259	0.508		
BRO_P3	0.072	0.119	0.194	0.255	0.372	
EPI_P1	0.087	0.111	0.114	0.121	0.116	0.299
EPI_P2	0.007	0.042	0.161	0.173	0.167	0.120
EPI_P3	0.041	0.077	0.126	0.158	0.161	0.136
ITL_P1	0.053	0.081	0.109	0.160	0.142	0.114
ITL_P2	0.030	0.044	0.091	0.120	0.118	0.096
ITL_P3	0.068	0.101	0.179	0.286	0.185	0.113
ITL_P4	0.059	0.079	0.111	0.150	0.127	0.103
ITL_P5	0.097	0.118	0.106	0.153	0.115	0.097

Covariance Matrix

	EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
EPI_P2	0.285					
EPI_P3	0.158	0.248				
ITL_P1	0.116	0.123	0.320			
ITL_P2	0.111	0.112	0.124	0.273		
ITL_P3	0.135	0.155	0.166	0.157	0.440	
ITL_P4	0.106	0.122	0.179	0.144	0.195	0.341
ITL_P5	0.087	0.099	0.134	0.123	0.174	0.172

Covariance Matrix

	ITL_P5
ITL_P5	0.326

SAPI FIRST-ORDER MEASUREMENT MODEL WITH ITEM PAQRCELS AS INDICATORS

Parameter Specifications

LAMBDA-X

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMP_P1	1	0	0	0	0	0
EMP_P2	2	0	0	0	0	0
EMP_P3	3	0	0	0	0	0
FAC_P1	0	4	0	0	0	0
FAC_P2	0	5	0	0	0	0
FAC_P3	0	6	0	0	0	0
FAC_P4	0	7	0	0	0	0
FAC_P5	0	8	0	0	0	0
INT_P1	0	0	9	0	0	0
INT_P2	0	0	10	0	0	0
INT_P3	0	0	11	0	0	0

INT_P4	0	0	12	0	0	0
INT_P5	0	0	13	0	0	0
INT_P6	0	0	14	0	0	0
IPR_P1	0	0	0	15	0	0
IPR_P2	0	0	0	16	0	0
IPR_P3	0	0	0	17	0	0
IPR_P4	0	0	0	18	0	0
SOC_P1	0	0	0	0	19	0
SOC_P2	0	0	0	0	20	0
WAR_P1	0	0	0	0	0	21
WAR_P2	0	0	0	0	0	22
WAR_P3	0	0	0	0	0	23
WAR_P4	0	0	0	0	0	24
WAR_P5	0	0	0	0	0	25
ARR_P1	0	0	0	0	0	0
ARR_P2	0	0	0	0	0	0
ARR_P3	0	0	0	0	0	0
CON_P1	0	0	0	0	0	0
CON_P2	0	0	0	0	0	0
CON_P3	0	0	0	0	0	0
HOS_P1	0	0	0	0	0	0
HOS_P2	0	0	0	0	0	0
HOS_P3	0	0	0	0	0	0
HOS_P4	0	0	0	0	0	0
HOS_P5	0	0	0	0	0	0
HOS_P6	0	0	0	0	0	0
HOS_P7	0	0	0	0	0	0
DEC_P1	0	0	0	0	0	0
DEC_P2	0	0	0	0	0	0
DEC_P3	0	0	0	0	0	0
EMO_P1	0	0	0	0	0	0
EMO_P2	0	0	0	0	0	0
EMO_P3	0	0	0	0	0	0
EMO_P4	0	0	0	0	0	0
NEG_P1	0	0	0	0	0	0
NEG_P2	0	0	0	0	0	0
NEG_P3	0	0	0	0	0	0
NEG_P4	0	0	0	0	0	0
NEG_P5	0	0	0	0	0	0
PLA_P1	0	0	0	0	0	0
PLA_P2	0	0	0	0	0	0
SOB_P1	0	0	0	0	0	0
SOB_P2	0	0	0	0	0	0
SOB_P3	0	0	0	0	0	0
ACH_P1	0	0	0	0	0	0
ACH_P2	0	0	0	0	0	0
ACH_P3	0	0	0	0	0	0
ACH_P4	0	0	0	0	0	0
ACH_P5	0	0	0	0	0	0
ORD_P1	0	0	0	0	0	0
ORD_P2	0	0	0	0	0	0
ORD_P3	0	0	0	0	0	0
ORD_P4	0	0	0	0	0	0
ORD_P5	0	0	0	0	0	0
ORD_P6	0	0	0	0	0	0
TRA_P1	0	0	0	0	0	0
TRA_P2	0	0	0	0	0	0
BRO_P1	0	0	0	0	0	0
BRO_P2	0	0	0	0	0	0
BRO_P3	0	0	0	0	0	0
EPI_P1	0	0	0	0	0	0
EPI_P2	0	0	0	0	0	0
EPI_P3	0	0	0	0	0	0
ITL_P1	0	0	0	0	0	0
ITL_P2	0	0	0	0	0	0
ITL_P3	0	0	0	0	0	0
ITL_P4	0	0	0	0	0	0
ITL_P5	0	0	0	0	0	0

LAMBDA-X

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
EMP_P1	0	0	0	0	0	0
EMP_P2	0	0	0	0	0	0
EMP_P3	0	0	0	0	0	0
FAC_P1	0	0	0	0	0	0

FAC_P2	0	0	0	0	0	0
FAC_P3	0	0	0	0	0	0
FAC_P4	0	0	0	0	0	0
FAC_P5	0	0	0	0	0	0
INT_P1	0	0	0	0	0	0
INT_P2	0	0	0	0	0	0
INT_P3	0	0	0	0	0	0
INT_P4	0	0	0	0	0	0
INT_P5	0	0	0	0	0	0
INT_P6	0	0	0	0	0	0
IPR_P1	0	0	0	0	0	0
IPR_P2	0	0	0	0	0	0
IPR_P3	0	0	0	0	0	0
IPR_P4	0	0	0	0	0	0
SOC_P1	0	0	0	0	0	0
SOC_P2	0	0	0	0	0	0
WAR_P1	0	0	0	0	0	0
WAR_P2	0	0	0	0	0	0
WAR_P3	0	0	0	0	0	0
WAR_P4	0	0	0	0	0	0
WAR_P5	0	0	0	0	0	0
ARR_P1	26	0	0	0	0	0
ARR_P2	27	0	0	0	0	0
ARR_P3	28	0	0	0	0	0
CON_P1	0	29	0	0	0	0
CON_P2	0	30	0	0	0	0
CON_P3	0	31	0	0	0	0
HOS_P1	0	0	32	0	0	0
HOS_P2	0	0	33	0	0	0
HOS_P3	0	0	34	0	0	0
HOS_P4	0	0	35	0	0	0
HOS_P5	0	0	36	0	0	0
HOS_P6	0	0	37	0	0	0
HOS_P7	0	0	38	0	0	0
DEC_P1	0	0	0	39	0	0
DEC_P2	0	0	0	40	0	0
DEC_P3	0	0	0	41	0	0
EMO_P1	0	0	0	0	42	0
EMO_P2	0	0	0	0	43	0
EMO_P3	0	0	0	0	44	0
EMO_P4	0	0	0	0	45	0
NEG_P1	0	0	0	0	0	46
NEG_P2	0	0	0	0	0	47
NEG_P3	0	0	0	0	0	48
NEG_P4	0	0	0	0	0	49
NEG_P5	0	0	0	0	0	50
PLA_P1	0	0	0	0	0	0
PLA_P2	0	0	0	0	0	0
SOB_P1	0	0	0	0	0	0
SOB_P2	0	0	0	0	0	0
SOB_P3	0	0	0	0	0	0
ACH_P1	0	0	0	0	0	0
ACH_P2	0	0	0	0	0	0
ACH_P3	0	0	0	0	0	0
ACH_P4	0	0	0	0	0	0
ACH_P5	0	0	0	0	0	0
ORD_P1	0	0	0	0	0	0
ORD_P2	0	0	0	0	0	0
ORD_P3	0	0	0	0	0	0
ORD_P4	0	0	0	0	0	0
ORD_P5	0	0	0	0	0	0
ORD_P6	0	0	0	0	0	0
TRA_P1	0	0	0	0	0	0
TRA_P2	0	0	0	0	0	0
BRO_P1	0	0	0	0	0	0
BRO_P2	0	0	0	0	0	0
BRO_P3	0	0	0	0	0	0
EPI_P1	0	0	0	0	0	0
EPI_P2	0	0	0	0	0	0
EPI_P3	0	0	0	0	0	0
ITL_P1	0	0	0	0	0	0
ITL_P2	0	0	0	0	0	0
ITL_P3	0	0	0	0	0	0
ITL_P4	0	0	0	0	0	0
ITL_P5	0	0	0	0	0	0

LAMBDA-X

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
	--------	--------	--------	--------	--------	--------
EMP_P1	0	0	0	0	0	0
EMP_P2	0	0	0	0	0	0
EMP_P3	0	0	0	0	0	0
FAC_P1	0	0	0	0	0	0
FAC_P2	0	0	0	0	0	0
FAC_P3	0	0	0	0	0	0
FAC_P4	0	0	0	0	0	0
FAC_P5	0	0	0	0	0	0
INT_P1	0	0	0	0	0	0
INT_P2	0	0	0	0	0	0
INT_P3	0	0	0	0	0	0
INT_P4	0	0	0	0	0	0
INT_P5	0	0	0	0	0	0
INT_P6	0	0	0	0	0	0
IPR_P1	0	0	0	0	0	0
IPR_P2	0	0	0	0	0	0
IPR_P3	0	0	0	0	0	0
IPR_P4	0	0	0	0	0	0
SOC_P1	0	0	0	0	0	0
SOC_P2	0	0	0	0	0	0
WAR_P1	0	0	0	0	0	0
WAR_P2	0	0	0	0	0	0
WAR_P3	0	0	0	0	0	0
WAR_P4	0	0	0	0	0	0
WAR_P5	0	0	0	0	0	0
ARR_P1	0	0	0	0	0	0
ARR_P2	0	0	0	0	0	0
ARR_P3	0	0	0	0	0	0
CON_P1	0	0	0	0	0	0
CON_P2	0	0	0	0	0	0
CON_P3	0	0	0	0	0	0
HOS_P1	0	0	0	0	0	0
HOS_P2	0	0	0	0	0	0
HOS_P3	0	0	0	0	0	0
HOS_P4	0	0	0	0	0	0
HOS_P5	0	0	0	0	0	0
HOS_P6	0	0	0	0	0	0
HOS_P7	0	0	0	0	0	0
DEC_P1	0	0	0	0	0	0
DEC_P2	0	0	0	0	0	0
DEC_P3	0	0	0	0	0	0
EMO_P1	0	0	0	0	0	0
EMO_P2	0	0	0	0	0	0
EMO_P3	0	0	0	0	0	0
EMO_P4	0	0	0	0	0	0
NEG_P1	0	0	0	0	0	0
NEG_P2	0	0	0	0	0	0
NEG_P3	0	0	0	0	0	0
NEG_P4	0	0	0	0	0	0
NEG_P5	0	0	0	0	0	0
PLA_P1	51	0	0	0	0	0
PLA_P2	52	0	0	0	0	0
SOB_P1	0	53	0	0	0	0
SOB_P2	0	54	0	0	0	0
SOB_P3	0	55	0	0	0	0
ACH_P1	0	0	56	0	0	0
ACH_P2	0	0	57	0	0	0
ACH_P3	0	0	58	0	0	0
ACH_P4	0	0	59	0	0	0
ACH_P5	0	0	60	0	0	0
ORD_P1	0	0	0	61	0	0
ORD_P2	0	0	0	62	0	0
ORD_P3	0	0	0	63	0	0
ORD_P4	0	0	0	64	0	0
ORD_P5	0	0	0	65	0	0
ORD_P6	0	0	0	66	0	0
TRA_P1	0	0	0	0	67	0
TRA_P2	0	0	0	0	68	0
BRO_P1	0	0	0	0	0	69
BRO_P2	0	0	0	0	0	70
BRO_P3	0	0	0	0	0	71
EPI_P1	0	0	0	0	0	0
EPI_P2	0	0	0	0	0	0
EPI_P3	0	0	0	0	0	0

ITL_P1	0	0	0	0	0	0
ITL_P2	0	0	0	0	0	0
ITL_P3	0	0	0	0	0	0
ITL_P4	0	0	0	0	0	0
ITL_P5	0	0	0	0	0	0

LAMBDA-X

	EPISTEM	INTELLEC
EMP_P1	0	0
EMP_P2	0	0
EMP_P3	0	0
FAC_P1	0	0
FAC_P2	0	0
FAC_P3	0	0
FAC_P4	0	0
FAC_P5	0	0
INT_P1	0	0
INT_P2	0	0
INT_P3	0	0
INT_P4	0	0
INT_P5	0	0
INT_P6	0	0
IPR_P1	0	0
IPR_P2	0	0
IPR_P3	0	0
IPR_P4	0	0
SOC_P1	0	0
SOC_P2	0	0
WAR_P1	0	0
WAR_P2	0	0
WAR_P3	0	0
WAR_P4	0	0
WAR_P5	0	0
ARR_P1	0	0
ARR_P2	0	0
ARR_P3	0	0
CON_P1	0	0
CON_P2	0	0
CON_P3	0	0
HOS_P1	0	0
HOS_P2	0	0
HOS_P3	0	0
HOS_P4	0	0
HOS_P5	0	0
HOS_P6	0	0
HOS_P7	0	0
DEC_P1	0	0
DEC_P2	0	0
DEC_P3	0	0
EMO_P1	0	0
EMO_P2	0	0
EMO_P3	0	0
EMO_P4	0	0
NEG_P1	0	0
NEG_P2	0	0
NEG_P3	0	0
NEG_P4	0	0
NEG_P5	0	0
PLA_P1	0	0
PLA_P2	0	0
SOB_P1	0	0
SOB_P2	0	0
SOB_P3	0	0
ACH_P1	0	0
ACH_P2	0	0
ACH_P3	0	0
ACH_P4	0	0
ACH_P5	0	0
ORD_P1	0	0
ORD_P2	0	0
ORD_P3	0	0
ORD_P4	0	0
ORD_P5	0	0
ORD_P6	0	0
TRA_P1	0	0

TRA_P2	0	0
BRO_P1	0	0
BRO_P2	0	0
BRO_P3	0	0
EPI_P1	72	0
EPI_P2	73	0
EPI_P3	74	0
ITL_P1	0	75
ITL_P2	0	76
ITL_P3	0	77
ITL_P4	0	78
ITL_P5	0	79

PHI

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMPATHY	0					
FACILIT	80	0				
INTEGRIT	81	82	0			
INTERPER	83	84	85	0		
SOC_INT	86	87	88	89	0	
WARMHEAR	90	91	92	93	94	0
ARROGAN	95	96	97	98	99	100
CONFLICT	101	102	103	104	105	106
HOSTILE	108	109	110	111	112	113
DECEIT	116	117	118	119	120	121
EMOTIONB	125	126	127	128	129	130
NEGATIVE	135	136	137	138	139	140
PLAYFULL	146	147	148	149	150	151
SOCIABIL	158	159	160	161	162	163
ACHIEVEM	171	172	173	174	175	176
ORDILIN	185	186	187	188	189	190
TRAD_REL	200	201	202	203	204	205
BROADMIN	216	217	218	219	220	221
EPISTEM	233	234	235	236	237	238
INTELLEC	251	252	253	254	255	256

PHI

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
ARROGAN	0					
CONFLICT	107	0				
HOSTILE	114	115	0			
DECEIT	122	123	124	0		
EMOTIONB	131	132	133	134	0	
NEGATIVE	141	142	143	144	145	0
PLAYFULL	152	153	154	155	156	157
SOCIABIL	164	165	166	167	168	169
ACHIEVEM	177	178	179	180	181	182
ORDILIN	191	192	193	194	195	196
TRAD_REL	206	207	208	209	210	211
BROADMIN	222	223	224	225	226	227
EPISTEM	239	240	241	242	243	244
INTELLEC	257	258	259	260	261	262

PHI

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
PLAYFULL	0					
SOCIABIL	170	0				
ACHIEVEM	183	184	0			
ORDILIN	197	198	199	0		
TRAD_REL	212	213	214	215	0	
BROADMIN	228	229	230	231	232	0
EPISTEM	245	246	247	248	249	250
INTELLEC	263	264	265	266	267	268

PHI

	EPISTEM	INTELLEC
EPISTEM	0	
INTELLEC	269	0

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THETA-DELTA

      EMP_P1      EMP_P2      EMP_P3      FAC_P1      FAC_P2      FAC_P3
    --------    --------    --------    --------    --------    --------
         270         271         272         273         274         275

THETA-DELTA

      FAC_P4      FAC_P5      INT_P1      INT_P2      INT_P3      INT_P4
    --------    --------    --------    --------    --------    --------
         276         277         278         279         280         281

THETA-DELTA

      INT_P5      INT_P6      IPR_P1      IPR_P2      IPR_P3      IPR_P4
    --------    --------    --------    --------    --------    --------
         282         283         284         285         286         287

THETA-DELTA

      SOC_P1      SOC_P2      WAR_P1      WAR_P2      WAR_P3      WAR_P4
    --------    --------    --------    --------    --------    --------
         288         289         290         291         292         293

THETA-DELTA

      WAR_P5      ARR_P1      ARR_P2      ARR_P3      CON_P1      CON_P2
    --------    --------    --------    --------    --------    --------
         294         295         296         297         298         299

THETA-DELTA

      CON_P3      HOS_P1      HOS_P2      HOS_P3      HOS_P4      HOS_P5
    --------    --------    --------    --------    --------    --------
         300         301         302         303         304         305

THETA-DELTA

      HOS_P6      HOS_P7      DEC_P1      DEC_P2      DEC_P3      EMO_P1
    --------    --------    --------    --------    --------    --------
         306         307         308         309         310         311

THETA-DELTA

      EMO_P2      EMO_P3      EMO_P4      NEG_P1      NEG_P2      NEG_P3
    --------    --------    --------    --------    --------    --------
         312         313         314         315         316         317

THETA-DELTA

      NEG_P4      NEG_P5      PLA_P1      PLA_P2      SOB_P1      SOB_P2
    --------    --------    --------    --------    --------    --------
         318         319         320         321         322         323

THETA-DELTA

      SOB_P3      ACH_P1      ACH_P2      ACH_P3      ACH_P4      ACH_P5
    --------    --------    --------    --------    --------    --------
         324         325         326         327         328         329

THETA-DELTA

      ORD_P1      ORD_P2      ORD_P3      ORD_P4      ORD_P5      ORD_P6
    --------    --------    --------    --------    --------    --------
         330         331         332         333         334         335

THETA-DELTA

      TRA_P1      TRA_P2      BRO_P1      BRO_P2      BRO_P3      EPI_P1
    --------    --------    --------    --------    --------    --------
         336         337         338         339         340         341

THETA-DELTA

      EPI_P2      EPI_P3      ITL_P1      ITL_P2      ITL_P3      ITL_P4
    --------    --------    --------    --------    --------    --------
         342         343         344         345         346         347
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THETA-DELTA

ITL_P5
348

SAPI FIRST-ORDER MEASUREMENT MODEL WITH ITEM PAQRCELS AS INDICATORS

Number of Iterations = 13

LISREL Estimates (Robust Maximum Likelihood)

LAMBDA-X

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMP_P1	0.489 (0.009) 54.898	- -	- -	- -	- -	- -
EMP_P2	0.359 (0.007) 48.458	- -	- -	- -	- -	- -
EMP_P3	0.472 (0.008) 57.888	- -	- -	- -	- -	- -
FAC_P1	- -	0.536 (0.009) 60.915	- -	- -	- -	- -
FAC_P2	- -	0.591 (0.009) 63.420	- -	- -	- -	- -
FAC_P3	- -	0.573 (0.010) 59.027	- -	- -	- -	- -
FAC_P4	- -	0.530 (0.009) 60.474	- -	- -	- -	- -
FAC_P5	- -	0.452 (0.009) 51.779	- -	- -	- -	- -
INT_P1	- -	- -	0.391 (0.009) 44.487	- -	- -	- -
INT_P2	- -	- -	0.358 (0.007) 51.294	- -	- -	- -
INT_P3	- -	- -	0.353 (0.008) 45.140	- -	- -	- -
INT_P4	- -	- -	0.381 (0.009) 41.087	- -	- -	- -
INT_P5	- -	- -	0.335 (0.007) 46.065	- -	- -	- -
INT_P6	- -	- -	0.351 (0.007) 52.774	- -	- -	- -
IPR_P1	- -	- -	- -	0.367 (0.009)	- -	- -

				38.811		
IPR_P2	- -	- -	- -	0.448 (0.010) 46.528	- -	- -
IPR_P3	- -	- -	- -	0.380 (0.008) 47.480	- -	- -
IPR_P4	- -	- -	- -	0.363 (0.008) 46.770	- -	- -
SOC_P1	- -	- -	- -	- -	0.513 (0.009) 59.787	- -
SOC_P2	- -	- -	- -	- -	0.496 (0.008) 59.585	- -
WAR_P1	- -	- -	- -	- -	- -	0.401 (0.007) 53.746
WAR_P2	- -	- -	- -	- -	- -	0.414 (0.008) 50.637
WAR_P3	- -	- -	- -	- -	- -	0.414 (0.007) 55.327
WAR_P4	- -	- -	- -	- -	- -	0.404 (0.007) 55.234
WAR_P5	- -	- -	- -	- -	- -	0.388 (0.007) 51.785
ARR_P1	- -	- -	- -	- -	- -	- -
ARR_P2	- -	- -	- -	- -	- -	- -
ARR_P3	- -	- -	- -	- -	- -	- -
CON_P1	- -	- -	- -	- -	- -	- -
CON_P2	- -	- -	- -	- -	- -	- -
CON_P3	- -	- -	- -	- -	- -	- -
HOS_P1	- -	- -	- -	- -	- -	- -
HOS_P2	- -	- -	- -	- -	- -	- -
HOS_P3	- -	- -	- -	- -	- -	- -
HOS_P4	- -	- -	- -	- -	- -	- -
HOS_P5	- -	- -	- -	- -	- -	- -
HOS_P6	- -	- -	- -	- -	- -	- -
HOS_P7	- -	- -	- -	- -	- -	- -
DEC_P1	- -	- -	- -	- -	- -	- -
DEC_P2	- -	- -	- -	- -	- -	- -
DEC_P3	- -	- -	- -	- -	- -	- -
EMO_P1	- -	- -	- -	- -	- -	- -
EMO_P2	- -	- -	- -	- -	- -	- -

EMO_P3	- -	- -	- -	- -	- -	- -
EMO_P4	- -	- -	- -	- -	- -	- -
NEG_P1	- -	- -	- -	- -	- -	- -
NEG_P2	- -	- -	- -	- -	- -	- -
NEG_P3	- -	- -	- -	- -	- -	- -
NEG_P4	- -	- -	- -	- -	- -	- -
NEG_P5	- -	- -	- -	- -	- -	- -
PLA_P1	- -	- -	- -	- -	- -	- -
PLA_P2	- -	- -	- -	- -	- -	- -
SOB_P1	- -	- -	- -	- -	- -	- -
SOB_P2	- -	- -	- -	- -	- -	- -
SOB_P3	- -	- -	- -	- -	- -	- -
ACH_P1	- -	- -	- -	- -	- -	- -
ACH_P2	- -	- -	- -	- -	- -	- -
ACH_P3	- -	- -	- -	- -	- -	- -
ACH_P4	- -	- -	- -	- -	- -	- -
ACH_P5	- -	- -	- -	- -	- -	- -
ORD_P1	- -	- -	- -	- -	- -	- -
ORD_P2	- -	- -	- -	- -	- -	- -
ORD_P3	- -	- -	- -	- -	- -	- -
ORD_P4	- -	- -	- -	- -	- -	- -
ORD_P5	- -	- -	- -	- -	- -	- -
ORD_P6	- -	- -	- -	- -	- -	- -
TRA_P1	- -	- -	- -	- -	- -	- -
TRA_P2	- -	- -	- -	- -	- -	- -
BRO_P1	- -	- -	- -	- -	- -	- -
BRO_P2	- -	- -	- -	- -	- -	- -
BRO_P3	- -	- -	- -	- -	- -	- -
EPI_P1	- -	- -	- -	- -	- -	- -
EPI_P2	- -	- -	- -	- -	- -	- -
EPI_P3	- -	- -	- -	- -	- -	- -
ITL_P1	- -	- -	- -	- -	- -	- -
ITL_P2	- -	- -	- -	- -	- -	- -
ITL_P3	- -	- -	- -	- -	- -	- -
ITL_P4	- -	- -	- -	- -	- -	- -
ITL_P5	- -	- -	- -	- -	- -	- -

LAMBDA-X

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE

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EMP_P1	- -	- -	- -	- -	- -	- -
EMP_P2	- -	- -	- -	- -	- -	- -
EMP_P3	- -	- -	- -	- -	- -	- -
FAC_P1	- -	- -	- -	- -	- -	- -
FAC_P2	- -	- -	- -	- -	- -	- -
FAC_P3	- -	- -	- -	- -	- -	- -
FAC_P4	- -	- -	- -	- -	- -	- -
FAC_P5	- -	- -	- -	- -	- -	- -
INT_P1	- -	- -	- -	- -	- -	- -
INT_P2	- -	- -	- -	- -	- -	- -
INT_P3	- -	- -	- -	- -	- -	- -
INT_P4	- -	- -	- -	- -	- -	- -
INT_P5	- -	- -	- -	- -	- -	- -
INT_P6	- -	- -	- -	- -	- -	- -
IPR_P1	- -	- -	- -	- -	- -	- -
IPR_P2	- -	- -	- -	- -	- -	- -
IPR_P3	- -	- -	- -	- -	- -	- -
IPR_P4	- -	- -	- -	- -	- -	- -
SOC_P1	- -	- -	- -	- -	- -	- -
SOC_P2	- -	- -	- -	- -	- -	- -
WAR_P1	- -	- -	- -	- -	- -	- -
WAR_P2	- -	- -	- -	- -	- -	- -
WAR_P3	- -	- -	- -	- -	- -	- -
WAR_P4	- -	- -	- -	- -	- -	- -
WAR_P5	- -	- -	- -	- -	- -	- -
ARR_P1	0.608 (0.011) 57.471	- -	- -	- -	- -	- -
ARR_P2	0.603 (0.010) 62.238	- -	- -	- -	- -	- -
ARR_P3	0.491 (0.012) 42.627	- -	- -	- -	- -	- -
CON_P1	- -	0.575 (0.013) 45.906	- -	- -	- -	- -
CON_P2	- -	0.476 (0.008) 56.949	- -	- -	- -	- -
CON_P3	- -	0.451 (0.009) 49.352	- -	- -	- -	- -
HOS_P1	- -	- -	0.512 (0.011)	- -	- -	- -

			46.563			
HOS_P2	- -	- -	0.411 (0.011) 38.817	- -	- -	- -
HOS_P3	- -	- -	0.430 (0.008) 52.110	- -	- -	- -
HOS_P4	- -	- -	0.420 (0.010) 41.892	- -	- -	- -
HOS_P5	- -	- -	0.496 (0.008) 58.918	- -	- -	- -
HOS_P6	- -	- -	0.418 (0.010) 40.639	- -	- -	- -
HOS_P7	- -	- -	0.498 (0.012) 41.639	- -	- -	- -
DEC_P1	- -	- -	- -	0.511 (0.010) 50.948	- -	- -
DEC_P2	- -	- -	- -	0.405 (0.012) 34.821	- -	- -
DEC_P3	- -	- -	- -	0.577 (0.011) 51.566	- -	- -
EMO_P1	- -	- -	- -	- -	0.449 (0.011) 41.836	- -
EMO_P2	- -	- -	- -	- -	0.455 (0.011) 42.588	- -
EMO_P3	- -	- -	- -	- -	0.510 (0.010) 49.470	- -
EMO_P4	- -	- -	- -	- -	0.494 (0.010) 51.863	- -
NEG_P1	- -	- -	- -	- -	- -	0.614 (0.014) 45.364
NEG_P2	- -	- -	- -	- -	- -	0.594 (0.012) 48.400
NEG_P3	- -	- -	- -	- -	- -	0.661 (0.014) 48.679
NEG_P4	- -	- -	- -	- -	- -	0.535 (0.012) 44.528
NEG_P5	- -	- -	- -	- -	- -	0.561 (0.012) 47.024
PLA_P1	- -	- -	- -	- -	- -	- -
PLA_P2	- -	- -	- -	- -	- -	- -

SOB_P1	- -	- -	- -	- -	- -	- -
SOB_P2	- -	- -	- -	- -	- -	- -
SOB_P3	- -	- -	- -	- -	- -	- -
ACH_P1	- -	- -	- -	- -	- -	- -
ACH_P2	- -	- -	- -	- -	- -	- -
ACH_P3	- -	- -	- -	- -	- -	- -
ACH_P4	- -	- -	- -	- -	- -	- -
ACH_P5	- -	- -	- -	- -	- -	- -
ORD_P1	- -	- -	- -	- -	- -	- -
ORD_P2	- -	- -	- -	- -	- -	- -
ORD_P3	- -	- -	- -	- -	- -	- -
ORD_P4	- -	- -	- -	- -	- -	- -
ORD_P5	- -	- -	- -	- -	- -	- -
ORD_P6	- -	- -	- -	- -	- -	- -
TRA_P1	- -	- -	- -	- -	- -	- -
TRA_P2	- -	- -	- -	- -	- -	- -
BRO_P1	- -	- -	- -	- -	- -	- -
BRO_P2	- -	- -	- -	- -	- -	- -
BRO_P3	- -	- -	- -	- -	- -	- -
EPI_P1	- -	- -	- -	- -	- -	- -
EPI_P2	- -	- -	- -	- -	- -	- -
EPI_P3	- -	- -	- -	- -	- -	- -
ITL_P1	- -	- -	- -	- -	- -	- -
ITL_P2	- -	- -	- -	- -	- -	- -
ITL_P3	- -	- -	- -	- -	- -	- -
ITL_P4	- -	- -	- -	- -	- -	- -
ITL_P5	- -	- -	- -	- -	- -	- -

LAMBDA-X

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
EMP_P1	- -	- -	- -	- -	- -	- -
EMP_P2	- -	- -	- -	- -	- -	- -
EMP_P3	- -	- -	- -	- -	- -	- -
FAC_P1	- -	- -	- -	- -	- -	- -
FAC_P2	- -	- -	- -	- -	- -	- -
FAC_P3	- -	- -	- -	- -	- -	- -
FAC_P4	- -	- -	- -	- -	- -	- -
FAC_P5	- -	- -	- -	- -	- -	- -
INT_P1	- -	- -	- -	- -	- -	- -

INT_P2	- -	- -	- -	- -	- -	- -
INT_P3	- -	- -	- -	- -	- -	- -
INT_P4	- -	- -	- -	- -	- -	- -
INT_P5	- -	- -	- -	- -	- -	- -
INT_P6	- -	- -	- -	- -	- -	- -
IPR_P1	- -	- -	- -	- -	- -	- -
IPR_P2	- -	- -	- -	- -	- -	- -
IPR_P3	- -	- -	- -	- -	- -	- -
IPR_P4	- -	- -	- -	- -	- -	- -
SOC_P1	- -	- -	- -	- -	- -	- -
SOC_P2	- -	- -	- -	- -	- -	- -
WAR_P1	- -	- -	- -	- -	- -	- -
WAR_P2	- -	- -	- -	- -	- -	- -
WAR_P3	- -	- -	- -	- -	- -	- -
WAR_P4	- -	- -	- -	- -	- -	- -
WAR_P5	- -	- -	- -	- -	- -	- -
ARR_P1	- -	- -	- -	- -	- -	- -
ARR_P2	- -	- -	- -	- -	- -	- -
ARR_P3	- -	- -	- -	- -	- -	- -
CON_P1	- -	- -	- -	- -	- -	- -
CON_P2	- -	- -	- -	- -	- -	- -
CON_P3	- -	- -	- -	- -	- -	- -
HOS_P1	- -	- -	- -	- -	- -	- -
HOS_P2	- -	- -	- -	- -	- -	- -
HOS_P3	- -	- -	- -	- -	- -	- -
HOS_P4	- -	- -	- -	- -	- -	- -
HOS_P5	- -	- -	- -	- -	- -	- -
HOS_P6	- -	- -	- -	- -	- -	- -
HOS_P7	- -	- -	- -	- -	- -	- -
DEC_P1	- -	- -	- -	- -	- -	- -
DEC_P2	- -	- -	- -	- -	- -	- -
DEC_P3	- -	- -	- -	- -	- -	- -
EMO_P1	- -	- -	- -	- -	- -	- -
EMO_P2	- -	- -	- -	- -	- -	- -
EMO_P3	- -	- -	- -	- -	- -	- -
EMO_P4	- -	- -	- -	- -	- -	- -
NEG_P1	- -	- -	- -	- -	- -	- -
NEG_P2	- -	- -	- -	- -	- -	- -

NEG_P3	- -	- -	- -	- -	- -	- -
NEG_P4	- -	- -	- -	- -	- -	- -
NEG_P5	- -	- -	- -	- -	- -	- -
PLA_P1	0.584 (0.013) 45.239	- -	- -	- -	- -	- -
PLA_P2	0.624 (0.010) 60.419	- -	- -	- -	- -	- -
SOB_P1	- -	0.686 (0.012) 58.846	- -	- -	- -	- -
SOB_P2	- -	0.563 (0.009) 60.152	- -	- -	- -	- -
SOB_P3	- -	0.720 (0.012) 62.414	- -	- -	- -	- -
ACH_P1	- -	- -	0.438 (0.009) 50.909	- -	- -	- -
ACH_P2	- -	- -	0.505 (0.009) 56.940	- -	- -	- -
ACH_P3	- -	- -	0.510 (0.009) 54.396	- -	- -	- -
ACH_P4	- -	- -	0.388 (0.008) 51.198	- -	- -	- -
ACH_P5	- -	- -	0.513 (0.009) 58.378	- -	- -	- -
ORD_P1	- -	- -	- -	0.446 (0.009) 47.520	- -	- -
ORD_P2	- -	- -	- -	0.463 (0.008) 55.017	- -	- -
ORD_P3	- -	- -	- -	0.435 (0.009) 48.547	- -	- -
ORD_P4	- -	- -	- -	0.485 (0.009) 52.913	- -	- -
ORD_P5	- -	- -	- -	0.494 (0.009) 52.136	- -	- -
ORD_P6	- -	- -	- -	0.505 (0.008) 63.255	- -	- -
TRA_P1	- -	- -	- -	- -	0.691 (0.015) 46.117	- -
TRA_P2	- -	- -	- -	- -	0.820 (0.013) 62.296	- -

BRO_P1	- -	- -	- -	- -	- -	0.437 (0.009) 47.429
BRO_P2	- -	- -	- -	- -	- -	0.558 (0.010) 55.152
BRO_P3	- -	- -	- -	- -	- -	0.465 (0.009) 52.598
EPI_P1	- -	- -	- -	- -	- -	- -
EPI_P2	- -	- -	- -	- -	- -	- -
EPI_P3	- -	- -	- -	- -	- -	- -
ITL_P1	- -	- -	- -	- -	- -	- -
ITL_P2	- -	- -	- -	- -	- -	- -
ITL_P3	- -	- -	- -	- -	- -	- -
ITL_P4	- -	- -	- -	- -	- -	- -
ITL_P5	- -	- -	- -	- -	- -	- -

LAMBDA-X

	EPISTEM	INTELLEC
EMP_P1	- -	- -
EMP_P2	- -	- -
EMP_P3	- -	- -
FAC_P1	- -	- -
FAC_P2	- -	- -
FAC_P3	- -	- -
FAC_P4	- -	- -
FAC_P5	- -	- -
INT_P1	- -	- -
INT_P2	- -	- -
INT_P3	- -	- -
INT_P4	- -	- -
INT_P5	- -	- -
INT_P6	- -	- -
IPR_P1	- -	- -
IPR_P2	- -	- -
IPR_P3	- -	- -
IPR_P4	- -	- -
SOC_P1	- -	- -
SOC_P2	- -	- -
WAR_P1	- -	- -
WAR_P2	- -	- -

WAR_P3	- -	- -
WAR_P4	- -	- -
WAR_P5	- -	- -
ARR_P1	- -	- -
ARR_P2	- -	- -
ARR_P3	- -	- -
CON_P1	- -	- -
CON_P2	- -	- -
CON_P3	- -	- -
HOS_P1	- -	- -
HOS_P2	- -	- -
HOS_P3	- -	- -
HOS_P4	- -	- -
HOS_P5	- -	- -
HOS_P6	- -	- -
HOS_P7	- -	- -
DEC_P1	- -	- -
DEC_P2	- -	- -
DEC_P3	- -	- -
EMO_P1	- -	- -
EMO_P2	- -	- -
EMO_P3	- -	- -
EMO_P4	- -	- -
NEG_P1	- -	- -
NEG_P2	- -	- -
NEG_P3	- -	- -
NEG_P4	- -	- -
NEG_P5	- -	- -
PLA_P1	- -	- -
PLA_P2	- -	- -
SOB_P1	- -	- -
SOB_P2	- -	- -
SOB_P3	- -	- -
ACH_P1	- -	- -
ACH_P2	- -	- -
ACH_P3	- -	- -
ACH_P4	- -	- -
ACH_P5	- -	- -

ORD_P1	- -	- -
ORD_P2	- -	- -
ORD_P3	- -	- -
ORD_P4	- -	- -
ORD_P5	- -	- -
ORD_P6	- -	- -
TRA_P1	- -	- -
TRA_P2	- -	- -
BRO_P1	- -	- -
BRO_P2	- -	- -
BRO_P3	- -	- -
EPI_P1	0.335 (0.008) 42.123	- -
EPI_P2	0.389 (0.007) 52.510	- -
EPI_P3	0.399 (0.007) 58.510	- -
ITL_P1	- -	0.371 (0.009) 43.531
ITL_P2	- -	0.321 (0.008) 39.618
ITL_P3	- -	0.476 (0.009) 50.859
ITL_P4	- -	0.414 (0.009) 47.810
ITL_P5	- -	0.402 (0.009) 46.233

PHI

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMPATHY	1.000					
FACILIT	0.534 (0.016) 32.525	1.000				
INTEGRIT	0.640 (0.015) 43.751	0.589 (0.014) 41.511	1.000			
INTERPER	0.742 (0.014) 53.708	0.811 (0.011) 74.797	0.755 (0.013) 60.309	1.000		
SOC_INT	0.761 (0.013) 58.685	0.708 (0.013) 54.324	0.600 (0.016) 38.174	0.821 (0.012) 71.090	1.000	

WARMHEAR	0.869	0.768	0.770	0.933	0.806	1.000
	(0.009)	(0.010)	(0.011)	(0.007)	(0.011)	
	95.105	75.278	68.929	126.078	76.551	
ARROGAN	-0.478	-0.129	-0.487	-0.396	-0.274	-0.434
	(0.018)	(0.020)	(0.017)	(0.019)	(0.020)	(0.018)
	-25.947	-6.386	-28.109	-20.445	-13.419	-24.119
CONFLICT	-0.328	-0.216	-0.595	-0.412	-0.254	-0.380
	(0.022)	(0.020)	(0.016)	(0.020)	(0.021)	(0.019)
	-15.246	-10.575	-36.421	-20.469	-11.946	-19.669
HOSTILE	-0.488	-0.302	-0.629	-0.545	-0.397	-0.535
	(0.018)	(0.019)	(0.015)	(0.017)	(0.019)	(0.016)
	-26.435	-15.710	-42.381	-31.203	-20.732	-32.479
DECEIT	-0.332	-0.424	-0.710	-0.514	-0.391	-0.450
	(0.021)	(0.019)	(0.014)	(0.019)	(0.020)	(0.019)
	-15.765	-21.941	-48.961	-26.508	-19.092	-23.938
EMOTIONB	0.295	0.576	0.614	0.654	0.525	0.497
	(0.021)	(0.016)	(0.016)	(0.016)	(0.018)	(0.019)
	13.877	36.911	39.633	40.975	29.407	26.854
NEGATIVE	0.111	-0.310	-0.338	-0.315	-0.151	-0.122
	(0.021)	(0.020)	(0.020)	(0.021)	(0.022)	(0.021)
	5.199	-15.714	-16.982	-14.758	-7.009	-5.739
PLAYFULL	0.410	0.382	0.315	0.506	0.578	0.479
	(0.020)	(0.019)	(0.019)	(0.018)	(0.018)	(0.019)
	20.617	20.330	16.298	27.696	32.764	25.844
SOCIABIL	0.441	0.540	0.419	0.647	0.718	0.589
	(0.018)	(0.015)	(0.018)	(0.015)	(0.013)	(0.015)
	24.278	35.192	23.803	43.699	56.571	39.776
ACHIEVEM	0.353	0.671	0.676	0.596	0.494	0.547
	(0.019)	(0.012)	(0.013)	(0.016)	(0.017)	(0.016)
	18.739	54.093	50.808	36.900	29.023	34.520
ORDILIN	0.312	0.448	0.684	0.443	0.333	0.455
	(0.020)	(0.017)	(0.013)	(0.019)	(0.020)	(0.018)
	15.517	26.314	54.147	23.249	16.962	25.576
TRAD_REL	0.443	0.420	0.446	0.492	0.405	0.519
	(0.018)	(0.017)	(0.017)	(0.018)	(0.018)	(0.016)
	24.434	24.455	25.804	27.648	22.000	31.858
BROADMIN	0.412	0.536	0.467	0.576	0.506	0.516
	(0.020)	(0.016)	(0.018)	(0.017)	(0.019)	(0.018)
	20.430	33.091	26.061	32.924	26.812	29.257
EPISTEM	0.435	0.471	0.585	0.537	0.436	0.511
	(0.020)	(0.017)	(0.017)	(0.019)	(0.020)	(0.018)
	21.481	27.348	35.081	28.525	21.838	28.045
INTELLEC	0.394	0.744	0.656	0.695	0.634	0.584
	(0.020)	(0.012)	(0.015)	(0.015)	(0.016)	(0.017)
	19.515	64.520	43.551	46.782	40.080	35.018

PHI

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
ARROGAN	1.000					
CONFLICT	0.739	1.000				
	(0.013)					
	57.155					
HOSTILE	0.854	0.937	1.000			
	(0.009)	(0.008)				
	91.272	116.728				
DECEIT	0.588	0.784	0.836	1.000		
	(0.017)	(0.014)	(0.012)			

	34.144	56.456	71.892			
EMOTIONB	-0.215	-0.401	-0.416	-0.540	1.000	
	(0.020)	(0.019)	(0.019)	(0.019)		
	-10.508	-20.586	-21.992	-29.027		
NEGATIVE	0.239	0.493	0.496	0.654	-0.725	1.000
	(0.020)	(0.018)	(0.017)	(0.015)	(0.015)	
	12.095	27.943	29.969	43.490	-48.700	
PLAYFULL	-0.020	0.082	-0.046	-0.111	0.326	-0.013
	(0.021)	(0.021)	(0.021)	(0.022)	(0.020)	(0.022)
	-0.942	3.892	-2.232	-5.012	16.014	-0.601
SOCIABIL	-0.122	-0.098	-0.243	-0.346	0.427	-0.198
	(0.020)	(0.020)	(0.019)	(0.020)	(0.018)	(0.020)
	-6.000	-4.800	-12.714	-17.502	23.652	-9.687
ACHIEVEM	-0.174	-0.351	-0.360	-0.575	0.664	-0.403
	(0.020)	(0.019)	(0.018)	(0.016)	(0.014)	(0.018)
	-8.692	-18.449	-19.630	-34.903	47.545	-22.570
ORDILIN	-0.240	-0.414	-0.393	-0.546	0.466	-0.256
	(0.019)	(0.019)	(0.018)	(0.017)	(0.018)	(0.020)
	-12.469	-22.355	-21.783	-32.131	25.630	-12.823
TRAD_REL	-0.273	-0.263	-0.347	-0.346	0.338	-0.109
	(0.019)	(0.020)	(0.018)	(0.019)	(0.019)	(0.020)
	-14.207	-13.426	-19.117	-18.153	17.657	-5.527
BROADMIN	-0.061	-0.127	-0.161	-0.235	0.482	-0.153
	(0.021)	(0.022)	(0.021)	(0.022)	(0.019)	(0.021)
	-2.865	-5.811	-7.691	-10.696	25.730	-7.255
EPISTEM	-0.212	-0.285	-0.293	-0.324	0.502	-0.190
	(0.021)	(0.021)	(0.020)	(0.021)	(0.018)	(0.021)
	-10.246	-13.426	-14.506	-15.468	27.467	-8.926
INTELLEC	-0.060	-0.240	-0.257	-0.437	0.752	-0.418
	(0.021)	(0.022)	(0.021)	(0.021)	(0.013)	(0.020)
	-2.826	-10.978	-12.272	-21.274	57.735	-20.571

PHI

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
PLAYFULL	1.000					
SOCIABIL	0.732	1.000				
	(0.013)					
	56.470					
ACHIEVEM	0.264	0.444	1.000			
	(0.020)	(0.017)				
	13.423	26.174				
ORDILIN	0.113	0.249	0.756	1.000		
	(0.020)	(0.019)	(0.010)			
	5.575	12.976	73.230			
TRAD_REL	0.257	0.376	0.432	0.367	1.000	
	(0.020)	(0.018)	(0.017)	(0.018)		
	13.055	20.831	25.469	20.198		
BROADMIN	0.553	0.510	0.527	0.259	0.298	1.000
	(0.017)	(0.017)	(0.017)	(0.020)	(0.019)	
	31.709	29.629	31.511	12.684	15.292	
EPISTEM	0.337	0.312	0.602	0.407	0.223	0.796
	(0.020)	(0.020)	(0.015)	(0.019)	(0.020)	(0.012)
	16.860	15.542	38.951	21.282	11.109	64.289
INTELLEC	0.435	0.531	0.763	0.578	0.260	0.745
	(0.019)	(0.016)	(0.011)	(0.016)	(0.020)	(0.013)
	23.433	32.595	68.687	36.734	13.074	58.633

PHI

	EPISTEM	INTELLEC
EPISTEM	1.000	
INTELLEC	0.750 (0.013) 58.111	1.000

THETA-DELTA

EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
0.143	0.125	0.135	0.138	0.157	0.198
(0.006)	(0.004)	(0.004)	(0.005)	(0.005)	(0.006)
25.383	30.415	30.543	30.464	30.784	30.963

THETA-DELTA

FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
0.137	0.145	0.216	0.130	0.190	0.237
(0.005)	(0.005)	(0.006)	(0.004)	(0.005)	(0.007)
29.499	31.537	36.298	32.561	35.821	36.450

THETA-DELTA

INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
0.136	0.104	0.195	0.233	0.145	0.128
(0.004)	(0.003)	(0.006)	(0.006)	(0.004)	(0.004)
34.339	31.951	30.355	37.918	35.544	33.696

THETA-DELTA

SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
0.106	0.111	0.129	0.160	0.111	0.111
(0.004)	(0.005)	(0.004)	(0.005)	(0.004)	(0.003)
24.105	23.686	34.755	34.794	31.006	33.277

THETA-DELTA

WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
0.121	0.239	0.171	0.321	0.397	0.156
(0.003)	(0.008)	(0.007)	(0.009)	(0.011)	(0.005)
35.111	28.566	24.407	36.993	35.409	30.743

THETA-DELTA

CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
0.191	0.314	0.328	0.191	0.266	0.166
(0.006)	(0.008)	(0.008)	(0.005)	(0.008)	(0.005)
31.186	39.013	40.579	35.881	34.950	31.960

THETA-DELTA

HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
0.276	0.450	0.217	0.349	0.276	0.311
(0.007)	(0.011)	(0.007)	(0.009)	(0.009)	(0.008)
37.808	40.101	31.658	39.740	31.407	38.159

THETA-DELTA

EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
0.251	0.222	0.171	0.442	0.373	0.450
(0.007)	(0.007)	(0.006)	(0.012)	(0.011)	(0.013)
34.673	33.034	30.609	36.047	33.883	33.721

THETA-DELTA

NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
0.378	0.347	0.354	0.103	0.238	0.163
(0.010)	(0.010)	(0.012)	(0.008)	(0.008)	(0.005)
36.662	33.720	30.336	12.386	29.725	30.306

THETA-DELTA

SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
0.223	0.185	0.168	0.200	0.145	0.157
(0.008)	(0.006)	(0.006)	(0.006)	(0.004)	(0.005)
27.410	32.192	30.110	32.896	36.324	34.616

THETA-DELTA

ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
0.228	0.143	0.179	0.204	0.205	0.115
(0.006)	(0.005)	(0.005)	(0.006)	(0.006)	(0.004)
35.896	29.462	35.987	33.168	33.210	28.093

THETA-DELTA

TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
0.391	0.061	0.197	0.197	0.156	0.187
(0.015)	(0.016)	(0.006)	(0.007)	(0.006)	(0.005)
26.484	3.901	31.343	28.587	27.076	34.893

THETA-DELTA

EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
0.134	0.088	0.182	0.171	0.213	0.170
(0.005)	(0.004)	(0.005)	(0.005)	(0.006)	(0.005)
26.910	24.634	34.543	37.266	33.284	35.128

THETA-DELTA

ITL_P5
0.165
(0.005)
36.053

Squared Multiple Correlations for X - Variables

EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
0.625	0.508	0.622	0.675	0.689	0.624

Squared Multiple Correlations for X - Variables

FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
0.671	0.585	0.415	0.497	0.396	0.379

Squared Multiple Correlations for X - Variables

INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4

0.451	0.541	0.408	0.462	0.499	0.507

Squared Multiple Correlations for X - Variables

SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
0.713	0.690	0.554	0.518	0.606	0.595

Squared Multiple Correlations for X - Variables

WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
0.555	0.607	0.680	0.429	0.455	0.593

Squared Multiple Correlations for X - Variables

CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
0.515	0.455	0.340	0.492	0.399	0.598

Squared Multiple Correlations for X - Variables

HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
0.388	0.355	0.546	0.320	0.547	0.394

Squared Multiple Correlations for X - Variables

EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
0.452	0.539	0.589	0.460	0.486	0.493

Squared Multiple Correlations for X - Variables

NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
0.431	0.475	0.490	0.791	0.664	0.660

Squared Multiple Correlations for X - Variables

SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
0.699	0.510	0.603	0.565	0.510	0.626

Squared Multiple Correlations for X - Variables

ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
0.466	0.600	0.514	0.536	0.543	0.689

Squared Multiple Correlations for X - Variables

TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
0.549	0.917	0.492	0.613	0.580	0.374

Squared Multiple Correlations for X - Variables

EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
0.530	0.644	0.430	0.376	0.515	0.501

Squared Multiple Correlations for X - Variables

ITL_P5
0.495

Goodness of Fit Statistics

Degrees of Freedom = 2812
Minimum Fit Function Chi-Square = 28243.713 (P = 0.0)
Normal Theory Weighted Least Squares Chi-Square = 33460.911 (P = 0.0)
Satorra-Bentler Scaled Chi-Square = 28603.964 (P = 0.0)
Chi-Square Corrected for Non-Normality = 46400.364 (P = 0.0)
Estimated Non-centrality Parameter (NCP) = 25791.964

90 Percent Confidence Interval for NCP = (25251.992 ; 26338.161)

Minimum Fit Function Value = 7.222
Population Discrepancy Function Value (F0) = 6.595
90 Percent Confidence Interval for F0 = (6.457 ; 6.734)
Root Mean Square Error of Approximation (RMSEA) = 0.0484
90 Percent Confidence Interval for RMSEA = (0.0479 ; 0.0489)
P-Value for Test of Close Fit (RMSEA < 0.05) = 1.000

Expected Cross-Validation Index (ECVI) = 7.492
90 Percent Confidence Interval for ECVI = (7.354 ; 7.631)
ECVI for Saturated Model = 1.616
ECVI for Independence Model = 268.804

Chi-Square for Independence Model with 3081 Degrees of Freedom = 1051135.007
Independence AIC = 1051293.007
Model AIC = 22979.964
Saturated AIC = 6320.000
Independence CAIC = 1051867.480
Model BIC = 5344.370
Model CAIC = 2532.370
Saturated CAIC = 29298.901

Normed Fit Index (NFI) = 0.973
Non-Normed Fit Index (NNFI) = 0.973
Parsimony Normed Fit Index (PNFI) = 0.888
Comparative Fit Index (CFI) = 0.975
Incremental Fit Index (IFI) = 0.975
Relative Fit Index (RFI) = 0.970

Critical N (CN) = 409.738

Root Mean Square Residual (RMR) = 0.0268
Standardized RMR = 0.0585
Goodness of Fit Index (GFI) = 0.822
Adjusted Goodness of Fit Index (AGFI) = 0.800
Parsimony Goodness of Fit Index (PGFI) = 0.731

SAPI FIRST-ORDER MEASUREMENT MODEL WITH ITEM PAQRCELS AS INDICATORS

Fitted Covariance Matrix

	EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
EMP_P1	0.383					
EMP_P2	0.176	0.254				
EMP_P3	0.231	0.170	0.359			
FAC_P1	0.140	0.103	0.135	0.426		
FAC_P2	0.154	0.113	0.149	0.317	0.506	
FAC_P3	0.150	0.110	0.144	0.307	0.338	0.526
FAC_P4	0.138	0.102	0.134	0.284	0.313	0.304
FAC_P5	0.118	0.087	0.114	0.243	0.267	0.259
INT_P1	0.123	0.090	0.118	0.124	0.136	0.132
INT_P2	0.112	0.082	0.108	0.113	0.125	0.121
INT_P3	0.111	0.081	0.107	0.111	0.123	0.119
INT_P4	0.119	0.088	0.115	0.120	0.132	0.129
INT_P5	0.105	0.077	0.101	0.106	0.116	0.113
INT_P6	0.110	0.081	0.106	0.111	0.122	0.118
IPR_P1	0.133	0.098	0.129	0.160	0.176	0.171
IPR_P2	0.162	0.119	0.157	0.195	0.214	0.208
IPR_P3	0.138	0.101	0.133	0.165	0.182	0.177
IPR_P4	0.132	0.097	0.127	0.158	0.174	0.169
SOC_P1	0.191	0.140	0.185	0.195	0.215	0.208
SOC_P2	0.185	0.136	0.178	0.188	0.208	0.201
WAR_P1	0.170	0.125	0.165	0.165	0.182	0.176
WAR_P2	0.176	0.129	0.170	0.170	0.188	0.182
WAR_P3	0.176	0.129	0.170	0.170	0.188	0.182
WAR_P4	0.172	0.126	0.166	0.166	0.183	0.178
WAR_P5	0.165	0.121	0.159	0.160	0.176	0.171
ARR_P1	-0.142	-0.104	-0.137	-0.042	-0.046	-0.045
ARR_P2	-0.141	-0.104	-0.136	-0.042	-0.046	-0.044
ARR_P3	-0.115	-0.084	-0.111	-0.034	-0.037	-0.036
CON_P1	-0.092	-0.068	-0.089	-0.067	-0.073	-0.071
CON_P2	-0.076	-0.056	-0.074	-0.055	-0.061	-0.059
CON_P3	-0.072	-0.053	-0.070	-0.052	-0.057	-0.056
HOS_P1	-0.122	-0.090	-0.118	-0.083	-0.091	-0.089

HOS_P2	-0.098	-0.072	-0.095	-0.066	-0.073	-0.071
HOS_P3	-0.103	-0.075	-0.099	-0.070	-0.077	-0.074
HOS_P4	-0.100	-0.074	-0.097	-0.068	-0.075	-0.073
HOS_P5	-0.118	-0.087	-0.114	-0.080	-0.088	-0.086
HOS_P6	-0.100	-0.073	-0.096	-0.068	-0.075	-0.072
HOS_P7	-0.119	-0.087	-0.115	-0.081	-0.089	-0.086
DEC_P1	-0.083	-0.061	-0.080	-0.116	-0.128	-0.124
DEC_P2	-0.066	-0.048	-0.064	-0.092	-0.101	-0.098
DEC_P3	-0.094	-0.069	-0.091	-0.131	-0.145	-0.140
EMO_P1	0.065	0.048	0.063	0.139	0.153	0.148
EMO_P2	0.066	0.048	0.064	0.141	0.155	0.150
EMO_P3	0.074	0.054	0.071	0.157	0.173	0.168
EMO_P4	0.071	0.052	0.069	0.153	0.168	0.163
NEG_P1	0.033	0.025	0.032	-0.102	-0.113	-0.109
NEG_P2	0.032	0.024	0.031	-0.099	-0.109	-0.106
NEG_P3	0.036	0.026	0.035	-0.110	-0.121	-0.118
NEG_P4	0.029	0.021	0.028	-0.089	-0.098	-0.095
NEG_P5	0.031	0.022	0.029	-0.093	-0.103	-0.100
PLA_P1	0.117	0.086	0.113	0.119	0.132	0.128
PLA_P2	0.125	0.092	0.121	0.128	0.141	0.136
SOB_P1	0.148	0.109	0.143	0.199	0.219	0.212
SOB_P2	0.121	0.089	0.117	0.163	0.180	0.174
SOB_P3	0.155	0.114	0.150	0.208	0.230	0.223
ACH_P1	0.076	0.056	0.073	0.158	0.174	0.168
ACH_P2	0.087	0.064	0.084	0.182	0.200	0.194
ACH_P3	0.088	0.065	0.085	0.184	0.202	0.196
ACH_P4	0.067	0.049	0.065	0.140	0.154	0.149
ACH_P5	0.089	0.065	0.086	0.185	0.203	0.197
ORD_P1	0.068	0.050	0.066	0.107	0.118	0.114
ORD_P2	0.071	0.052	0.068	0.111	0.122	0.119
ORD_P3	0.066	0.049	0.064	0.104	0.115	0.112
ORD_P4	0.074	0.054	0.071	0.117	0.128	0.125
ORD_P5	0.075	0.055	0.073	0.119	0.131	0.127
ORD_P6	0.077	0.057	0.074	0.121	0.134	0.130
TRA_P1	0.150	0.110	0.144	0.156	0.171	0.166
TRA_P2	0.178	0.130	0.171	0.185	0.203	0.197
BRO_P1	0.088	0.065	0.085	0.126	0.138	0.134
BRO_P2	0.113	0.083	0.109	0.160	0.177	0.171
BRO_P3	0.094	0.069	0.090	0.133	0.147	0.143
EPI_P1	0.071	0.052	0.069	0.085	0.093	0.090
EPI_P2	0.083	0.061	0.080	0.098	0.108	0.105
EPI_P3	0.085	0.062	0.082	0.101	0.111	0.108
ITL_P1	0.071	0.052	0.069	0.148	0.163	0.158
ITL_P2	0.062	0.045	0.060	0.128	0.141	0.137
ITL_P3	0.092	0.067	0.088	0.190	0.209	0.203
ITL_P4	0.080	0.058	0.077	0.165	0.182	0.176
ITL_P5	0.077	0.057	0.075	0.160	0.177	0.171

Fitted Covariance Matrix

	FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
FAC_P4	0.418					
FAC_P5	0.240	0.350				
INT_P1	0.122	0.104	0.369			
INT_P2	0.112	0.095	0.140	0.258		
INT_P3	0.110	0.094	0.138	0.126	0.314	
INT_P4	0.119	0.101	0.149	0.136	0.134	0.382
INT_P5	0.104	0.089	0.131	0.120	0.118	0.127
INT_P6	0.109	0.093	0.137	0.126	0.124	0.134
IPR_P1	0.158	0.135	0.108	0.099	0.098	0.105
IPR_P2	0.192	0.164	0.132	0.121	0.119	0.129
IPR_P3	0.163	0.139	0.112	0.103	0.101	0.109
IPR_P4	0.156	0.133	0.107	0.098	0.097	0.104
SOC_P1	0.193	0.165	0.121	0.110	0.109	0.117
SOC_P2	0.186	0.159	0.116	0.107	0.105	0.113
WAR_P1	0.163	0.139	0.121	0.111	0.109	0.117
WAR_P2	0.168	0.144	0.125	0.114	0.112	0.121
WAR_P3	0.168	0.144	0.125	0.114	0.112	0.121
WAR_P4	0.164	0.140	0.122	0.111	0.110	0.118
WAR_P5	0.158	0.135	0.117	0.107	0.105	0.114
ARR_P1	-0.041	-0.035	-0.116	-0.106	-0.105	-0.113
ARR_P2	-0.041	-0.035	-0.115	-0.105	-0.104	-0.112
ARR_P3	-0.033	-0.029	-0.094	-0.086	-0.084	-0.091
CON_P1	-0.066	-0.056	-0.134	-0.123	-0.121	-0.130
CON_P2	-0.054	-0.047	-0.111	-0.101	-0.100	-0.108
CON_P3	-0.052	-0.044	-0.105	-0.096	-0.095	-0.102

HOS_P1	-0.082	-0.070	-0.126	-0.115	-0.114	-0.123
HOS_P2	-0.066	-0.056	-0.101	-0.093	-0.091	-0.098
HOS_P3	-0.069	-0.059	-0.106	-0.097	-0.095	-0.103
HOS_P4	-0.067	-0.057	-0.103	-0.095	-0.093	-0.100
HOS_P5	-0.079	-0.068	-0.122	-0.112	-0.110	-0.119
HOS_P6	-0.067	-0.057	-0.103	-0.094	-0.093	-0.100
HOS_P7	-0.080	-0.068	-0.122	-0.112	-0.110	-0.119
DEC_P1	-0.115	-0.098	-0.142	-0.130	-0.128	-0.138
DEC_P2	-0.091	-0.078	-0.112	-0.103	-0.101	-0.109
DEC_P3	-0.130	-0.111	-0.160	-0.147	-0.145	-0.156
EMO_P1	0.137	0.117	0.108	0.099	0.097	0.105
EMO_P2	0.139	0.119	0.109	0.100	0.099	0.106
EMO_P3	0.156	0.133	0.122	0.112	0.110	0.119
EMO_P4	0.151	0.129	0.119	0.109	0.107	0.116
NEG_P1	-0.101	-0.086	-0.081	-0.074	-0.073	-0.079
NEG_P2	-0.098	-0.083	-0.078	-0.072	-0.071	-0.076
NEG_P3	-0.109	-0.093	-0.087	-0.080	-0.079	-0.085
NEG_P4	-0.088	-0.075	-0.071	-0.065	-0.064	-0.069
NEG_P5	-0.092	-0.079	-0.074	-0.068	-0.067	-0.072
PLA_P1	0.118	0.101	0.072	0.066	0.065	0.070
PLA_P2	0.126	0.108	0.077	0.070	0.069	0.075
SOB_P1	0.196	0.168	0.113	0.103	0.102	0.110
SOB_P2	0.161	0.138	0.092	0.085	0.083	0.090
SOB_P3	0.206	0.176	0.118	0.108	0.107	0.115
ACH_P1	0.156	0.133	0.116	0.106	0.105	0.113
ACH_P2	0.179	0.153	0.134	0.122	0.121	0.130
ACH_P3	0.181	0.155	0.135	0.124	0.122	0.131
ACH_P4	0.138	0.118	0.103	0.094	0.093	0.100
ACH_P5	0.182	0.156	0.136	0.124	0.122	0.132
ORD_P1	0.106	0.090	0.119	0.109	0.108	0.116
ORD_P2	0.110	0.094	0.124	0.113	0.112	0.121
ORD_P3	0.103	0.088	0.116	0.107	0.105	0.113
ORD_P4	0.115	0.098	0.130	0.119	0.117	0.126
ORD_P5	0.117	0.100	0.132	0.121	0.119	0.129
ORD_P6	0.120	0.102	0.135	0.124	0.122	0.132
TRA_P1	0.154	0.131	0.121	0.110	0.109	0.117
TRA_P2	0.182	0.156	0.143	0.131	0.129	0.139
BRO_P1	0.124	0.106	0.080	0.073	0.072	0.078
BRO_P2	0.158	0.135	0.102	0.093	0.092	0.099
BRO_P3	0.132	0.113	0.085	0.078	0.076	0.083
EPI_P1	0.084	0.071	0.077	0.070	0.069	0.075
EPI_P2	0.097	0.083	0.089	0.082	0.080	0.087
EPI_P3	0.100	0.085	0.091	0.084	0.082	0.089
ITL_P1	0.146	0.125	0.095	0.087	0.086	0.093
ITL_P2	0.126	0.108	0.082	0.075	0.074	0.080
ITL_P3	0.187	0.160	0.122	0.112	0.110	0.119
ITL_P4	0.163	0.139	0.106	0.097	0.096	0.103
ITL_P5	0.158	0.135	0.103	0.095	0.093	0.100

Fitted Covariance Matrix

	INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
INT_P5	0.248					
INT_P6	0.117	0.227				
IPR_P1	0.093	0.097	0.330			
IPR_P2	0.113	0.118	0.164	0.433		
IPR_P3	0.096	0.101	0.139	0.170	0.289	
IPR_P4	0.092	0.096	0.133	0.163	0.138	0.260
SOC_P1	0.103	0.108	0.155	0.189	0.160	0.153
SOC_P2	0.100	0.104	0.150	0.182	0.155	0.148
WAR_P1	0.103	0.108	0.137	0.168	0.142	0.136
WAR_P2	0.107	0.112	0.142	0.173	0.147	0.140
WAR_P3	0.107	0.112	0.142	0.173	0.147	0.140
WAR_P4	0.104	0.109	0.138	0.169	0.143	0.137
WAR_P5	0.100	0.105	0.133	0.162	0.138	0.132
ARR_P1	-0.099	-0.104	-0.088	-0.108	-0.091	-0.087
ARR_P2	-0.098	-0.103	-0.088	-0.107	-0.091	-0.087
ARR_P3	-0.080	-0.084	-0.071	-0.087	-0.074	-0.071
CON_P1	-0.115	-0.120	-0.087	-0.106	-0.090	-0.086
CON_P2	-0.095	-0.099	-0.072	-0.088	-0.075	-0.071
CON_P3	-0.090	-0.094	-0.068	-0.083	-0.071	-0.067
HOS_P1	-0.108	-0.113	-0.102	-0.125	-0.106	-0.101
HOS_P2	-0.086	-0.091	-0.082	-0.100	-0.085	-0.081
HOS_P3	-0.090	-0.095	-0.086	-0.105	-0.089	-0.085
HOS_P4	-0.088	-0.093	-0.084	-0.102	-0.087	-0.083
HOS_P5	-0.104	-0.109	-0.099	-0.121	-0.103	-0.098

HOS_P6	-0.088	-0.092	-0.084	-0.102	-0.087	-0.083
HOS_P7	-0.105	-0.110	-0.099	-0.121	-0.103	-0.098
DEC_P1	-0.121	-0.127	-0.096	-0.118	-0.100	-0.095
DEC_P2	-0.096	-0.101	-0.077	-0.093	-0.079	-0.076
DEC_P3	-0.137	-0.144	-0.109	-0.133	-0.113	-0.108
EMO_P1	0.092	0.097	0.108	0.132	0.112	0.107
EMO_P2	0.094	0.098	0.109	0.133	0.113	0.108
EMO_P3	0.105	0.110	0.122	0.149	0.127	0.121
EMO_P4	0.102	0.106	0.119	0.145	0.123	0.117
NEG_P1	-0.069	-0.073	-0.071	-0.087	-0.073	-0.070
NEG_P2	-0.067	-0.070	-0.069	-0.084	-0.071	-0.068
NEG_P3	-0.075	-0.078	-0.076	-0.093	-0.079	-0.076
NEG_P4	-0.061	-0.063	-0.062	-0.076	-0.064	-0.061
NEG_P5	-0.063	-0.066	-0.065	-0.079	-0.067	-0.064
PLA_P1	0.062	0.065	0.108	0.132	0.112	0.107
PLA_P2	0.066	0.069	0.116	0.141	0.120	0.115
SOB_P1	0.096	0.101	0.163	0.199	0.169	0.161
SOB_P2	0.079	0.083	0.134	0.163	0.138	0.132
SOB_P3	0.101	0.106	0.171	0.208	0.177	0.169
ACH_P1	0.099	0.104	0.096	0.117	0.099	0.095
ACH_P2	0.114	0.120	0.111	0.135	0.114	0.109
ACH_P3	0.115	0.121	0.112	0.136	0.116	0.110
ACH_P4	0.088	0.092	0.085	0.104	0.088	0.084
ACH_P5	0.116	0.122	0.112	0.137	0.116	0.111
ORD_P1	0.102	0.107	0.072	0.088	0.075	0.072
ORD_P2	0.106	0.111	0.075	0.092	0.078	0.074
ORD_P3	0.100	0.104	0.071	0.086	0.073	0.070
ORD_P4	0.111	0.116	0.079	0.096	0.082	0.078
ORD_P5	0.113	0.119	0.080	0.098	0.083	0.079
ORD_P6	0.116	0.121	0.082	0.100	0.085	0.081
TRA_P1	0.103	0.108	0.125	0.152	0.129	0.123
TRA_P2	0.122	0.128	0.148	0.181	0.153	0.147
BRO_P1	0.068	0.072	0.092	0.113	0.096	0.091
BRO_P2	0.087	0.091	0.118	0.144	0.122	0.117
BRO_P3	0.073	0.076	0.098	0.120	0.102	0.097
EPI_P1	0.066	0.069	0.066	0.080	0.068	0.065
EPI_P2	0.076	0.080	0.077	0.094	0.079	0.076
EPI_P3	0.078	0.082	0.079	0.096	0.081	0.078
ITL_P1	0.081	0.085	0.095	0.115	0.098	0.093
ITL_P2	0.070	0.074	0.082	0.100	0.085	0.081
ITL_P3	0.105	0.110	0.121	0.148	0.126	0.120
ITL_P4	0.091	0.095	0.105	0.129	0.109	0.104
ITL_P5	0.088	0.093	0.103	0.125	0.106	0.101

Fitted Covariance Matrix

	SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
SOC_P1	0.370					
SOC_P2	0.255	0.357				
WAR_P1	0.166	0.160	0.290			
WAR_P2	0.171	0.166	0.166	0.331		
WAR_P3	0.171	0.166	0.166	0.171	0.283	
WAR_P4	0.167	0.161	0.162	0.167	0.167	0.274
WAR_P5	0.161	0.155	0.156	0.161	0.161	0.157
ARR_P1	-0.086	-0.083	-0.106	-0.109	-0.109	-0.106
ARR_P2	-0.085	-0.082	-0.105	-0.108	-0.108	-0.106
ARR_P3	-0.069	-0.067	-0.085	-0.088	-0.088	-0.086
CON_P1	-0.075	-0.072	-0.088	-0.091	-0.091	-0.088
CON_P2	-0.062	-0.060	-0.073	-0.075	-0.075	-0.073
CON_P3	-0.059	-0.057	-0.069	-0.071	-0.071	-0.069
HOS_P1	-0.104	-0.101	-0.110	-0.113	-0.113	-0.111
HOS_P2	-0.084	-0.081	-0.088	-0.091	-0.091	-0.089
HOS_P3	-0.088	-0.085	-0.092	-0.095	-0.095	-0.093
HOS_P4	-0.086	-0.083	-0.090	-0.093	-0.093	-0.091
HOS_P5	-0.101	-0.098	-0.106	-0.110	-0.110	-0.107
HOS_P6	-0.085	-0.082	-0.090	-0.093	-0.093	-0.090
HOS_P7	-0.101	-0.098	-0.107	-0.110	-0.110	-0.107
DEC_P1	-0.103	-0.099	-0.092	-0.095	-0.095	-0.093
DEC_P2	-0.081	-0.079	-0.073	-0.075	-0.075	-0.074
DEC_P3	-0.116	-0.112	-0.104	-0.108	-0.108	-0.105
EMO_P1	0.121	0.117	0.090	0.093	0.093	0.090
EMO_P2	0.123	0.119	0.091	0.094	0.094	0.091
EMO_P3	0.137	0.133	0.102	0.105	0.105	0.102
EMO_P4	0.133	0.129	0.099	0.102	0.102	0.099
NEG_P1	-0.048	-0.046	-0.030	-0.031	-0.031	-0.030
NEG_P2	-0.046	-0.045	-0.029	-0.030	-0.030	-0.029

NEG_P3	-0.051	-0.050	-0.032	-0.033	-0.033	-0.033
NEG_P4	-0.042	-0.040	-0.026	-0.027	-0.027	-0.026
NEG_P5	-0.044	-0.042	-0.027	-0.028	-0.028	-0.028
PLA_P1	0.173	0.167	0.112	0.116	0.116	0.113
PLA_P2	0.185	0.179	0.120	0.124	0.124	0.121
SOB_P1	0.253	0.245	0.162	0.167	0.167	0.163
SOB_P2	0.208	0.201	0.133	0.137	0.137	0.134
SOB_P3	0.265	0.256	0.170	0.175	0.175	0.171
ACH_P1	0.111	0.107	0.096	0.099	0.099	0.097
ACH_P2	0.128	0.124	0.111	0.114	0.115	0.112
ACH_P3	0.130	0.125	0.112	0.116	0.116	0.113
ACH_P4	0.099	0.095	0.085	0.088	0.088	0.086
ACH_P5	0.130	0.126	0.113	0.116	0.116	0.113
ORD_P1	0.076	0.074	0.081	0.084	0.084	0.082
ORD_P2	0.079	0.076	0.084	0.087	0.087	0.085
ORD_P3	0.074	0.072	0.079	0.082	0.082	0.080
ORD_P4	0.083	0.080	0.089	0.091	0.091	0.089
ORD_P5	0.085	0.082	0.090	0.093	0.093	0.091
ORD_P6	0.086	0.083	0.092	0.095	0.095	0.093
TRA_P1	0.143	0.139	0.144	0.148	0.148	0.145
TRA_P2	0.170	0.165	0.171	0.176	0.176	0.172
BRO_P1	0.114	0.110	0.091	0.094	0.094	0.091
BRO_P2	0.145	0.140	0.116	0.119	0.119	0.116
BRO_P3	0.121	0.117	0.096	0.099	0.099	0.097
EPI_P1	0.075	0.072	0.069	0.071	0.071	0.069
EPI_P2	0.087	0.084	0.080	0.082	0.082	0.080
EPI_P3	0.089	0.086	0.082	0.085	0.085	0.082
ITL_P1	0.121	0.117	0.087	0.090	0.090	0.087
ITL_P2	0.104	0.101	0.075	0.078	0.078	0.076
ITL_P3	0.155	0.150	0.112	0.115	0.115	0.112
ITL_P4	0.135	0.130	0.097	0.100	0.100	0.098
ITL_P5	0.131	0.126	0.094	0.097	0.097	0.095

Fitted Covariance Matrix

	WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
WAR_P5	0.272					
ARR_P1	-0.102	0.609				
ARR_P2	-0.102	0.367	0.535			
ARR_P3	-0.083	0.299	0.296	0.562		
CON_P1	-0.085	0.259	0.256	0.209	0.728	
CON_P2	-0.070	0.214	0.212	0.173	0.274	0.383
CON_P3	-0.066	0.202	0.201	0.164	0.259	0.215
HOS_P1	-0.106	0.266	0.264	0.215	0.276	0.228
HOS_P2	-0.085	0.213	0.212	0.172	0.222	0.183
HOS_P3	-0.089	0.223	0.221	0.180	0.232	0.192
HOS_P4	-0.087	0.218	0.216	0.176	0.226	0.187
HOS_P5	-0.103	0.258	0.255	0.208	0.267	0.221
HOS_P6	-0.087	0.217	0.215	0.176	0.226	0.187
HOS_P7	-0.103	0.258	0.256	0.209	0.268	0.222
DEC_P1	-0.089	0.183	0.181	0.148	0.230	0.191
DEC_P2	-0.071	0.145	0.144	0.117	0.183	0.151
DEC_P3	-0.101	0.206	0.205	0.167	0.261	0.216
EMO_P1	0.087	-0.059	-0.058	-0.047	-0.104	-0.086
EMO_P2	0.088	-0.059	-0.059	-0.048	-0.105	-0.087
EMO_P3	0.098	-0.067	-0.066	-0.054	-0.118	-0.097
EMO_P4	0.095	-0.065	-0.064	-0.052	-0.114	-0.094
NEG_P1	-0.029	0.089	0.089	0.072	0.174	0.144
NEG_P2	-0.028	0.086	0.086	0.070	0.169	0.140
NEG_P3	-0.031	0.096	0.095	0.078	0.188	0.155
NEG_P4	-0.025	0.078	0.077	0.063	0.152	0.126
NEG_P5	-0.027	0.082	0.081	0.066	0.159	0.132
PLA_P1	0.109	-0.007	-0.007	-0.006	0.028	0.023
PLA_P2	0.116	-0.008	-0.008	-0.006	0.030	0.024
SOB_P1	0.157	-0.051	-0.051	-0.041	-0.039	-0.032
SOB_P2	0.129	-0.042	-0.042	-0.034	-0.032	-0.026
SOB_P3	0.164	-0.054	-0.053	-0.043	-0.040	-0.033
ACH_P1	0.093	-0.046	-0.046	-0.037	-0.088	-0.073
ACH_P2	0.107	-0.053	-0.053	-0.043	-0.102	-0.084
ACH_P3	0.108	-0.054	-0.053	-0.044	-0.103	-0.085
ACH_P4	0.083	-0.041	-0.041	-0.033	-0.078	-0.065
ACH_P5	0.109	-0.054	-0.054	-0.044	-0.104	-0.086
ORD_P1	0.079	-0.065	-0.064	-0.053	-0.106	-0.088
ORD_P2	0.082	-0.067	-0.067	-0.054	-0.110	-0.091
ORD_P3	0.077	-0.063	-0.063	-0.051	-0.104	-0.086
ORD_P4	0.086	-0.071	-0.070	-0.057	-0.116	-0.096

ORD_P5	0.087	-0.072	-0.071	-0.058	-0.118	-0.098
ORD_P6	0.089	-0.074	-0.073	-0.059	-0.120	-0.100
TRA_P1	0.139	-0.115	-0.114	-0.093	-0.105	-0.087
TRA_P2	0.165	-0.136	-0.135	-0.110	-0.124	-0.103
BRO_P1	0.088	-0.016	-0.016	-0.013	-0.032	-0.027
BRO_P2	0.112	-0.021	-0.020	-0.017	-0.041	-0.034
BRO_P3	0.093	-0.017	-0.017	-0.014	-0.034	-0.028
EPI_P1	0.066	-0.043	-0.043	-0.035	-0.055	-0.045
EPI_P2	0.077	-0.050	-0.050	-0.040	-0.064	-0.053
EPI_P3	0.079	-0.051	-0.051	-0.041	-0.065	-0.054
ITL_P1	0.084	-0.014	-0.013	-0.011	-0.051	-0.042
ITL_P2	0.073	-0.012	-0.012	-0.010	-0.044	-0.037
ITL_P3	0.108	-0.017	-0.017	-0.014	-0.066	-0.054
ITL_P4	0.094	-0.015	-0.015	-0.012	-0.057	-0.047
ITL_P5	0.091	-0.015	-0.015	-0.012	-0.055	-0.046

Fitted Covariance Matrix

	CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
CON_P3	0.394					
HOS_P1	0.216	0.576				
HOS_P2	0.173	0.210	0.497			
HOS_P3	0.181	0.220	0.177	0.376		
HOS_P4	0.177	0.215	0.173	0.180	0.442	
HOS_P5	0.209	0.254	0.204	0.213	0.208	0.412
HOS_P6	0.177	0.214	0.172	0.180	0.176	0.208
HOS_P7	0.210	0.255	0.205	0.214	0.209	0.247
DEC_P1	0.180	0.219	0.175	0.183	0.179	0.212
DEC_P2	0.143	0.173	0.139	0.146	0.142	0.168
DEC_P3	0.204	0.247	0.198	0.207	0.203	0.239
EMO_P1	-0.081	-0.096	-0.077	-0.080	-0.078	-0.093
EMO_P2	-0.082	-0.097	-0.078	-0.081	-0.079	-0.094
EMO_P3	-0.092	-0.108	-0.087	-0.091	-0.089	-0.105
EMO_P4	-0.089	-0.105	-0.084	-0.088	-0.086	-0.102
NEG_P1	0.136	0.156	0.125	0.131	0.128	0.151
NEG_P2	0.132	0.151	0.121	0.127	0.124	0.146
NEG_P3	0.147	0.168	0.135	0.141	0.138	0.163
NEG_P4	0.119	0.136	0.109	0.114	0.112	0.132
NEG_P5	0.125	0.142	0.114	0.120	0.117	0.138
PLA_P1	0.022	-0.014	-0.011	-0.012	-0.011	-0.013
PLA_P2	0.023	-0.015	-0.012	-0.012	-0.012	-0.014
SOB_P1	-0.030	-0.085	-0.069	-0.072	-0.070	-0.083
SOB_P2	-0.025	-0.070	-0.056	-0.059	-0.057	-0.068
SOB_P3	-0.032	-0.090	-0.072	-0.075	-0.073	-0.087
ACH_P1	-0.069	-0.081	-0.065	-0.068	-0.066	-0.078
ACH_P2	-0.080	-0.093	-0.075	-0.078	-0.076	-0.090
ACH_P3	-0.081	-0.094	-0.075	-0.079	-0.077	-0.091
ACH_P4	-0.061	-0.072	-0.057	-0.060	-0.059	-0.069
ACH_P5	-0.081	-0.094	-0.076	-0.079	-0.078	-0.092
ORD_P1	-0.083	-0.090	-0.072	-0.075	-0.074	-0.087
ORD_P2	-0.086	-0.093	-0.075	-0.078	-0.076	-0.090
ORD_P3	-0.081	-0.087	-0.070	-0.073	-0.072	-0.085
ORD_P4	-0.091	-0.098	-0.078	-0.082	-0.080	-0.095
ORD_P5	-0.092	-0.099	-0.080	-0.083	-0.082	-0.096
ORD_P6	-0.094	-0.102	-0.082	-0.085	-0.083	-0.098
TRA_P1	-0.082	-0.123	-0.099	-0.103	-0.101	-0.119
TRA_P2	-0.097	-0.146	-0.117	-0.122	-0.120	-0.141
BRO_P1	-0.025	-0.036	-0.029	-0.030	-0.030	-0.035
BRO_P2	-0.032	-0.046	-0.037	-0.039	-0.038	-0.045
BRO_P3	-0.027	-0.038	-0.031	-0.032	-0.031	-0.037
EPI_P1	-0.043	-0.050	-0.040	-0.042	-0.041	-0.049
EPI_P2	-0.050	-0.058	-0.047	-0.049	-0.048	-0.057
EPI_P3	-0.051	-0.060	-0.048	-0.050	-0.049	-0.058
ITL_P1	-0.040	-0.049	-0.039	-0.041	-0.040	-0.047
ITL_P2	-0.035	-0.042	-0.034	-0.035	-0.035	-0.041
ITL_P3	-0.051	-0.063	-0.050	-0.052	-0.051	-0.061
ITL_P4	-0.045	-0.054	-0.044	-0.046	-0.045	-0.053
ITL_P5	-0.043	-0.053	-0.042	-0.044	-0.043	-0.051

Fitted Covariance Matrix

	HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
HOS_P6	0.451					
HOS_P7	0.208	0.698				
DEC_P1	0.179	0.213	0.478			

DEC_P2	0.142	0.169	0.207	0.513		
DEC_P3	0.202	0.240	0.295	0.234	0.609	
EMO_P1	-0.078	-0.093	-0.124	-0.098	-0.140	0.513
EMO_P2	-0.079	-0.094	-0.125	-0.100	-0.142	0.205
EMO_P3	-0.089	-0.105	-0.140	-0.111	-0.159	0.229
EMO_P4	-0.086	-0.102	-0.136	-0.108	-0.154	0.222
NEG_P1	0.128	0.152	0.205	0.163	0.232	-0.200
NEG_P2	0.123	0.147	0.198	0.157	0.224	-0.193
NEG_P3	0.137	0.163	0.221	0.175	0.250	-0.215
NEG_P4	0.111	0.132	0.179	0.142	0.202	-0.174
NEG_P5	0.116	0.138	0.187	0.149	0.212	-0.183
PLA_P1	-0.011	-0.013	-0.033	-0.026	-0.038	0.086
PLA_P2	-0.012	-0.014	-0.035	-0.028	-0.040	0.091
SOB_P1	-0.070	-0.083	-0.121	-0.096	-0.137	0.132
SOB_P2	-0.057	-0.068	-0.099	-0.079	-0.112	0.108
SOB_P3	-0.073	-0.087	-0.127	-0.101	-0.144	0.138
ACH_P1	-0.066	-0.078	-0.129	-0.102	-0.145	0.131
ACH_P2	-0.076	-0.090	-0.148	-0.118	-0.168	0.151
ACH_P3	-0.077	-0.091	-0.150	-0.119	-0.169	0.152
ACH_P4	-0.058	-0.070	-0.114	-0.090	-0.129	0.116
ACH_P5	-0.077	-0.092	-0.151	-0.119	-0.170	0.153
ORD_P1	-0.073	-0.087	-0.124	-0.099	-0.140	0.093
ORD_P2	-0.076	-0.090	-0.129	-0.102	-0.146	0.097
ORD_P3	-0.072	-0.085	-0.121	-0.096	-0.137	0.091
ORD_P4	-0.080	-0.095	-0.135	-0.107	-0.153	0.101
ORD_P5	-0.081	-0.097	-0.138	-0.109	-0.156	0.103
ORD_P6	-0.083	-0.099	-0.141	-0.112	-0.159	0.106
TRA_P1	-0.100	-0.119	-0.122	-0.097	-0.138	0.105
TRA_P2	-0.119	-0.142	-0.145	-0.115	-0.164	0.125
BRO_P1	-0.029	-0.035	-0.052	-0.042	-0.059	0.095
BRO_P2	-0.038	-0.045	-0.067	-0.053	-0.076	0.121
BRO_P3	-0.031	-0.037	-0.056	-0.044	-0.063	0.101
EPI_P1	-0.041	-0.049	-0.055	-0.044	-0.063	0.076
EPI_P2	-0.048	-0.057	-0.064	-0.051	-0.073	0.088
EPI_P3	-0.049	-0.058	-0.066	-0.052	-0.075	0.090
ITL_P1	-0.040	-0.047	-0.083	-0.066	-0.094	0.125
ITL_P2	-0.034	-0.041	-0.072	-0.057	-0.081	0.108
ITL_P3	-0.051	-0.061	-0.106	-0.084	-0.120	0.161
ITL_P4	-0.044	-0.053	-0.092	-0.073	-0.104	0.140
ITL_P5	-0.043	-0.051	-0.090	-0.071	-0.101	0.136

Fitted Covariance Matrix

	EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
EMO_P2	0.458					
EMO_P3	0.232	0.482				
EMO_P4	0.225	0.252	0.415			
NEG_P1	-0.203	-0.227	-0.220	0.819		
NEG_P2	-0.196	-0.219	-0.213	0.365	0.726	
NEG_P3	-0.218	-0.244	-0.237	0.406	0.393	0.887
NEG_P4	-0.177	-0.198	-0.192	0.329	0.318	0.354
NEG_P5	-0.185	-0.207	-0.201	0.344	0.333	0.371
PLA_P1	0.087	0.097	0.094	-0.005	-0.004	-0.005
PLA_P2	0.093	0.104	0.101	-0.005	-0.005	-0.005
SOB_P1	0.134	0.149	0.145	-0.084	-0.081	-0.090
SOB_P2	0.109	0.123	0.119	-0.069	-0.066	-0.074
SOB_P3	0.140	0.157	0.152	-0.088	-0.085	-0.094
ACH_P1	0.133	0.148	0.144	-0.108	-0.105	-0.117
ACH_P2	0.153	0.171	0.166	-0.125	-0.121	-0.135
ACH_P3	0.154	0.173	0.167	-0.126	-0.122	-0.136
ACH_P4	0.117	0.132	0.128	-0.096	-0.093	-0.103
ACH_P5	0.155	0.174	0.168	-0.127	-0.123	-0.137
ORD_P1	0.094	0.106	0.103	-0.070	-0.068	-0.075
ORD_P2	0.098	0.110	0.106	-0.073	-0.070	-0.078
ORD_P3	0.092	0.103	0.100	-0.068	-0.066	-0.074
ORD_P4	0.103	0.115	0.112	-0.076	-0.074	-0.082
ORD_P5	0.105	0.117	0.114	-0.078	-0.075	-0.084
ORD_P6	0.107	0.120	0.116	-0.079	-0.077	-0.085
TRA_P1	0.106	0.119	0.115	-0.046	-0.045	-0.050
TRA_P2	0.126	0.141	0.137	-0.055	-0.053	-0.059
BRO_P1	0.096	0.107	0.104	-0.041	-0.040	-0.044
BRO_P2	0.122	0.137	0.133	-0.052	-0.051	-0.056
BRO_P3	0.102	0.114	0.111	-0.044	-0.042	-0.047
EPI_P1	0.076	0.086	0.083	-0.039	-0.038	-0.042
EPI_P2	0.089	0.100	0.096	-0.045	-0.044	-0.049
EPI_P3	0.091	0.102	0.099	-0.046	-0.045	-0.050

ITL_P1	0.127	0.142	0.138	-0.095	-0.092	-0.102
ITL_P2	0.110	0.123	0.119	-0.082	-0.080	-0.089
ITL_P3	0.163	0.182	0.177	-0.122	-0.118	-0.132
ITL_P4	0.142	0.159	0.154	-0.106	-0.103	-0.114
ITL_P5	0.138	0.154	0.149	-0.103	-0.100	-0.111

Fitted Covariance Matrix

	NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
NEG_P4	0.665					
NEG_P5	0.300	0.662				
PLA_P1	-0.004	-0.004	0.695			
PLA_P2	-0.004	-0.005	0.364	0.492		
SOB_P1	-0.073	-0.076	0.293	0.313	0.710	
SOB_P2	-0.060	-0.063	0.241	0.257	0.386	0.480
SOB_P3	-0.076	-0.080	0.308	0.329	0.494	0.405
ACH_P1	-0.095	-0.099	0.068	0.072	0.134	0.109
ACH_P2	-0.109	-0.114	0.078	0.083	0.154	0.126
ACH_P3	-0.110	-0.115	0.079	0.084	0.155	0.127
ACH_P4	-0.084	-0.088	0.060	0.064	0.118	0.097
ACH_P5	-0.111	-0.116	0.079	0.085	0.156	0.128
ORD_P1	-0.061	-0.064	0.029	0.031	0.076	0.062
ORD_P2	-0.063	-0.066	0.030	0.033	0.079	0.065
ORD_P3	-0.060	-0.062	0.029	0.031	0.074	0.061
ORD_P4	-0.066	-0.070	0.032	0.034	0.083	0.068
ORD_P5	-0.068	-0.071	0.033	0.035	0.084	0.069
ORD_P6	-0.069	-0.072	0.033	0.036	0.086	0.071
TRA_P1	-0.040	-0.042	0.104	0.111	0.178	0.146
TRA_P2	-0.048	-0.050	0.123	0.132	0.212	0.173
BRO_P1	-0.036	-0.037	0.141	0.151	0.153	0.126
BRO_P2	-0.046	-0.048	0.180	0.192	0.195	0.160
BRO_P3	-0.038	-0.040	0.150	0.160	0.163	0.133
EPI_P1	-0.034	-0.036	0.066	0.070	0.072	0.059
EPI_P2	-0.039	-0.041	0.077	0.082	0.083	0.068
EPI_P3	-0.041	-0.042	0.079	0.084	0.086	0.070
ITL_P1	-0.083	-0.087	0.094	0.100	0.135	0.111
ITL_P2	-0.072	-0.075	0.081	0.087	0.117	0.096
ITL_P3	-0.107	-0.112	0.121	0.129	0.173	0.142
ITL_P4	-0.093	-0.097	0.105	0.112	0.151	0.123
ITL_P5	-0.090	-0.094	0.102	0.109	0.146	0.120

Fitted Covariance Matrix

	SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
SOB_P3	0.741					
ACH_P1	0.140	0.377				
ACH_P2	0.161	0.221	0.423			
ACH_P3	0.163	0.224	0.258	0.461		
ACH_P4	0.124	0.170	0.196	0.198	0.296	
ACH_P5	0.164	0.225	0.259	0.262	0.199	0.421
ORD_P1	0.080	0.148	0.170	0.172	0.131	0.173
ORD_P2	0.083	0.153	0.177	0.179	0.136	0.180
ORD_P3	0.078	0.144	0.166	0.168	0.128	0.169
ORD_P4	0.087	0.161	0.185	0.187	0.142	0.188
ORD_P5	0.089	0.164	0.189	0.191	0.145	0.192
ORD_P6	0.090	0.167	0.193	0.195	0.148	0.196
TRA_P1	0.187	0.131	0.151	0.152	0.116	0.153
TRA_P2	0.222	0.155	0.179	0.181	0.138	0.182
BRO_P1	0.160	0.101	0.116	0.118	0.090	0.118
BRO_P2	0.205	0.129	0.149	0.150	0.114	0.151
BRO_P3	0.170	0.107	0.124	0.125	0.095	0.126
EPI_P1	0.075	0.088	0.102	0.103	0.078	0.103
EPI_P2	0.087	0.103	0.118	0.119	0.091	0.120
EPI_P3	0.090	0.105	0.121	0.123	0.093	0.123
ITL_P1	0.142	0.124	0.143	0.144	0.110	0.145
ITL_P2	0.122	0.107	0.124	0.125	0.095	0.126
ITL_P3	0.182	0.159	0.184	0.185	0.141	0.186
ITL_P4	0.158	0.138	0.159	0.161	0.123	0.162
ITL_P5	0.154	0.134	0.155	0.157	0.119	0.157

Fitted Covariance Matrix

	ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
ORD_P1	0.426					

ORD_P2	0.206	0.357				
ORD_P3	0.194	0.201	0.368			
ORD_P4	0.216	0.224	0.211	0.439		
ORD_P5	0.220	0.229	0.215	0.240	0.450	
ORD_P6	0.225	0.234	0.220	0.245	0.250	0.370
TRA_P1	0.113	0.117	0.110	0.123	0.125	0.128
TRA_P2	0.134	0.139	0.131	0.146	0.149	0.152
BRO_P1	0.050	0.052	0.049	0.055	0.056	0.057
BRO_P2	0.064	0.067	0.063	0.070	0.071	0.073
BRO_P3	0.054	0.056	0.052	0.058	0.059	0.061
EPI_P1	0.061	0.063	0.059	0.066	0.067	0.069
EPI_P2	0.071	0.073	0.069	0.077	0.078	0.080
EPI_P3	0.072	0.075	0.071	0.079	0.080	0.082
ITL_P1	0.096	0.099	0.093	0.104	0.106	0.108
ITL_P2	0.083	0.086	0.081	0.090	0.092	0.094
ITL_P3	0.123	0.127	0.120	0.134	0.136	0.139
ITL_P4	0.107	0.111	0.104	0.116	0.118	0.121
ITL_P5	0.104	0.108	0.101	0.113	0.115	0.117

Fitted Covariance Matrix

	TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
TRA_P1	0.868					
TRA_P2	0.566	0.733				
BRO_P1	0.090	0.107	0.389			
BRO_P2	0.115	0.136	0.244	0.508		
BRO_P3	0.096	0.113	0.203	0.259	0.372	
EPI_P1	0.051	0.061	0.116	0.149	0.124	0.299
EPI_P2	0.060	0.071	0.135	0.173	0.144	0.130
EPI_P3	0.061	0.073	0.139	0.177	0.148	0.134
ITL_P1	0.067	0.079	0.121	0.154	0.128	0.093
ITL_P2	0.058	0.068	0.104	0.133	0.111	0.080
ITL_P3	0.086	0.102	0.155	0.198	0.165	0.119
ITL_P4	0.074	0.088	0.135	0.172	0.143	0.104
ITL_P5	0.072	0.086	0.131	0.167	0.139	0.101

Fitted Covariance Matrix

	EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
EPI_P2	0.285					
EPI_P3	0.155	0.248				
ITL_P1	0.108	0.111	0.320			
ITL_P2	0.094	0.096	0.119	0.273		
ITL_P3	0.139	0.143	0.176	0.153	0.440	
ITL_P4	0.121	0.124	0.153	0.133	0.197	0.341
ITL_P5	0.117	0.120	0.149	0.129	0.191	0.166

Fitted Covariance Matrix

	ITL_P5
ITL_P5	0.326

Fitted Residuals

	EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
EMP_P1	0.000					
EMP_P2	-0.006	0.000				
EMP_P3	0.016	-0.013	0.000			
FAC_P1	0.014	0.043	-0.004	0.000		
FAC_P2	-0.028	0.014	-0.047	-0.007	0.000	
FAC_P3	-0.037	0.021	-0.050	-0.022	0.065	0.000
FAC_P4	0.015	0.043	0.002	0.007	-0.012	-0.013
FAC_P5	0.000	0.037	-0.012	0.011	-0.017	-0.028
INT_P1	-0.050	0.001	-0.054	0.007	-0.032	0.008
INT_P2	-0.037	0.018	-0.033	0.003	-0.029	0.004
INT_P3	0.025	0.060	0.034	0.021	-0.006	0.013
INT_P4	-0.007	0.048	-0.007	0.034	-0.011	0.013
INT_P5	0.026	0.049	0.025	0.013	-0.016	-0.004
INT_P6	-0.026	0.017	-0.027	-0.008	-0.031	-0.001
IPR_P1	-0.011	0.020	-0.015	0.013	-0.003	-0.001
IPR_P2	-0.017	0.015	-0.020	0.012	-0.008	-0.012
IPR_P3	-0.013	0.014	-0.024	0.014	0.006	-0.010
IPR_P4	0.010	0.043	0.000	-0.010	-0.047	-0.043

SOC_P1	-0.015	0.002	-0.036	0.009	0.018	0.000
SOC_P2	0.025	0.018	0.012	-0.006	-0.021	-0.031
WAR_P1	-0.011	0.012	-0.011	0.009	-0.033	-0.019
WAR_P2	0.001	0.009	0.000	-0.002	-0.030	-0.034
WAR_P3	0.026	0.019	0.026	0.001	-0.046	-0.044
WAR_P4	-0.025	0.010	-0.029	0.033	0.013	0.007
WAR_P5	-0.016	0.014	-0.018	0.018	-0.008	-0.007
ARR_P1	0.010	-0.004	0.010	-0.013	0.068	0.044
ARR_P2	0.000	-0.018	-0.001	-0.033	0.031	0.001
ARR_P3	0.009	-0.022	0.019	-0.038	0.030	0.001
CON_P1	0.055	-0.014	0.039	-0.045	0.020	-0.050
CON_P2	-0.002	-0.035	-0.004	-0.022	0.022	-0.018
CON_P3	0.007	-0.019	0.002	0.018	0.065	0.016
HOS_P1	0.043	0.000	0.035	0.003	0.060	0.009
HOS_P2	0.017	0.002	0.008	0.032	0.075	0.042
HOS_P3	-0.009	-0.036	-0.005	-0.026	0.008	-0.021
HOS_P4	-0.042	-0.049	-0.021	-0.040	0.019	-0.006
HOS_P5	0.001	-0.028	0.000	-0.007	0.043	0.005
HOS_P6	0.013	-0.004	0.024	-0.032	-0.002	-0.042
HOS_P7	0.051	0.000	0.056	-0.009	0.025	-0.033
DEC_P1	0.014	-0.026	0.020	0.001	0.024	-0.039
DEC_P2	0.030	-0.008	0.020	0.010	0.044	0.009
DEC_P3	-0.003	-0.052	0.008	-0.022	0.007	-0.054
EMO_P1	0.001	0.067	-0.010	0.028	0.026	0.094
EMO_P2	-0.003	0.033	-0.016	-0.018	-0.030	-0.006
EMO_P3	-0.009	0.034	-0.020	-0.009	-0.020	0.004
EMO_P4	-0.018	0.032	-0.035	-0.005	-0.012	0.022
NEG_P1	0.009	-0.039	0.045	0.024	0.057	0.019
NEG_P2	-0.022	-0.065	0.007	-0.044	-0.017	-0.079
NEG_P3	0.031	-0.023	0.067	-0.003	0.004	-0.030
NEG_P4	0.111	0.031	0.135	0.064	0.079	0.023
NEG_P5	-0.092	-0.116	-0.073	-0.048	-0.019	-0.083
PLA_P1	-0.023	0.010	-0.029	0.000	0.028	-0.013
PLA_P2	-0.011	0.031	-0.002	-0.013	0.002	-0.019
SOB_P1	-0.031	0.022	-0.040	-0.019	-0.004	-0.018
SOB_P2	0.025	0.055	0.009	0.021	0.022	0.024
SOB_P3	-0.027	0.036	-0.041	-0.016	0.000	-0.002
ACH_P1	-0.008	0.032	-0.019	0.018	-0.009	0.024
ACH_P2	-0.015	0.050	-0.019	0.011	-0.002	0.048
ACH_P3	-0.021	0.036	-0.024	-0.014	-0.033	0.022
ACH_P4	0.005	0.039	-0.003	-0.015	-0.034	0.012
ACH_P5	-0.027	0.043	-0.032	0.009	0.012	0.058
ORD_P1	-0.010	0.022	-0.002	-0.012	-0.028	0.027
ORD_P2	-0.020	0.013	-0.021	-0.021	-0.036	0.019
ORD_P3	-0.004	0.034	0.000	0.034	0.020	0.059
ORD_P4	0.001	0.043	-0.006	0.001	-0.014	0.059
ORD_P5	0.000	0.034	0.001	0.005	-0.012	0.042
ORD_P6	-0.023	0.019	-0.020	-0.012	-0.030	0.026
TRA_P1	-0.027	0.013	-0.031	-0.005	-0.004	0.029
TRA_P2	-0.016	0.026	0.000	0.001	-0.020	0.015
BRO_P1	0.004	0.039	0.016	-0.001	-0.015	-0.029
BRO_P2	-0.033	0.026	-0.025	0.027	0.018	0.015
BRO_P3	-0.021	0.027	-0.007	-0.008	-0.019	-0.020
EPI_P1	-0.002	0.037	-0.004	0.032	0.007	0.024
EPI_P2	-0.006	0.025	0.006	0.000	-0.030	-0.043
EPI_P3	-0.025	0.024	-0.018	0.010	-0.013	-0.010
ITL_P1	0.007	0.032	-0.009	-0.015	-0.033	-0.026
ITL_P2	-0.005	0.026	-0.018	-0.018	-0.013	-0.019
ITL_P3	-0.025	0.028	-0.030	0.017	0.006	0.002
ITL_P4	-0.007	0.034	-0.017	-0.001	-0.001	0.008
ITL_P5	-0.003	0.035	-0.021	0.013	0.019	0.039

Fitted Residuals

	FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
FAC_P4	0.000					
FAC_P5	0.015	0.000				
INT_P1	-0.015	-0.005	0.000			
INT_P2	-0.009	0.003	0.027	0.000		
INT_P3	0.016	0.009	-0.017	0.005	0.000	
INT_P4	0.033	0.030	0.010	0.005	-0.039	0.000
INT_P5	0.014	0.017	-0.023	-0.013	0.021	0.009
INT_P6	-0.002	-0.002	0.011	0.006	-0.005	-0.012
IPR_P1	0.016	0.010	-0.016	-0.019	0.010	0.008
IPR_P2	0.024	0.006	-0.027	-0.035	-0.003	0.033
IPR_P3	0.019	0.026	-0.011	-0.011	-0.001	0.019

IPR_P4	-0.001	0.004	-0.012	-0.011	0.016	0.050
SOC_P1	0.013	0.009	-0.022	-0.018	0.028	0.010
SOC_P2	0.001	-0.003	-0.024	-0.015	0.037	0.013
WAR_P1	0.005	-0.001	-0.004	-0.009	0.039	0.013
WAR_P2	-0.005	-0.011	-0.020	-0.019	0.038	0.003
WAR_P3	0.004	-0.003	-0.030	-0.024	0.029	0.009
WAR_P4	0.036	0.031	-0.023	-0.016	0.013	0.027
WAR_P5	0.026	0.021	-0.025	-0.015	0.022	0.013
ARR_P1	-0.009	0.011	0.006	0.018	0.011	-0.037
ARR_P2	-0.029	-0.003	0.008	0.017	-0.005	-0.039
ARR_P3	-0.042	-0.018	0.006	0.007	0.004	-0.057
CON_P1	-0.040	-0.020	-0.033	0.008	0.038	-0.059
CON_P2	-0.017	-0.015	0.003	0.006	-0.002	-0.033
CON_P3	0.016	0.026	0.010	0.016	0.017	-0.014
HOS_P1	-0.003	0.016	0.011	0.035	0.032	-0.035
HOS_P2	0.028	0.035	0.012	0.024	0.023	-0.024
HOS_P3	-0.027	-0.017	0.011	0.011	-0.014	-0.029
HOS_P4	-0.029	-0.022	-0.008	-0.004	-0.025	-0.024
HOS_P5	-0.009	0.002	0.011	0.014	-0.001	-0.033
HOS_P6	-0.036	-0.008	-0.011	0.009	0.009	-0.023
HOS_P7	-0.006	0.002	-0.071	-0.025	0.013	-0.039
DEC_P1	0.007	0.010	-0.054	-0.014	0.004	0.005
DEC_P2	0.027	0.021	-0.043	0.000	0.013	0.010
DEC_P3	-0.016	0.003	-0.033	0.017	0.013	-0.003
EMO_P1	0.027	0.015	0.043	0.022	0.027	0.031
EMO_P2	-0.025	-0.003	-0.011	-0.010	-0.014	0.016
EMO_P3	-0.013	-0.001	-0.019	-0.008	-0.016	0.018
EMO_P4	-0.008	0.010	-0.010	-0.002	-0.016	0.010
NEG_P1	0.028	0.007	-0.014	0.001	0.052	-0.024
NEG_P2	-0.024	-0.015	-0.086	-0.046	0.013	-0.054
NEG_P3	0.012	-0.002	-0.016	0.010	0.060	0.012
NEG_P4	0.077	0.062	0.018	0.040	0.099	0.037
NEG_P5	-0.040	-0.034	-0.066	-0.052	-0.029	-0.093
PLA_P1	-0.001	0.026	-0.044	-0.028	0.020	-0.023
PLA_P2	0.007	0.009	-0.021	-0.020	0.048	0.005
SOB_P1	-0.018	-0.009	-0.040	-0.039	0.012	-0.016
SOB_P2	0.015	0.021	0.005	0.019	0.060	0.033
SOB_P3	-0.012	-0.016	-0.024	-0.030	0.036	0.018
ACH_P1	-0.010	-0.011	0.006	0.010	0.001	-0.019
ACH_P2	-0.007	-0.004	-0.004	0.015	0.000	-0.024
ACH_P3	-0.021	-0.011	0.002	0.010	-0.014	0.005
ACH_P4	-0.028	-0.007	0.015	0.032	0.012	0.006
ACH_P5	0.001	0.003	-0.021	-0.008	-0.003	-0.031
ORD_P1	-0.015	-0.019	0.026	0.008	-0.023	-0.007
ORD_P2	-0.023	-0.012	0.017	0.018	-0.014	-0.033
ORD_P3	0.023	0.032	0.018	0.026	-0.012	0.001
ORD_P4	-0.001	-0.005	0.023	0.040	0.007	-0.004
ORD_P5	0.008	0.009	-0.010	-0.005	-0.024	-0.017
ORD_P6	-0.013	-0.007	0.000	0.002	-0.027	-0.027
TRA_P1	0.008	-0.022	-0.023	-0.020	0.017	-0.001
TRA_P2	0.021	-0.019	-0.024	-0.027	0.029	0.016
BRO_P1	-0.011	0.006	-0.022	-0.011	0.017	-0.004
BRO_P2	0.014	0.026	-0.014	-0.010	0.007	0.007
BRO_P3	-0.021	0.009	-0.010	0.000	0.017	0.011
EPI_P1	0.014	0.029	0.016	0.013	0.015	0.019
EPI_P2	-0.019	0.018	-0.027	-0.005	-0.007	-0.019
EPI_P3	-0.006	0.027	-0.011	0.006	-0.003	0.002
ITL_P1	-0.030	0.000	-0.012	-0.004	-0.004	-0.005
ITL_P2	-0.031	0.004	0.010	0.023	-0.004	0.009
ITL_P3	0.002	0.024	-0.014	0.000	-0.032	-0.001
ITL_P4	-0.009	0.021	0.001	0.008	-0.007	-0.002
ITL_P5	-0.001	0.028	0.007	0.011	0.004	-0.011

Fitted Residuals

	INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
INT_P5	0.000					
INT_P6	-0.001	0.000				
IPR_P1	0.011	-0.018	0.000			
IPR_P2	0.005	-0.023	-0.010	0.000		
IPR_P3	0.015	0.001	-0.010	0.021	0.000	
IPR_P4	0.037	0.002	-0.012	0.004	0.003	0.000
SOC_P1	0.016	-0.015	0.020	-0.011	0.003	-0.005
SOC_P2	0.025	-0.010	0.012	-0.014	-0.005	0.002
WAR_P1	0.022	-0.013	0.000	-0.004	-0.013	-0.001
WAR_P2	0.016	-0.024	0.001	-0.003	-0.007	-0.004

WAR_P3	0.023	-0.019	-0.017	-0.011	-0.011	0.000
WAR_P4	0.038	-0.011	0.010	0.016	0.021	0.004
WAR_P5	0.025	-0.010	-0.004	0.005	0.004	0.006
ARR_P1	-0.005	0.016	0.023	0.030	0.035	-0.017
ARR_P2	-0.020	0.012	-0.008	0.001	0.028	-0.030
ARR_P3	-0.013	0.008	-0.010	-0.020	0.002	-0.044
CON_P1	0.033	0.003	0.011	-0.021	0.009	-0.022
CON_P2	-0.004	-0.011	-0.008	-0.006	0.003	-0.022
CON_P3	0.010	-0.003	0.016	0.028	0.024	-0.003
HOS_P1	0.016	0.027	0.016	0.000	0.036	-0.009
HOS_P2	0.003	0.015	0.025	0.005	0.028	0.006
HOS_P3	-0.011	0.006	-0.014	-0.023	0.006	-0.032
HOS_P4	-0.020	0.002	-0.018	-0.002	0.001	-0.035
HOS_P5	-0.010	0.004	0.007	0.006	0.019	-0.019
HOS_P6	0.008	0.014	-0.003	-0.013	0.004	-0.011
HOS_P7	-0.002	-0.021	0.015	0.035	0.026	0.009
DEC_P1	0.014	-0.011	-0.002	0.022	0.009	0.007
DEC_P2	0.022	0.004	0.024	0.029	0.024	0.013
DEC_P3	0.030	0.013	-0.033	-0.020	-0.005	-0.032
EMO_P1	0.006	0.028	0.021	0.014	-0.002	0.015
EMO_P2	-0.007	-0.006	0.000	-0.005	-0.013	0.002
EMO_P3	-0.009	-0.003	-0.008	0.015	-0.008	0.010
EMO_P4	-0.013	0.006	-0.013	-0.008	-0.001	0.000
NEG_P1	0.028	0.004	0.002	-0.011	0.019	-0.005
NEG_P2	0.012	-0.029	-0.020	-0.025	-0.015	-0.010
NEG_P3	0.066	0.022	0.010	0.017	0.023	0.026
NEG_P4	0.087	0.052	0.050	0.049	0.071	0.064
NEG_P5	-0.036	-0.046	-0.060	-0.075	-0.033	-0.063
PLA_P1	0.012	-0.029	0.015	-0.027	0.004	-0.017
PLA_P2	0.034	-0.009	0.029	-0.013	-0.002	-0.003
SOB_P1	0.001	-0.046	0.042	-0.046	-0.028	-0.029
SOB_P2	0.044	0.005	0.070	0.006	0.013	0.011
SOB_P3	0.021	-0.029	0.035	-0.021	-0.021	-0.015
ACH_P1	-0.019	0.002	0.012	-0.017	-0.001	-0.002
ACH_P2	-0.031	0.005	0.005	-0.006	-0.008	-0.005
ACH_P3	-0.016	0.012	0.000	0.000	0.009	0.003
ACH_P4	0.006	0.032	-0.004	-0.020	0.004	0.002
ACH_P5	-0.019	0.003	0.009	-0.004	0.009	0.003
ORD_P1	-0.020	0.016	-0.008	0.013	0.004	-0.006
ORD_P2	-0.032	0.012	-0.016	-0.040	-0.009	-0.012
ORD_P3	-0.012	0.027	0.014	0.003	0.037	0.018
ORD_P4	-0.010	0.033	0.003	-0.019	0.014	0.010
ORD_P5	-0.021	0.005	0.003	0.002	0.015	0.006
ORD_P6	-0.027	0.011	-0.008	-0.008	0.006	-0.007
TRA_P1	0.006	0.000	-0.016	0.013	-0.037	-0.006
TRA_P2	0.010	0.007	-0.005	0.021	-0.017	0.010
BRO_P1	0.012	-0.007	0.005	-0.018	-0.001	0.003
BRO_P2	0.005	-0.014	0.016	-0.005	0.004	-0.004
BRO_P3	0.017	0.004	0.010	-0.023	0.002	0.005
EPI_P1	0.014	0.016	0.022	0.005	0.021	0.014
EPI_P2	0.004	-0.011	-0.007	-0.039	0.005	0.000
EPI_P3	0.000	0.003	-0.003	-0.023	0.008	0.007
ITL_P1	-0.001	0.002	0.006	-0.028	0.004	-0.004
ITL_P2	-0.002	0.012	-0.004	-0.028	0.004	-0.015
ITL_P3	-0.020	-0.014	0.003	-0.005	0.018	-0.016
ITL_P4	-0.007	0.010	0.008	-0.015	0.025	-0.005
ITL_P5	0.001	0.014	0.017	-0.006	0.019	0.002

Fitted Residuals

	SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
SOC_P1	0.000					
SOC_P2	0.000	0.000				
WAR_P1	-0.010	-0.002	0.000			
WAR_P2	0.005	0.015	0.023	0.000		
WAR_P3	-0.010	0.008	0.003	0.007	0.000	
WAR_P4	0.008	0.007	-0.006	-0.010	-0.008	0.000
WAR_P5	-0.011	-0.006	0.006	-0.006	-0.002	0.000
ARR_P1	0.032	-0.002	0.013	0.003	-0.013	0.039
ARR_P2	0.006	-0.024	-0.012	-0.021	-0.023	0.013
ARR_P3	0.004	-0.017	-0.011	-0.019	-0.020	0.003
CON_P1	0.008	0.012	-0.004	0.001	0.002	0.001
CON_P2	-0.008	-0.017	-0.019	-0.004	-0.012	-0.012
CON_P3	0.019	0.001	0.006	0.014	0.002	0.010
HOS_P1	0.031	0.016	0.015	0.017	0.017	0.031
HOS_P2	0.027	0.016	0.011	0.002	0.002	0.021

HOS_P3	-0.015	-0.024	-0.015	-0.011	-0.019	-0.008
HOS_P4	-0.016	-0.028	-0.035	-0.030	-0.041	-0.012
HOS_P5	0.011	-0.012	-0.006	-0.008	-0.012	0.003
HOS_P6	-0.007	-0.004	-0.012	-0.008	-0.008	0.002
HOS_P7	0.020	0.019	0.012	0.032	0.029	0.016
DEC_P1	-0.003	0.004	-0.006	0.005	0.009	0.002
DEC_P2	0.044	0.026	0.014	0.008	0.018	0.020
DEC_P3	-0.025	-0.015	-0.022	-0.027	0.000	-0.017
EMO_P1	0.022	0.003	0.033	0.015	-0.002	0.029
EMO_P2	0.005	-0.008	0.004	-0.002	-0.016	0.020
EMO_P3	0.005	-0.004	-0.007	-0.004	-0.026	0.016
EMO_P4	0.005	-0.018	-0.011	-0.018	-0.023	0.010
NEG_P1	-0.005	0.025	0.011	0.023	0.021	-0.020
NEG_P2	-0.036	-0.003	-0.032	-0.009	-0.004	-0.033
NEG_P3	-0.014	0.028	0.016	0.030	0.059	0.007
NEG_P4	0.060	0.098	0.060	0.075	0.092	0.047
NEG_P5	-0.071	-0.054	-0.081	-0.063	-0.053	-0.085
PLA_P1	-0.014	-0.034	-0.028	-0.020	-0.034	0.002
PLA_P2	0.003	0.010	-0.002	0.008	-0.019	0.025
SOB_P1	-0.003	-0.028	-0.018	-0.013	-0.055	0.012
SOB_P2	0.038	0.018	0.023	0.033	-0.004	0.048
SOB_P3	0.001	-0.037	-0.012	0.002	-0.043	0.025
ACH_P1	0.007	-0.010	0.008	-0.012	-0.018	0.000
ACH_P2	0.007	-0.001	0.009	-0.009	-0.018	0.005
ACH_P3	-0.006	-0.013	0.008	-0.012	-0.019	0.020
ACH_P4	0.000	-0.007	0.009	-0.006	-0.007	0.013
ACH_P5	0.019	-0.005	0.001	-0.020	-0.033	0.019
ORD_P1	-0.002	-0.013	0.009	0.006	-0.012	0.002
ORD_P2	-0.007	-0.006	-0.003	-0.014	-0.024	-0.018
ORD_P3	0.020	0.015	0.015	0.004	0.004	0.023
ORD_P4	0.017	0.009	0.011	0.005	-0.009	0.008
ORD_P5	0.006	-0.002	0.007	-0.004	-0.006	0.016
ORD_P6	-0.008	-0.012	-0.004	-0.017	-0.022	-0.004
TRA_P1	-0.011	-0.013	0.004	-0.010	-0.032	-0.012
TRA_P2	-0.005	0.009	0.009	0.002	-0.015	-0.009
BRO_P1	-0.002	0.009	-0.004	0.004	-0.010	0.012
BRO_P2	-0.002	-0.008	-0.007	-0.008	-0.030	0.026
BRO_P3	0.002	0.002	-0.004	-0.007	-0.020	0.016
EPI_P1	0.006	0.010	0.017	0.014	0.008	0.021
EPI_P2	-0.007	0.001	-0.013	-0.015	-0.013	0.000
EPI_P3	-0.005	0.003	-0.003	-0.012	-0.008	0.011
ITL_P1	0.012	-0.001	0.001	-0.009	-0.015	0.018
ITL_P2	-0.006	-0.022	-0.011	-0.027	-0.018	0.008
ITL_P3	-0.004	-0.034	-0.013	-0.016	-0.026	0.026
ITL_P4	0.018	-0.002	-0.001	-0.013	-0.010	0.025
ITL_P5	0.027	0.000	0.005	-0.005	-0.014	0.022

Fitted Residuals

	WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
WAR_P5	0.000					
ARR_P1	0.027	0.000				
ARR_P2	0.011	0.001	0.000			
ARR_P3	-0.003	-0.001	-0.001	0.000		
CON_P1	0.014	-0.017	-0.048	0.002	0.000	
CON_P2	0.004	-0.001	0.000	0.002	-0.015	0.000
CON_P3	0.019	0.019	0.009	0.030	0.002	0.008
HOS_P1	0.038	-0.016	-0.016	-0.022	0.065	0.002
HOS_P2	0.031	0.018	-0.002	-0.011	0.013	0.001
HOS_P3	0.004	-0.008	0.005	0.005	-0.036	0.020
HOS_P4	-0.021	0.032	0.038	0.043	-0.048	-0.018
HOS_P5	0.006	0.006	0.023	0.014	-0.025	0.009
HOS_P6	-0.003	-0.028	-0.024	0.004	0.002	-0.015
HOS_P7	0.042	-0.053	-0.054	-0.019	0.046	0.014
DEC_P1	0.012	-0.023	-0.010	-0.010	0.019	0.012
DEC_P2	0.019	0.013	-0.004	0.018	0.046	0.003
DEC_P3	-0.010	0.004	0.013	0.029	0.009	-0.001
EMO_P1	0.026	-0.004	-0.042	-0.043	-0.046	-0.044
EMO_P2	0.001	0.011	-0.006	-0.023	0.002	-0.007
EMO_P3	0.002	0.019	0.003	-0.011	0.015	0.004
EMO_P4	0.002	0.026	0.011	-0.006	0.001	-0.005
NEG_P1	0.018	-0.024	-0.022	0.011	0.009	-0.006
NEG_P2	-0.030	0.028	0.014	0.064	0.098	0.013
NEG_P3	0.016	-0.083	-0.087	-0.021	-0.011	-0.070
NEG_P4	0.062	-0.064	-0.068	-0.015	-0.005	-0.062
NEG_P5	-0.063	0.096	0.096	0.118	0.122	0.103

PLA_P1	0.000	0.060	0.035	0.015	0.099	0.004
PLA_P2	0.011	0.012	-0.021	-0.025	0.058	-0.038
SOB_P1	-0.025	0.059	0.021	-0.006	0.044	0.013
SOB_P2	0.019	-0.009	-0.048	-0.041	-0.016	-0.055
SOB_P3	-0.004	0.044	-0.003	-0.013	0.002	-0.011
ACH_P1	0.002	0.008	-0.011	-0.009	-0.017	-0.002
ACH_P2	0.005	0.006	-0.010	-0.030	-0.019	-0.011
ACH_P3	0.015	0.011	-0.020	-0.032	-0.045	-0.018
ACH_P4	0.021	-0.016	-0.034	-0.035	-0.023	-0.021
ACH_P5	0.019	0.077	0.033	0.013	0.023	0.017
ORD_P1	0.007	-0.006	-0.035	-0.014	-0.040	-0.013
ORD_P2	0.002	0.015	0.003	0.004	-0.013	0.014
ORD_P3	0.024	0.024	0.004	0.003	-0.005	-0.001
ORD_P4	0.017	-0.010	-0.024	-0.015	-0.037	-0.011
ORD_P5	0.027	0.010	-0.017	0.000	-0.018	0.005
ORD_P6	0.008	0.018	0.001	0.019	-0.012	0.005
TRA_P1	0.010	0.040	0.001	0.012	0.015	0.005
TRA_P2	0.023	0.022	-0.016	-0.011	0.003	-0.003
BRO_P1	0.009	-0.007	-0.022	-0.019	0.026	-0.015
BRO_P2	0.020	0.041	0.015	0.003	-0.014	0.008
BRO_P3	0.005	0.005	-0.011	-0.027	0.003	-0.023
EPI_P1	0.013	-0.028	-0.040	-0.040	-0.027	-0.042
EPI_P2	-0.001	0.004	0.008	0.008	0.056	0.002
EPI_P3	0.007	0.012	0.015	-0.004	0.013	-0.012
ITL_P1	0.008	-0.010	-0.013	-0.025	-0.006	-0.012
ITL_P2	0.001	0.012	0.000	-0.004	0.018	0.001
ITL_P3	0.014	0.038	0.015	-0.016	-0.014	0.009
ITL_P4	0.011	-0.001	-0.004	-0.021	-0.012	-0.015
ITL_P5	0.014	0.011	-0.002	-0.012	-0.030	-0.018

Fitted Residuals

	CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
CON_P3	0.000					
HOS_P1	0.013	0.000				
HOS_P2	0.014	0.034	0.000			
HOS_P3	-0.007	-0.011	0.010	0.000		
HOS_P4	-0.021	-0.039	-0.034	0.015	0.000	
HOS_P5	0.002	0.000	0.009	0.006	0.006	0.000
HOS_P6	-0.020	0.020	0.002	-0.003	0.015	-0.011
HOS_P7	0.014	0.025	-0.008	-0.027	-0.037	-0.015
DEC_P1	-0.007	-0.006	-0.013	-0.012	-0.014	-0.020
DEC_P2	-0.018	-0.003	-0.004	-0.023	-0.010	-0.018
DEC_P3	-0.035	-0.006	-0.029	-0.002	0.009	-0.006
EMO_P1	-0.010	-0.033	0.008	-0.064	-0.023	-0.024
EMO_P2	0.010	-0.014	0.021	-0.027	0.016	0.023
EMO_P3	0.033	0.017	0.031	-0.020	0.014	0.027
EMO_P4	0.015	0.005	0.032	-0.014	0.017	0.025
NEG_P1	-0.032	0.018	-0.017	0.011	-0.045	-0.048
NEG_P2	-0.009	0.051	-0.002	0.008	-0.006	0.001
NEG_P3	-0.097	-0.052	-0.113	-0.052	-0.068	-0.106
NEG_P4	-0.073	-0.044	-0.086	-0.054	-0.075	-0.095
NEG_P5	0.069	0.122	0.051	0.112	0.072	0.069
PLA_P1	0.031	0.066	0.057	0.005	-0.015	0.047
PLA_P2	-0.013	0.018	0.021	-0.035	-0.041	-0.007
SOB_P1	0.051	0.082	0.079	0.013	-0.018	0.045
SOB_P2	-0.018	-0.007	0.009	-0.051	-0.066	-0.035
SOB_P3	0.034	0.020	0.052	-0.018	-0.024	0.019
ACH_P1	0.022	0.021	0.027	-0.010	-0.010	0.005
ACH_P2	0.021	0.018	0.035	-0.019	-0.020	-0.003
ACH_P3	0.001	-0.006	0.029	-0.021	-0.010	-0.007
ACH_P4	-0.009	0.005	0.000	-0.015	-0.023	-0.020
ACH_P5	0.043	0.052	0.074	0.008	0.024	0.028
ORD_P1	-0.012	-0.019	-0.028	-0.013	0.008	-0.034
ORD_P2	0.014	0.028	0.021	0.012	0.003	0.012
ORD_P3	0.022	0.033	0.034	0.013	0.004	0.013
ORD_P4	0.000	0.000	0.003	-0.006	-0.010	-0.019
ORD_P5	0.008	0.005	0.007	0.004	0.007	-0.004
ORD_P6	0.015	0.015	0.013	0.012	0.018	0.005
TRA_P1	0.017	0.015	0.041	0.004	0.006	0.011
TRA_P2	-0.002	-0.001	0.030	-0.014	-0.007	-0.011
BRO_P1	0.008	0.016	0.023	-0.026	-0.020	-0.009
BRO_P2	0.031	0.013	0.044	-0.004	0.005	0.019
BRO_P3	-0.007	0.004	0.012	-0.029	-0.018	-0.007
EPI_P1	-0.023	-0.008	-0.013	-0.051	-0.040	-0.037
EPI_P2	0.017	0.046	0.029	-0.007	-0.015	0.014

EPI_P3	0.009	0.021	0.013	-0.016	-0.013	0.001
ITL_P1	-0.001	0.014	0.022	-0.021	-0.015	0.007
ITL_P2	0.014	0.029	0.027	-0.002	-0.016	0.014
ITL_P3	0.035	0.028	0.040	0.002	0.002	0.035
ITL_P4	0.008	0.014	0.022	-0.018	-0.015	0.004
ITL_P5	0.022	0.008	0.025	-0.022	-0.026	-0.001

Fitted Residuals

	HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
HOS_P6	0.000					
HOS_P7	0.045	0.000				
DEC_P1	0.018	0.109	0.000			
DEC_P2	0.009	0.073	0.006	0.000		
DEC_P3	0.013	0.037	-0.011	0.015	0.000	
EMO_P1	-0.033	-0.046	-0.054	-0.027	-0.113	0.000
EMO_P2	-0.008	-0.014	0.002	0.049	0.029	-0.028
EMO_P3	0.004	0.000	0.005	0.036	0.006	-0.016
EMO_P4	-0.009	-0.018	-0.001	0.034	0.014	-0.015
NEG_P1	0.035	0.038	-0.026	-0.044	-0.070	0.042
NEG_P2	0.062	0.092	0.053	0.059	0.082	-0.063
NEG_P3	-0.007	-0.025	-0.057	-0.034	-0.040	0.008
NEG_P4	-0.008	-0.016	-0.056	-0.030	-0.048	0.037
NEG_P5	0.116	0.147	0.067	0.026	0.068	-0.061
PLA_P1	0.023	0.036	0.040	0.045	0.019	-0.034
PLA_P2	-0.003	0.009	-0.001	0.028	-0.039	0.004
SOB_P1	0.024	0.032	0.056	0.067	-0.024	0.009
SOB_P2	-0.033	-0.021	-0.010	0.036	-0.070	0.050
SOB_P3	-0.026	-0.002	0.026	0.058	-0.064	0.033
ACH_P1	-0.010	-0.034	-0.008	0.008	-0.013	0.062
ACH_P2	-0.019	-0.034	0.000	0.008	-0.028	0.088
ACH_P3	-0.029	-0.055	0.001	0.012	-0.023	0.061
ACH_P4	-0.006	-0.043	-0.010	0.007	-0.001	0.030
ACH_P5	0.015	0.005	0.027	0.040	0.002	0.082
ORD_P1	-0.019	-0.069	-0.013	-0.002	-0.010	0.043
ORD_P2	0.003	-0.040	-0.015	0.010	0.014	0.036
ORD_P3	0.001	-0.028	-0.002	0.006	-0.001	0.056
ORD_P4	-0.016	-0.059	-0.034	-0.008	-0.029	0.077
ORD_P5	0.003	-0.033	0.017	0.013	0.007	0.035
ORD_P6	0.003	-0.037	0.004	0.012	0.018	0.030
TRA_P1	-0.004	0.032	0.047	0.022	-0.029	0.084
TRA_P2	-0.010	0.031	0.027	0.014	-0.043	0.101
BRO_P1	0.014	0.015	0.016	0.016	0.007	0.003
BRO_P2	0.005	0.005	-0.006	0.009	-0.010	0.015
BRO_P3	-0.006	-0.014	-0.004	0.007	-0.014	0.021
EPI_P1	-0.013	-0.025	-0.036	-0.031	-0.045	0.070
EPI_P2	0.040	0.025	0.010	0.020	0.037	-0.021
EPI_P3	0.011	0.001	-0.004	0.001	0.006	0.012
ITL_P1	0.004	-0.013	-0.005	0.028	0.022	0.008
ITL_P2	0.005	-0.016	-0.007	0.025	0.033	-0.012
ITL_P3	-0.012	-0.025	0.007	0.021	0.021	-0.012
ITL_P4	-0.017	-0.029	-0.020	0.019	0.017	-0.011
ITL_P5	-0.023	-0.054	-0.044	-0.005	-0.046	0.029

Fitted Residuals

	EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
EMO_P2	0.000					
EMO_P3	0.022	0.000				
EMO_P4	0.005	0.011	0.000			
NEG_P1	-0.047	-0.020	-0.049	0.000		
NEG_P2	0.020	0.028	0.014	-0.053	0.000	
NEG_P3	-0.005	0.003	0.020	-0.016	0.032	0.000
NEG_P4	0.057	0.052	0.057	0.016	0.011	0.097
NEG_P5	-0.039	-0.025	-0.033	0.043	-0.013	-0.040
PLA_P1	0.018	-0.002	-0.031	-0.001	0.004	-0.036
PLA_P2	0.039	0.006	-0.021	-0.003	-0.004	-0.017
SOB_P1	-0.027	-0.037	-0.059	0.085	0.015	0.005
SOB_P2	0.046	0.020	0.017	-0.006	-0.039	-0.040
SOB_P3	0.015	-0.006	-0.023	0.027	-0.019	-0.041
ACH_P1	-0.040	-0.023	-0.004	0.023	-0.042	0.031
ACH_P2	-0.032	-0.013	-0.002	0.025	-0.057	-0.004
ACH_P3	-0.014	-0.015	-0.005	0.010	-0.045	0.015
ACH_P4	-0.028	-0.016	0.000	0.043	-0.014	0.054
ACH_P5	-0.028	-0.021	0.003	0.029	-0.029	0.013

ORD_P1	-0.033	-0.027	-0.015	0.034	-0.035	0.073
ORD_P2	-0.027	-0.016	0.002	0.028	-0.051	0.025
ORD_P3	-0.010	0.015	0.020	0.009	-0.050	0.013
ORD_P4	-0.017	0.006	0.022	0.010	-0.077	0.000
ORD_P5	-0.032	-0.020	-0.006	0.045	-0.030	0.059
ORD_P6	-0.033	-0.017	-0.003	0.023	-0.051	0.028
TRA_P1	-0.028	-0.025	-0.027	0.043	-0.038	0.019
TRA_P2	-0.020	-0.014	-0.024	0.044	-0.054	0.016
BRO_P1	-0.010	-0.030	-0.020	0.046	0.015	0.035
BRO_P2	0.015	-0.006	-0.003	-0.006	-0.033	-0.044
BRO_P3	0.027	0.000	0.000	-0.009	-0.025	-0.014
EPI_P1	0.006	0.005	0.014	-0.028	-0.045	0.004
EPI_P2	-0.013	-0.021	-0.021	0.011	0.019	0.040
EPI_P3	0.002	0.003	0.004	-0.013	-0.020	0.007
ITL_P1	0.025	0.019	0.015	0.015	-0.007	-0.005
ITL_P2	-0.012	-0.012	-0.004	0.022	0.009	0.021
ITL_P3	-0.013	-0.012	-0.004	0.001	-0.021	-0.023
ITL_P4	-0.009	-0.015	0.002	0.008	-0.004	-0.001
ITL_P5	-0.008	-0.001	0.015	0.003	-0.051	-0.046

Fitted Residuals

	NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
NEG_P4	0.000					
NEG_P5	-0.066	0.000				
PLA_P1	0.048	0.001	0.000			
PLA_P2	0.054	-0.030	0.000	0.000		
SOB_P1	0.071	0.023	0.012	0.001	0.000	
SOB_P2	0.048	-0.068	-0.010	-0.004	-0.004	0.000
SOB_P3	0.036	-0.045	-0.013	0.007	0.015	-0.009
ACH_P1	0.050	-0.031	-0.013	-0.019	-0.018	-0.005
ACH_P2	0.026	-0.066	-0.014	-0.001	-0.013	0.015
ACH_P3	0.027	-0.058	-0.035	-0.012	-0.021	0.003
ACH_P4	0.066	-0.031	-0.020	-0.009	-0.031	0.004
ACH_P5	0.048	-0.026	0.023	0.043	0.027	0.035
ORD_P1	0.062	-0.038	-0.022	-0.004	-0.028	0.009
ORD_P2	0.045	-0.037	-0.021	-0.011	-0.033	0.004
ORD_P3	0.039	-0.043	0.021	0.026	0.010	0.030
ORD_P4	0.021	-0.069	-0.026	0.003	0.003	0.030
ORD_P5	0.077	-0.028	-0.004	0.013	-0.009	0.021
ORD_P6	0.040	-0.036	-0.015	0.000	-0.028	0.011
TRA_P1	0.091	-0.062	-0.038	0.008	-0.009	0.017
TRA_P2	0.093	-0.085	-0.046	0.013	-0.021	0.007
BRO_P1	0.094	-0.004	0.026	-0.011	-0.009	0.001
BRO_P2	0.037	-0.030	0.006	-0.002	0.003	0.007
BRO_P3	0.044	-0.042	-0.004	0.004	-0.009	0.006
EPI_P1	0.025	-0.075	-0.021	-0.015	0.012	0.037
EPI_P2	0.083	-0.007	0.023	0.008	-0.011	0.016
EPI_P3	0.042	-0.049	-0.004	0.000	-0.016	0.016
ITL_P1	0.048	-0.022	0.002	0.010	-0.010	0.029
ITL_P2	0.067	-0.006	0.017	-0.017	-0.044	0.003
ITL_P3	0.041	-0.027	0.024	-0.016	-0.040	-0.011
ITL_P4	0.058	-0.014	0.026	-0.010	-0.017	0.021
ITL_P5	0.031	-0.042	0.045	0.001	0.045	0.063

Fitted Residuals

	SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
SOB_P3	0.000					
ACH_P1	-0.031	0.000				
ACH_P2	-0.006	0.018	0.000			
ACH_P3	-0.014	-0.015	0.016	0.000		
ACH_P4	-0.030	-0.013	-0.013	0.008	0.000	
ACH_P5	0.045	0.004	0.003	-0.001	-0.008	0.000
ORD_P1	-0.013	-0.023	-0.031	-0.022	-0.002	-0.033
ORD_P2	-0.021	0.004	-0.011	0.006	0.039	-0.022
ORD_P3	0.017	0.020	0.017	0.039	0.048	0.018
ORD_P4	0.007	0.031	0.032	0.048	0.068	0.018
ORD_P5	0.012	-0.021	-0.039	-0.008	0.006	-0.028
ORD_P6	-0.008	-0.014	-0.034	-0.013	0.014	-0.031
TRA_P1	0.013	0.000	0.006	-0.006	-0.015	0.030
TRA_P2	0.009	-0.012	-0.003	0.000	-0.007	0.015
BRO_P1	-0.020	-0.007	-0.025	-0.041	-0.017	0.007
BRO_P2	0.013	0.020	-0.007	-0.007	0.002	0.054
BRO_P3	0.000	0.001	-0.018	-0.014	0.000	0.020

EPI_P1	0.007	0.053	0.036	0.037	0.051	0.035
EPI_P2	-0.021	-0.019	-0.046	-0.046	-0.008	-0.032
EPI_P3	-0.017	0.003	-0.008	-0.002	0.023	0.002
ITL_P1	0.000	-0.011	-0.021	-0.011	0.015	-0.001
ITL_P2	-0.048	0.002	-0.018	-0.020	0.012	-0.016
ITL_P3	-0.028	0.015	-0.013	-0.006	-0.005	0.011
ITL_P4	-0.026	-0.008	-0.021	-0.018	0.005	-0.007
ITL_P5	0.027	0.035	0.026	0.000	0.014	0.030

Fitted Residuals

	ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
ORD_P1	0.000					
ORD_P2	-0.021	0.000				
ORD_P3	-0.022	0.004	0.000			
ORD_P4	-0.029	0.031	0.003	0.000		
ORD_P5	0.049	-0.020	-0.007	-0.041	0.000	
ORD_P6	0.026	-0.003	-0.010	-0.020	0.040	0.000
TRA_P1	0.081	-0.037	0.009	0.015	0.029	-0.002
TRA_P2	0.044	-0.037	0.009	0.009	0.023	-0.020
BRO_P1	-0.031	-0.018	0.014	-0.013	-0.004	-0.022
BRO_P2	-0.026	0.001	0.033	0.016	0.022	0.004
BRO_P3	-0.018	-0.004	0.026	0.005	0.009	-0.005
EPI_P1	0.025	0.028	0.046	0.048	0.022	0.021
EPI_P2	-0.048	-0.023	-0.001	-0.022	-0.023	-0.028
EPI_P3	-0.021	0.004	0.030	0.013	-0.003	-0.003
ITL_P1	-0.039	0.012	0.012	-0.003	-0.024	-0.019
ITL_P2	-0.023	0.013	0.028	0.006	-0.012	-0.003
ITL_P3	-0.064	-0.028	0.021	-0.015	-0.025	-0.035
ITL_P4	-0.029	0.017	0.034	0.003	-0.016	0.001
ITL_P5	-0.002	0.024	0.041	0.038	0.015	0.029

Fitted Residuals

	TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
TRA_P1	0.000					
TRA_P2	0.000	0.000				
BRO_P1	-0.022	-0.001	0.000			
BRO_P2	-0.015	0.003	0.015	0.000		
BRO_P3	-0.024	0.005	-0.009	-0.004	0.000	
EPI_P1	0.036	0.050	-0.003	-0.027	-0.007	0.000
EPI_P2	-0.052	-0.029	0.025	0.000	0.024	-0.010
EPI_P3	-0.021	0.004	-0.013	-0.019	0.014	0.003
ITL_P1	-0.014	0.001	-0.012	0.006	0.014	0.021
ITL_P2	-0.027	-0.025	-0.013	-0.013	0.007	0.015
ITL_P3	-0.017	-0.001	0.024	0.089	0.020	-0.006
ITL_P4	-0.016	-0.009	-0.023	-0.021	-0.016	0.000
ITL_P5	0.025	0.032	-0.025	-0.014	-0.024	-0.004

Fitted Residuals

	EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
EPI_P2	0.000					
EPI_P3	0.002	0.000				
ITL_P1	0.008	0.012	0.000			
ITL_P2	0.017	0.016	0.005	0.000		
ITL_P3	-0.004	0.013	-0.010	0.004	0.000	
ITL_P4	-0.015	-0.002	0.026	0.012	-0.002	0.000
ITL_P5	-0.030	-0.021	-0.015	-0.006	-0.017	0.006

Fitted Residuals

	ITL_P5
ITL_P5	0.000

Summary Statistics for Fitted Residuals

```
Smallest Fitted Residual =   -0.116
  Median Fitted Residual =    0.000
 Largest Fitted Residual =    0.147
```

Stemleaf Plot

```
-10|6336
- 8|753276655331
- 6|9755533110009988866665444433332210
- 4|99987776555444444444443332222211111000099988888888877766666666666655555554+48
- 2|99999999999998888877777777777766666666666555555555555554444444444444433+97
- 0|9999999999999999999999999999999999999999999888888888888888888888888888888+97
  0|1111111111111111111111111111111111111111111111111112222222222222222+97
  2|00000000000000000000000001111111111111111111111111111111111111111112222222222+99
  4|00000000001111222222233333333333333334444444444555555555666666677788888888+47
  6|00000001222223444555666777778888990011233455777799
  8|12223457891223446678899
 10|1391268
 12|225
 14|7
```

Standardized Residuals

	EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
EMP_P1	- -					
EMP_P2	-2.496	- -				
EMP_P3	5.766	-8.388	- -			
FAC_P1	2.759	10.232	-0.865	- -		
FAC_P2	-5.315	3.058	-10.196	-3.536	- -	
FAC_P3	-6.817	4.506	-9.735	-9.958	19.127	- -
FAC_P4	2.906	10.203	0.518	2.658	-6.883	-7.409
FAC_P5	-0.004	8.993	-2.859	3.386	-5.674	-9.826
INT_P1	-10.934	0.385	-12.627	1.601	-6.233	1.583
INT_P2	-10.830	5.772	-10.501	0.798	-7.309	0.902
INT_P3	5.630	16.208	8.269	4.540	-1.167	2.460
INT_P4	-1.491	11.207	-1.599	6.716	-2.013	2.276
INT_P5	6.847	15.018	7.087	3.476	-3.789	-0.984
INT_P6	-8.050	5.702	-9.262	-2.511	-8.573	-0.244
IPR_P1	-2.534	5.516	-3.872	2.883	-0.628	-0.153
IPR_P2	-3.502	3.803	-4.582	2.758	-1.778	-2.557
IPR_P3	-3.326	4.343	-7.031	3.785	1.562	-2.698
IPR_P4	2.762	13.219	0.110	-2.915	-13.280	-11.359
SOC_P1	-3.863	0.666	-10.886	2.128	3.994	-0.043
SOC_P2	6.187	5.785	3.507	-1.398	-5.086	-7.180
WAR_P1	-3.763	4.466	-3.881	2.466	-9.178	-4.602
WAR_P2	0.249	2.832	-0.028	-0.569	-7.102	-7.586
WAR_P3	7.295	6.816	8.439	0.362	-13.525	-12.154
WAR_P4	-8.067	3.679	-11.253	8.833	3.294	1.741
WAR_P5	-4.824	5.223	-6.037	4.713	-2.088	-1.721
ARR_P1	1.946	-0.814	1.923	-2.054	9.638	5.677
ARR_P2	-0.051	-4.767	-0.260	-6.424	5.322	0.164
ARR_P3	1.469	-4.405	3.419	-5.538	4.117	0.177
CON_P1	7.746	-2.301	5.806	-5.989	2.351	-5.591
CON_P2	-0.378	-9.446	-0.929	-4.906	4.459	-3.326
CON_P3	1.509	-4.490	0.532	3.645	12.272	2.632
HOS_P1	6.936	-0.039	6.042	0.408	8.323	1.230
HOS_P2	2.836	0.430	1.349	4.726	10.475	5.698
HOS_P3	-2.081	-9.602	-1.036	-5.272	1.495	-3.717
HOS_P4	-7.269	-10.222	-3.777	-6.313	2.762	-0.811
HOS_P5	0.157	-7.484	-0.111	-1.433	8.523	0.874
HOS_P6	2.257	-0.873	4.312	-5.047	-0.335	-5.792
HOS_P7	7.715	-0.008	8.798	-1.217	3.061	-3.881
DEC_P1	2.862	-5.745	4.153	0.150	4.377	-6.338
DEC_P2	4.948	-1.557	3.389	1.632	6.531	1.306
DEC_P3	-0.553	-9.974	1.439	-3.867	1.205	-7.942
EMO_P1	0.221	12.339	-1.691	4.758	4.175	13.576
EMO_P2	-0.549	6.626	-3.021	-3.294	-5.162	-0.903
EMO_P3	-1.563	6.789	-3.854	-1.659	-3.398	0.684
EMO_P4	-3.531	7.077	-6.987	-1.055	-2.307	3.965
NEG_P1	1.296	-6.204	6.721	3.085	7.011	2.168
NEG_P2	-2.865	-10.028	0.975	-5.872	-2.051	-9.071
NEG_P3	3.817	-3.344	8.657	-0.368	0.417	-3.205
NEG_P4	14.649	4.998	18.903	8.997	10.191	2.743
NEG_P5	-13.528	-19.685	-11.244	-6.685	-2.491	-10.010
PLA_P1	-3.357	1.787	-4.492	-0.069	3.696	-1.637
PLA_P2	-2.356	7.297	-0.524	-2.472	0.412	-3.205
SOB_P1	-5.018	4.193	-7.128	-3.024	-0.633	-2.430
SOB_P2	4.720	12.408	1.842	4.008	3.854	3.928
SOB_P3	-4.260	6.712	-7.166	-2.619	0.060	-0.270
ACH_P1	-1.659	7.469	-4.025	3.929	-2.010	4.783
ACH_P2	-3.155	11.315	-4.468	2.394	-0.530	8.841
ACH_P3	-4.091	7.978	-4.926	-3.086	-6.683	3.647

ACH_P4	1.154	10.330	-0.621	-4.693	-9.228	2.756
ACH_P5	-5.479	9.506	-7.101	2.236	2.595	11.116
ORD_P1	-1.766	4.836	-0.448	-2.318	-5.092	4.262
ORD_P2	-4.335	3.160	-4.566	-4.597	-7.163	3.523
ORD_P3	-0.660	7.484	0.016	6.735	3.570	9.767
ORD_P4	0.162	9.041	-1.098	0.141	-2.413	9.356
ORD_P5	0.049	7.170	0.286	0.978	-2.075	6.687
ORD_P6	-5.086	4.429	-4.615	-2.798	-6.257	4.835
TRA_P1	-3.971	2.152	-4.566	-0.632	-0.568	3.593
TRA_P2	-3.147	5.737	0.089	0.219	-3.821	2.751
BRO_P1	0.938	9.928	3.445	-0.111	-2.951	-5.463
BRO_P2	-6.081	5.604	-4.938	5.321	3.411	2.595
BRO_P3	-4.383	6.725	-1.566	-1.870	-3.884	-4.026
EPI_P1	-0.524	10.420	-1.120	7.643	1.507	4.893
EPI_P2	-1.392	6.695	1.719	-0.101	-6.970	-9.190
EPI_P3	-7.463	7.626	-5.682	2.727	-3.410	-2.531
ITL_P1	1.361	7.766	-1.935	-3.663	-7.515	-5.456
ITL_P2	-1.102	6.541	-4.063	-4.698	-2.981	-4.149
ITL_P3	-4.627	6.242	-5.776	3.851	1.219	0.311
ITL_P4	-1.482	7.792	-3.745	-0.335	-0.203	1.614
ITL_P5	-0.557	8.311	-4.631	3.114	4.138	7.456

Standardized Residuals

	FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
	--------	--------	--------	--------	--------	--------
FAC_P4	- -					
FAC_P5	4.552	- -				
INT_P1	-3.148	-1.094	- -			
INT_P2	-2.588	0.836	10.887	- -		
INT_P3	3.456	2.092	-5.520	2.291	- -	
INT_P4	6.509	6.034	2.507	1.930	-11.811	- -
INT_P5	3.412	4.205	-8.375	-6.501	9.263	2.900
INT_P6	-0.705	-0.529	4.297	4.458	-3.129	-4.712
IPR_P1	3.527	2.259	-3.604	-5.645	2.573	1.750
IPR_P2	5.601	1.404	-5.536	-9.781	-0.578	6.299
IPR_P3	5.275	6.593	-3.022	-3.776	-0.356	4.410
IPR_P4	-0.341	0.940	-3.109	-3.791	4.451	12.039
SOC_P1	2.937	2.302	-5.159	-5.161	6.370	2.013
SOC_P2	0.150	-0.778	-5.455	-4.592	8.372	2.781
WAR_P1	1.533	-0.328	-0.958	-3.089	11.172	3.277
WAR_P2	-1.238	-2.937	-4.895	-5.929	9.769	0.718
WAR_P3	1.044	-0.804	-8.425	-9.567	8.220	2.448
WAR_P4	9.243	8.028	-6.723	-6.449	3.999	6.821
WAR_P5	6.578	5.594	-7.057	-5.686	6.987	3.154
ARR_P1	-1.517	1.774	1.010	4.053	1.999	-5.773
ARR_P2	-5.440	-0.535	1.571	4.276	-1.040	-6.755
ARR_P3	-6.236	-2.752	1.019	1.489	0.668	-8.228
CON_P1	-5.145	-2.728	-4.860	1.550	6.465	-8.267
CON_P2	-3.841	-3.411	0.793	2.051	-0.567	-6.951
CON_P3	3.172	5.194	2.077	4.699	4.073	-2.673
HOS_P1	-0.443	2.555	1.829	7.909	6.101	-5.404
HOS_P2	4.230	5.709	1.990	5.306	4.371	-3.997
HOS_P3	-5.532	-3.531	2.593	3.242	-3.497	-6.363
HOS_P4	-4.577	-3.651	-1.464	-0.901	-4.996	-4.085
HOS_P5	-1.933	0.443	2.483	4.385	-0.312	-6.648
HOS_P6	-5.566	-1.317	-1.961	2.215	1.702	-3.909
HOS_P7	-0.774	0.244	-10.565	-4.651	2.107	-5.515
DEC_P1	1.389	2.039	-11.515	-3.867	0.958	0.976
DEC_P2	4.436	3.589	-7.661	-0.116	2.622	1.754
DEC_P3	-2.681	0.525	-6.579	4.483	2.790	-0.612
EMO_P1	4.623	2.724	7.520	4.964	5.022	5.291
EMO_P2	-4.597	-0.551	-2.113	-2.437	-2.815	2.765
EMO_P3	-2.345	-0.125	-3.636	-1.921	-3.228	2.961
EMO_P4	-1.709	2.062	-2.046	-0.547	-3.743	1.944
NEG_P1	3.868	0.930	-1.706	0.116	7.472	-2.890
NEG_P2	-3.231	-2.000	-12.045	-7.732	1.946	-7.038
NEG_P3	1.476	-0.290	-2.032	1.593	8.354	1.380
NEG_P4	10.676	8.930	2.539	6.879	15.185	4.920
NEG_P5	-5.768	-4.968	-9.371	-9.273	-4.570	-12.469
PLA_P1	-0.112	3.882	-6.478	-5.110	3.147	-3.048
PLA_P2	1.420	1.876	-3.863	-4.916	9.251	0.863
SOB_P1	-2.905	-1.447	-6.223	-7.617	1.941	-2.349
SOB_P2	2.795	4.126	0.860	4.438	11.408	5.824
SOB_P3	-1.999	-2.644	-3.753	-5.708	5.709	2.444
ACH_P1	-2.402	-2.583	1.354	2.974	0.292	-4.148
ACH_P2	-1.510	-1.032	-1.003	4.379	0.103	-5.243

ACH_P3	-4.479	-2.417	0.471	2.821	-3.319	0.974
ACH_P4	-7.870	-1.876	3.584	10.199	3.469	1.349
ACH_P5	0.320	0.581	-4.829	-2.379	-0.785	-6.581
ORD_P1	-2.813	-3.775	5.429	2.167	-5.606	-1.336
ORD_P2	-4.778	-2.700	4.036	5.318	-3.673	-7.513
ORD_P3	4.367	6.211	4.008	7.304	-3.085	0.261
ORD_P4	-0.234	-1.016	4.656	10.485	1.663	-0.821
ORD_P5	1.514	1.800	-2.025	-1.379	-5.547	-3.352
ORD_P6	-2.912	-1.616	-0.102	0.592	-7.699	-6.139
TRA_P1	1.075	-3.085	-3.165	-3.531	2.434	-0.129
TRA_P2	3.939	-3.501	-4.134	-6.404	5.284	2.475
BRO_P1	-2.384	1.362	-4.387	-2.622	3.813	-0.760
BRO_P2	2.750	5.303	-2.604	-2.455	1.335	1.112
BRO_P3	-4.439	2.112	-2.091	0.052	3.813	2.234
EPI_P1	3.313	6.924	3.901	3.818	3.654	4.472
EPI_P2	-4.576	4.487	-7.224	-1.674	-1.950	-4.488
EPI_P3	-1.761	7.953	-3.031	2.175	-0.865	0.551
ITL_P1	-7.492	-0.086	-2.798	-1.308	-0.885	-0.997
ITL_P2	-7.500	0.885	2.350	6.497	-1.035	1.996
ITL_P3	0.438	5.091	-2.908	0.082	-6.957	-0.173
ITL_P4	-2.094	4.565	0.176	2.161	-1.722	-0.409
ITL_P5	-0.133	6.532	1.595	3.041	1.022	-2.428

Standardized Residuals

	INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
INT_P5	- -					
INT_P6	-0.531	- -				
IPR_P1	2.998	-5.701	- -			
IPR_P2	1.177	-6.893	-2.653	- -		
IPR_P3	4.455	0.261	-3.578	6.345	- -	
IPR_P4	10.843	0.711	-4.118	1.175	1.247	- -
SOC_P1	4.486	-4.888	5.053	-2.888	1.054	-1.720
SOC_P2	7.652	-3.233	3.287	-3.849	-1.630	0.550
WAR_P1	7.412	-5.130	-0.003	-1.177	-5.230	-0.285
WAR_P2	4.834	-8.100	0.347	-0.719	-2.200	-1.154
WAR_P3	7.530	-7.990	-5.593	-3.227	-4.115	0.123
WAR_P4	12.517	-4.090	3.014	4.668	7.411	1.433
WAR_P5	7.982	-3.883	-1.342	1.406	1.306	2.227
ARR_P1	-0.975	3.596	3.866	4.626	6.746	-3.343
ARR_P2	-4.576	3.284	-1.577	0.176	6.377	-6.676
ARR_P3	-2.479	1.774	-1.651	-2.915	0.341	-8.312
CON_P1	6.173	0.694	1.519	-2.700	1.504	-3.774
CON_P2	-1.122	-3.889	-1.772	-1.208	0.668	-5.867
CON_P3	2.694	-0.843	3.519	5.425	5.889	-0.749
HOS_P1	3.427	6.165	2.788	0.058	7.107	-1.812
HOS_P2	0.636	3.614	4.286	0.854	5.357	1.128
HOS_P3	-2.994	1.970	-3.227	-4.648	1.528	-8.161
HOS_P4	-4.529	0.610	-3.234	-0.401	0.194	-7.119
HOS_P5	-2.818	1.498	1.686	1.246	5.071	-5.111
HOS_P6	1.816	3.366	-0.553	-2.108	0.859	-2.160
HOS_P7	-0.406	-4.250	2.430	4.828	4.433	1.544
DEC_P1	4.214	-3.324	-0.313	3.922	2.194	1.808
DEC_P2	4.935	0.870	4.213	4.509	4.675	2.614
DEC_P3	7.241	3.547	-5.718	-3.319	-1.097	-6.482
EMO_P1	1.358	6.680	3.639	2.335	-0.336	3.131
EMO_P2	-1.678	-1.697	0.064	-0.874	-2.749	0.425
EMO_P3	-2.094	-0.820	-1.552	2.392	-1.793	2.143
EMO_P4	-3.332	1.836	-2.729	-1.438	-0.313	0.046
NEG_P1	4.546	0.740	0.229	-1.326	2.814	-0.763
NEG_P2	2.059	-5.236	-2.724	-2.974	-2.332	-1.632
NEG_P3	10.553	3.661	1.292	1.915	3.259	4.083
NEG_P4	15.583	9.708	7.073	6.140	11.120	10.759
NEG_P5	-6.122	-8.507	-8.578	-9.883	-5.386	-10.698
PLA_P1	2.030	-5.740	2.347	-3.732	0.705	-3.166
PLA_P2	7.748	-2.390	5.690	-2.468	-0.555	-0.651
SOB_P1	0.111	-9.986	6.920	-7.601	-5.847	-6.093
SOB_P2	9.839	1.461	13.355	1.067	3.136	2.602
SOB_P3	3.858	-6.278	5.757	-3.392	-4.143	-3.102
ACH_P1	-5.395	0.739	2.568	-3.269	-0.128	-0.411
ACH_P2	-8.655	1.664	0.997	-1.106	-1.937	-1.148
ACH_P3	-4.202	3.456	0.007	-0.015	2.180	0.716
ACH_P4	1.718	10.732	-0.911	-4.361	1.153	0.507
ACH_P5	-5.209	0.899	1.834	-0.789	2.135	0.736
ORD_P1	-5.175	4.441	-1.546	2.061	0.894	-1.314
ORD_P2	-9.494	3.898	-3.360	-7.401	-2.156	-2.756

ORD_P3	-3.146	7.616	2.776	0.525	8.046	3.955
ORD_P4	-2.451	8.631	0.626	-3.066	2.829	2.134
ORD_P5	-5.416	1.414	0.608	0.250	3.176	1.209
ORD_P6	-8.081	3.597	-1.795	-1.614	1.400	-1.656
TRA_P1	0.965	-0.032	-2.301	1.739	-6.170	-1.091
TRA_P2	1.987	1.672	-0.807	3.524	-3.557	2.007
BRO_P1	2.960	-1.771	1.008	-3.604	-0.185	0.774
BRO_P2	1.052	-3.376	2.963	-0.836	0.939	-0.929
BRO_P3	4.423	1.225	2.136	-4.961	0.579	1.330
EPI_P1	4.186	5.344	5.289	1.049	5.849	4.060
EPI_P2	1.098	-3.941	-1.726	-8.981	1.425	0.076
EPI_P3	0.035	1.095	-0.759	-6.101	2.503	2.251
ITL_P1	-0.228	0.644	1.329	-5.976	1.021	-1.159
ITL_P2	-0.450	3.489	-0.980	-6.002	0.955	-4.355
ITL_P3	-4.931	-3.860	0.630	-0.909	4.125	-3.809
ITL_P4	-1.883	3.109	1.641	-3.225	6.485	-1.288
ITL_P5	0.240	3.981	3.719	-1.142	4.601	0.547

Standardized Residuals

	SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
SOC_P1	- -					
SOC_P2	0.000	0.000				
WAR_P1	-3.349	-0.833	- -			
WAR_P2	1.396	4.054	8.747	- -		
WAR_P3	-3.309	2.391	1.368	2.331	0.000	
WAR_P4	2.675	2.358	-3.655	-4.425	-4.039	- -
WAR_P5	-3.629	-2.021	2.709	-2.200	-0.661	-0.126
ARR_P1	6.060	-0.417	2.504	0.462	-2.562	8.082
ARR_P2	1.383	-5.271	-2.801	-4.269	-5.733	3.124
ARR_P3	0.620	-3.020	-2.007	-3.382	-3.803	0.486
CON_P1	1.223	1.713	-0.669	0.185	0.257	0.112
CON_P2	-2.127	-4.349	-5.454	-0.927	-3.301	-3.369
CON_P3	4.268	0.166	1.411	3.137	0.607	2.445
HOS_P1	5.404	2.808	2.917	2.907	3.303	6.142
HOS_P2	4.670	2.774	2.162	0.326	0.385	4.290
HOS_P3	-3.520	-5.533	-3.832	-2.483	-4.875	-2.114
HOS_P4	-2.838	-4.977	-7.370	-5.599	-7.947	-2.494
HOS_P5	2.866	-2.961	-1.637	-1.950	-3.325	0.830
HOS_P6	-1.302	-0.738	-2.473	-1.588	-1.641	0.340
HOS_P7	3.039	2.927	2.103	5.212	5.057	2.895
DEC_P1	-0.622	0.850	-1.383	1.150	2.121	0.569
DEC_P2	7.687	4.626	2.857	1.466	3.553	3.963
DEC_P3	-4.824	-2.700	-4.437	-4.933	0.023	-3.522
EMO_P1	4.038	0.558	6.312	2.669	-0.436	5.827
EMO_P2	0.971	-1.690	0.812	-0.393	-3.334	4.116
EMO_P3	0.954	-0.747	-1.449	-0.729	-5.637	3.251
EMO_P4	1.155	-4.260	-2.691	-3.813	-5.419	2.245
NEG_P1	-0.690	3.624	1.636	3.315	3.386	-3.000
NEG_P2	-5.025	-0.490	-4.989	-1.299	-0.672	-4.944
NEG_P3	-1.861	3.792	2.273	3.846	8.455	1.025
NEG_P4	8.940	14.227	9.250	10.338	14.344	7.443
NEG_P5	-10.714	-8.181	-13.411	-9.514	-8.897	-13.713
PLA_P1	-2.550	-6.162	-4.917	-3.135	-6.182	0.297
PLA_P2	0.672	2.451	-0.494	1.478	-4.432	6.054
SOB_P1	-0.702	-5.863	-3.928	-2.191	-11.397	2.283
SOB_P2	8.915	4.484	5.618	6.402	-0.885	11.190
SOB_P3	0.232	-8.434	-2.426	0.362	-8.523	4.894
ACH_P1	1.692	-2.327	1.832	-2.649	-4.447	-0.059
ACH_P2	1.583	-0.160	2.240	-2.057	-4.624	1.379
ACH_P3	-1.240	-2.973	1.793	-2.681	-4.484	4.449
ACH_P4	0.124	-1.798	2.678	-1.407	-1.955	3.685
ACH_P5	4.190	-1.096	0.369	-4.484	-8.427	4.481
ORD_P1	-0.468	-2.689	1.933	1.287	-2.581	0.427
ORD_P2	-1.567	-1.428	-0.629	-3.177	-5.886	-4.387
ORD_P3	4.143	3.051	3.284	0.808	0.958	5.156
ORD_P4	3.317	1.804	2.414	0.871	-1.983	1.644
ORD_P5	1.093	-0.464	1.453	-0.812	-1.369	3.559
ORD_P6	-1.850	-2.888	-1.000	-3.899	-5.779	-1.064
TRA_P1	-1.557	-2.011	0.723	-1.528	-5.591	-2.179
TRA_P2	-1.101	1.779	2.038	0.378	-3.642	-2.186
BRO_P1	-0.405	2.169	-1.026	0.757	-2.485	3.098
BRO_P2	-0.368	-1.489	-1.567	-1.505	-6.703	5.735
BRO_P3	0.411	0.407	-0.932	-1.515	-5.328	4.033
EPI_P1	1.646	2.730	4.667	3.562	2.251	6.036
EPI_P2	-1.842	0.314	-4.003	-3.826	-3.818	0.041

EPI_P3	-1.576	0.919	-1.058	-3.351	-2.782	3.607
ITL_P1	2.766	-0.246	0.164	-2.121	-3.945	4.602
ITL_P2	-1.408	-5.470	-2.894	-6.504	-4.622	2.099
ITL_P3	-0.888	-7.624	-2.931	-3.175	-5.958	5.698
ITL_P4	4.192	-0.451	-0.362	-2.840	-2.462	5.808
ITL_P5	6.111	0.080	1.330	-1.027	-3.571	5.341

Standardized Residuals

	WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
WAR_P5	- -					
ARR_P1	5.519	- -				
ARR_P2	2.673	- -	- -			
ARR_P3	-0.558	-0.172	-0.307	- -		
CON_P1	2.253	-2.464	-8.679	0.327	- -	
CON_P2	1.096	-0.267	0.160	0.433	-6.362	- -
CON_P3	4.616	3.914	2.365	5.536	0.578	5.196
HOS_P1	7.587	-2.739	-3.419	-3.452	9.570	0.717
HOS_P2	5.995	3.040	-0.498	-1.639	1.941	0.260
HOS_P3	1.141	-2.766	1.666	1.025	-9.451	8.798
HOS_P4	-4.352	6.210	8.743	7.279	-7.883	-5.348
HOS_P5	1.650	1.759	6.923	3.350	-8.296	6.978
HOS_P6	-0.663	-5.453	-5.548	0.601	0.345	-4.669
HOS_P7	7.320	-9.031	-9.965	-2.744	6.270	3.384
DEC_P1	2.822	-4.137	-2.157	-1.663	3.094	3.668
DEC_P2	3.667	1.775	-0.642	2.295	6.027	0.658
DEC_P3	-1.934	0.615	2.384	4.147	1.227	-0.403
EMO_P1	5.092	-0.536	-6.144	-5.552	-5.404	-8.171
EMO_P2	0.250	1.560	-1.063	-3.234	0.242	-1.518
EMO_P3	0.438	2.944	0.575	-1.515	1.948	0.775
EMO_P4	0.426	4.459	2.058	-0.841	0.149	-1.166
NEG_P1	2.779	-2.549	-2.785	1.185	0.883	-1.038
NEG_P2	-4.717	3.110	1.919	7.132	9.522	2.252
NEG_P3	2.205	-8.135	-10.196	-2.066	-1.071	-11.657
NEG_P4	9.666	-7.416	-8.794	-1.735	-0.541	-10.234
NEG_P5	-10.510	11.622	12.585	12.927	12.999	17.251
PLA_P1	0.035	6.904	4.490	1.659	9.567	0.547
PLA_P2	2.736	1.935	-4.122	-3.657	7.746	-9.234
SOB_P1	-5.146	7.290	3.149	-0.691	4.605	2.421
SOB_P2	4.330	-1.365	-8.682	-5.991	-2.044	-12.051
SOB_P3	-0.763	5.573	-0.450	-1.508	0.174	-1.906
ACH_P1	0.433	1.396	-2.069	-1.359	-2.476	-0.424
ACH_P2	1.193	1.013	-1.956	-4.555	-2.616	-2.599
ACH_P3	3.149	1.544	-3.562	-4.533	-5.846	-3.968
ACH_P4	5.702	-3.012	-7.007	-5.989	-3.721	-5.164
ACH_P5	4.415	11.937	6.024	1.952	3.016	3.806
ORD_P1	1.489	-0.847	-5.526	-1.956	-5.237	-2.550
ORD_P2	0.511	2.583	0.594	0.635	-2.005	3.672
ORD_P3	5.303	3.673	0.717	0.394	-0.700	-0.136
ORD_P4	3.686	-1.439	-4.085	-2.145	-4.976	-2.275
ORD_P5	5.518	1.505	-2.861	-0.039	-2.338	0.969
ORD_P6	1.997	3.384	0.298	3.046	-1.954	1.294
TRA_P1	1.785	3.999	0.120	1.216	1.324	0.688
TRA_P2	5.160	3.292	-2.919	-1.375	0.388	-0.790
BRO_P1	2.179	-1.069	-4.129	-2.943	3.491	-3.221
BRO_P2	4.454	5.993	2.607	0.416	-1.639	1.686
BRO_P3	1.252	0.880	-2.072	-4.305	0.480	-5.308
EPI_P1	3.656	-5.058	-8.233	-7.170	-4.072	-9.792
EPI_P2	-0.372	0.776	1.781	1.460	9.772	0.670
EPI_P3	2.286	2.932	4.202	-0.834	2.621	-3.967
ITL_P1	1.902	-1.704	-2.446	-4.052	-0.836	-2.624
ITL_P2	0.140	2.144	0.025	-0.626	2.565	0.129
ITL_P3	3.136	5.373	2.564	-2.230	-1.718	1.864
ITL_P4	2.753	-0.113	-0.676	-3.233	-1.570	-3.316
ITL_P5	3.260	1.859	-0.474	-1.883	-4.127	-3.992

Standardized Residuals

	CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
CON_P3	- -					
HOS_P1	3.408	- -				
HOS_P2	3.199	6.153	- -			
HOS_P3	-2.473	-3.568	3.032	- -		
HOS_P4	-5.381	-8.086	-7.092	4.288	- -	
HOS_P5	0.541	0.065	2.587	8.903	1.920	- -

HOS_P6	-4.838	3.964	0.318	-0.937	2.906	-3.391
HOS_P7	2.882	4.456	-1.249	-7.944	-7.054	-4.203
DEC_P1	-1.613	-1.168	-2.369	-3.441	-3.004	-6.613
DEC_P2	-3.324	-0.466	-0.686	-4.624	-1.549	-3.647
DEC_P3	-7.931	-1.034	-4.989	-0.401	1.571	-1.610
EMO_P1	-1.745	-4.236	1.181	-10.939	-3.099	-4.314
EMO_P2	1.751	-1.895	3.030	-4.774	2.370	4.436
EMO_P3	6.348	2.503	4.474	-3.601	2.134	5.502
EMO_P4	3.215	0.831	4.869	-2.794	2.736	5.596
NEG_P1	-4.724	2.019	-1.933	1.611	-5.790	-7.404
NEG_P2	-1.279	5.916	-0.265	1.158	-0.800	0.109
NEG_P3	-13.936	-5.813	-11.969	-7.807	-8.321	-16.074
NEG_P4	-10.987	-5.317	-10.487	-8.556	-9.820	-15.339
NEG_P5	10.464	14.799	6.345	16.872	9.279	10.731
PLA_P1	4.260	6.982	6.352	0.658	-1.768	6.424
PLA_P2	-2.834	2.748	3.093	-6.890	-6.113	-1.440
SOB_P1	8.077	9.973	9.340	2.219	-2.168	7.414
SOB_P2	-3.595	-1.066	1.293	-9.660	-10.322	-6.877
SOB_P3	5.142	2.382	6.001	-2.800	-2.921	2.943
ACH_P1	4.957	3.230	4.265	-2.014	-1.592	1.180
ACH_P2	4.470	2.799	5.345	-3.815	-3.157	-0.587
ACH_P3	0.189	-0.792	4.223	-4.128	-1.576	-1.414
ACH_P4	-2.284	0.941	-0.036	-3.426	-4.396	-4.789
ACH_P5	8.561	7.768	10.986	1.663	3.955	5.977
ORD_P1	-2.292	-2.605	-4.141	-2.454	1.333	-6.354
ORD_P2	3.212	4.691	3.549	2.709	0.553	2.846
ORD_P3	4.444	5.136	5.439	2.687	0.680	2.757
ORD_P4	-0.005	0.059	0.452	-1.086	-1.566	-3.699
ORD_P5	1.547	0.669	1.008	0.786	1.096	-0.808
ORD_P6	3.377	2.596	2.229	2.822	3.354	1.135
TRA_P1	2.193	1.515	4.380	0.478	0.622	1.520
TRA_P2	-0.329	-0.095	3.921	-2.440	-0.976	-2.253
BRO_P1	1.604	2.432	3.565	-5.244	-3.295	-1.731
BRO_P2	5.530	1.732	5.994	-0.750	0.658	3.500
BRO_P3	-1.451	0.630	2.001	-6.103	-3.111	-1.540
EPI_P1	-5.179	-1.467	-2.445	-11.270	-7.679	-8.529
EPI_P2	4.303	8.915	5.549	-1.648	-2.918	3.638
EPI_P3	2.563	4.592	2.705	-4.307	-2.904	0.198
ITL_P1	-0.323	2.272	3.629	-4.500	-2.584	1.425
ITL_P2	3.036	4.844	4.654	-0.478	-3.011	3.155
ITL_P3	6.368	3.902	5.667	0.353	0.282	6.646
ITL_P4	1.740	2.235	3.537	-3.660	-2.537	0.760
ITL_P5	4.567	1.367	3.940	-4.461	-4.405	-0.251

Standardized Residuals

	HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
HOS_P6	- -					
HOS_P7	8.084	- -				
DEC_P1	3.255	16.694	- -			
DEC_P2	1.457	9.370	1.329	- -		
DEC_P3	2.151	5.453	-4.192	2.905	- -	
EMO_P1	-4.738	-5.560	-8.679	-3.779	-15.923	- -
EMO_P2	-1.170	-1.704	0.355	7.582	4.634	-6.167
EMO_P3	0.572	0.056	0.907	5.477	1.004	-3.544
EMO_P4	-1.479	-2.445	-0.236	5.695	2.543	-4.221
NEG_P1	4.255	3.819	-3.738	-5.490	-9.009	5.396
NEG_P2	7.483	9.098	7.975	7.652	11.316	-8.531
NEG_P3	-0.880	-2.318	-8.448	-4.142	-5.916	1.000
NEG_P4	-1.013	-1.741	-8.762	-3.959	-6.787	5.124
NEG_P5	14.671	15.284	10.008	3.403	9.332	-8.378
PLA_P1	2.674	3.551	5.287	5.012	2.130	-4.008
PLA_P2	-0.438	1.137	-0.171	4.053	-6.305	0.653
SOB_P1	3.179	3.336	8.794	8.360	-3.188	1.057
SOB_P2	-5.191	-2.831	-1.875	5.418	-11.419	7.539
SOB_P3	-3.151	-0.210	4.045	6.827	-8.504	4.043
ACH_P1	-1.718	-4.847	-1.746	1.515	-2.495	11.046
ACH_P2	-3.112	-4.735	0.097	1.348	-5.467	14.807
ACH_P3	-4.518	-7.213	0.122	1.951	-4.028	10.116
ACH_P4	-1.146	-6.860	-2.485	1.416	-0.176	6.125
ACH_P5	2.486	0.666	5.892	7.004	0.368	13.852
ORD_P1	-2.975	-9.281	-2.445	-0.289	-1.627	7.002
ORD_P2	0.558	-6.027	-3.203	1.781	2.941	6.255
ORD_P3	0.204	-3.952	-0.497	0.970	-0.159	9.093
ORD_P4	-2.625	-7.841	-6.342	-1.248	-4.550	11.614
ORD_P5	0.492	-4.205	3.357	2.003	1.233	5.538

ORD_P6	0.444	-5.561	0.911	2.297	3.996	5.386
TRA_P1	-0.479	2.925	5.732	2.342	-3.183	9.199
TRA_P2	-1.411	3.557	5.476	1.851	-7.417	13.499
BRO_P1	2.435	1.986	2.875	2.571	1.123	0.515
BRO_P2	0.775	0.610	-0.992	1.276	-1.494	2.376
BRO_P3	-1.002	-1.975	-0.736	1.153	-2.449	3.524
EPI_P1	-2.531	-4.019	-7.459	-5.710	-8.405	13.130
EPI_P2	7.809	4.041	2.349	3.831	7.856	-4.104
EPI_P3	2.545	0.104	-1.188	0.277	1.545	2.785
ITL_P1	0.766	-1.926	-1.032	4.951	4.167	1.619
ITL_P2	0.879	-2.436	-1.315	4.556	5.997	-2.359
ITL_P3	-1.870	-3.099	1.266	3.192	3.273	-2.206
ITL_P4	-2.903	-4.048	-3.904	3.314	2.992	-2.087
ITL_P5	-3.873	-7.587	-8.323	-0.885	-8.119	5.793

Standardized Residuals

	EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
EMO_P2	- -					
EMO_P3	4.622	- -				
EMO_P4	1.425	2.816	- -			
NEG_P1	-6.252	-2.852	-7.322	- -		
NEG_P2	2.867	4.062	2.282	-9.612	- -	
NEG_P3	-0.604	0.352	3.103	-2.577	6.138	- -
NEG_P4	8.523	7.822	9.596	2.561	2.251	16.505
NEG_P5	-5.698	-3.660	-5.363	8.067	-3.072	-9.150
PLA_P1	2.299	-0.247	-4.402	-0.050	0.404	-3.028
PLA_P2	6.548	1.076	-4.228	-0.316	-0.499	-2.003
SOB_P1	-3.771	-4.944	-9.213	8.514	1.538	0.448
SOB_P2	7.400	3.382	3.234	-0.759	-4.963	-4.579
SOB_P3	2.013	-0.848	-3.517	2.702	-2.032	-3.707
ACH_P1	-7.994	-4.493	-0.988	3.271	-6.107	4.253
ACH_P2	-6.234	-2.632	-0.496	3.701	-7.984	-0.563
ACH_P3	-2.440	-2.828	-1.089	1.296	-6.078	1.867
ACH_P4	-6.175	-3.813	0.061	6.742	-2.219	8.007
ACH_P5	-5.333	-4.066	0.663	3.865	-3.915	1.696
ORD_P1	-5.470	-4.598	-2.741	4.131	-4.381	8.396
ORD_P2	-5.057	-2.902	0.330	3.704	-7.161	3.221
ORD_P3	-1.719	2.668	3.930	1.252	-6.534	1.663
ORD_P4	-2.666	0.989	4.003	1.197	-9.706	-0.010
ORD_P5	-5.105	-3.251	-1.109	5.321	-3.715	6.631
ORD_P6	-6.244	-3.382	-0.760	3.120	-7.562	3.700
TRA_P1	-3.334	-2.928	-3.502	3.488	-3.266	1.481
TRA_P2	-2.966	-1.971	-4.441	4.815	-6.065	1.658
BRO_P1	-1.793	-5.430	-4.029	5.897	1.872	4.339
BRO_P2	2.514	-0.932	-0.561	-0.754	-4.102	-4.910
BRO_P3	5.011	-0.044	-0.087	-1.260	-3.613	-1.827
EPI_P1	1.258	1.017	3.191	-4.122	-6.929	0.563
EPI_P2	-2.997	-4.678	-5.370	1.721	2.943	5.976
EPI_P3	0.550	0.658	1.150	-2.319	-3.692	1.220
ITL_P1	5.166	3.839	3.494	2.103	-1.094	-0.694
ITL_P2	-2.568	-2.505	-0.870	3.272	1.371	2.986
ITL_P3	-2.323	-2.101	-0.760	0.102	-2.719	-2.705
ITL_P4	-1.762	-2.985	0.355	1.097	-0.510	-0.091
ITL_P5	-1.777	-0.236	3.479	0.413	-7.177	-6.223

Standardized Residuals

	NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
NEG_P4	- -					
NEG_P5	-14.943	- -				
PLA_P1	4.639	0.084	- -			
PLA_P2	6.942	-3.998	0.000	- -		
SOB_P1	7.354	2.523	1.905	0.263	- -	
SOB_P2	6.217	-9.439	-2.082	-1.129	-2.264	- -
SOB_P3	3.749	-4.839	-2.116	1.905	12.120	-9.278
ACH_P1	7.701	-4.594	-1.868	-3.684	-2.943	-1.021
ACH_P2	3.885	-9.488	-1.991	-0.188	-2.060	2.785
ACH_P3	3.659	-7.896	-4.497	-2.065	-3.115	0.472
ACH_P4	10.830	-4.959	-3.390	-2.027	-5.822	0.986
ACH_P5	7.033	-3.617	3.066	8.460	4.344	6.654
ORD_P1	8.435	-5.166	-2.755	-0.712	-3.910	1.510
ORD_P2	6.622	-5.501	-3.153	-2.368	-5.277	0.804
ORD_P3	5.329	-6.053	2.798	4.575	1.380	5.345
ORD_P4	2.670	-9.201	-3.347	0.469	0.376	4.872

ORD_P5	9.727	-3.484	-0.465	2.302	-1.229	3.521
ORD_P6	5.954	-5.259	-2.149	-0.076	-4.650	2.156
TRA_P1	8.054	-5.727	-3.397	0.982	-0.910	2.276
TRA_P2	10.547	-10.062	-5.421	2.585	-3.146	1.140
BRO_P1	13.101	-0.606	4.212	-2.482	-1.445	0.164
BRO_P2	4.665	-3.923	0.914	-0.443	0.396	1.413
BRO_P3	6.417	-6.247	-0.608	1.019	-1.466	1.268
EPI_P1	3.870	-11.999	-3.496	-3.504	2.028	7.735
EPI_P2	13.851	-1.207	4.204	2.064	-2.167	3.551
EPI_P3	7.893	-9.467	-0.767	0.098	-3.444	4.149
ITL_P1	7.480	-3.312	0.384	2.140	-1.647	5.957
ITL_P2	10.659	-1.041	2.731	-3.698	-7.716	0.611
ITL_P3	5.286	-3.688	3.181	-3.121	-6.247	-2.078
ITL_P4	8.714	-2.116	3.695	-2.077	-2.819	4.198
ITL_P5	4.696	-6.367	6.955	0.119	7.193	12.342

Standardized Residuals

	SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
SOB_P3	- -					
ACH_P1	-4.894	- -				
ACH_P2	-1.036	7.506	- -			
ACH_P3	-2.068	-6.477	5.356	- -		
ACH_P4	-5.551	-6.828	-11.610	3.713	- -	
ACH_P5	7.117	2.019	1.379	-0.391	-4.677	- -
ORD_P1	-1.837	-5.530	-8.060	-4.934	-0.446	-8.654
ORD_P2	-3.271	1.023	-2.944	1.504	11.105	-6.344
ORD_P3	2.441	4.816	4.258	8.327	12.418	4.364
ORD_P4	0.947	7.653	7.798	10.351	15.903	4.242
ORD_P5	1.610	-5.450	-9.940	-1.781	1.566	-7.067
ORD_P6	-1.355	-4.516	-10.889	-3.782	4.093	-9.620
TRA_P1	1.378	0.017	0.837	-0.819	-2.431	4.229
TRA_P2	1.323	-2.316	-0.655	-0.063	-1.538	2.971
BRO_P1	-3.499	-1.562	-5.167	-8.429	-4.115	1.502
BRO_P2	2.046	3.884	-1.360	-1.284	0.537	10.653
BRO_P3	-0.059	0.162	-3.891	-2.892	0.018	4.611
EPI_P1	1.136	12.549	9.213	8.695	13.685	8.665
EPI_P2	-3.811	-5.256	-13.327	-12.772	-2.529	-9.278
EPI_P3	-3.477	1.108	-2.909	-0.457	7.945	0.495
ITL_P1	-0.069	-2.760	-5.092	-2.497	4.112	-0.336
ITL_P2	-8.215	0.482	-4.837	-4.878	3.474	-4.099
ITL_P3	-3.953	3.200	-2.986	-1.417	-1.346	2.499
ITL_P4	-4.249	-2.063	-5.299	-4.158	1.497	-1.713
ITL_P5	4.324	8.317	6.370	-0.115	3.786	7.037

Standardized Residuals

	ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
ORD_P1	- -					
ORD_P2	-8.092	- -				
ORD_P3	-7.364	1.530	- -			
ORD_P4	-10.171	10.444	0.991	- -		
ORD_P5	14.068	-7.011	-2.199	-15.012	- -	
ORD_P6	13.386	-1.593	-4.485	-13.843	14.187	- -
TRA_P1	9.725	-5.349	1.128	1.836	3.554	-0.264
TRA_P2	6.722	-6.981	1.372	1.353	3.554	-3.940
BRO_P1	-5.501	-3.453	2.661	-2.169	-0.748	-4.415
BRO_P2	-3.943	0.166	5.559	2.497	3.386	0.695
BRO_P3	-3.385	-0.793	5.075	0.961	1.737	-1.020
EPI_P1	5.432	6.809	10.580	9.977	4.564	5.068
EPI_P2	-10.863	-5.725	-0.240	-4.791	-5.164	-7.423
EPI_P3	-5.351	1.277	8.169	3.197	-0.863	-0.842
ITL_P1	-8.235	2.699	2.652	-0.604	-4.679	-4.455
ITL_P2	-5.138	3.153	6.160	1.250	-2.557	-0.630
ITL_P3	-11.691	-5.710	4.095	-2.766	-4.554	-7.700
ITL_P4	-6.136	3.902	7.175	0.508	-3.264	0.191
ITL_P5	-0.426	5.277	8.556	7.285	3.035	6.563

Standardized Residuals

	TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
TRA_P1	- -					
TRA_P2	- -	- -				
BRO_P1	-2.925	-0.148	- -			

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  BRO_P2     -1.780      0.469      5.946       - -
  BRO_P3     -3.203      0.927     -4.888     -2.158       - -
  EPI_P1      5.252      9.220     -0.840     -8.490     -2.475       - -
  EPI_P2     -8.180     -5.877     10.153      0.063      8.538     -8.528
  EPI_P3     -3.591      1.014     -5.512     -8.111      6.112       - -
  ITL_P1     -1.821      0.252     -3.038      1.481      3.862      6.004
  ITL_P2     -3.714     -4.178     -3.423     -3.082      2.043      4.574
  ITL_P3     -2.020     -0.089      5.161     17.294      4.796     -1.727
  ITL_P4     -2.011     -1.440     -6.012     -4.902     -4.080     -0.099
  ITL_P5      3.333      5.488     -6.373     -3.184     -6.556     -1.076

        Standardized Residuals

             EPI_P2     EPI_P3     ITL_P1     ITL_P2     ITL_P3     ITL_P4
            --------   --------   --------   --------   --------   --------
  EPI_P2       - -
  EPI_P3       - -        - -
  ITL_P1      2.501      4.234       - -
  ITL_P2      5.546      5.862      1.674       - -
  ITL_P3     -1.163      3.840     -3.115      1.221       - -
  ITL_P4     -4.606     -0.635      7.841      3.731     -0.633       - -
  ITL_P5     -9.467     -7.846     -4.407     -1.843     -4.699      1.707

        Standardized Residuals

             ITL_P5
            --------
  ITL_P5       - -

Summary Statistics for Standardized Residuals

Smallest Standardized Residual =  -19.685
  Median Standardized Residual =    0.000
 Largest Standardized Residual =   19.127

Stemleaf Plot

-18|7
-16|1
-14|9309
-12|9875543386521000
-10|877654443320999998776555322222221000000
- 8|998888777666655555544433333222222210009887777766655555554444444443333322+19
- 6|9999999888777777666666555555544444444433322222222211111111000000000099999998+71
- 4|99999998888888888777777777777776666666666666555555555555555555555555544444+92
- 2|9999999999999999999999999998888888888888888888888888877777777777777777777666+94
- 0|99999999999999999999888888888888888888888887777777777777777777777777777766666+96
  0|111111111111111111111111111111111112222222222222222222222222222222333333333+93
  2|000000000000000000000111111111111111111111111222222222222222222222222223333+98
  4|000000000000000000011111111111111111112222222222222222222222333333333333333+98
  6|00000000000000011111111122222222223333333344444444455555555666666667777777777+84
  8|00000001111122333333444444555555666777777788888999990001122222333333445566610
 10|0001222222334445555667777788890011122234669
 12|01333445569011244567 99
 14|1223678802369
 16|257933
 18|91
Largest Negative Standardized Residuals
Residual for   EMP_P3 and   EMP_P2  -8.388
Residual for   FAC_P2 and   EMP_P1  -5.315
Residual for   FAC_P2 and   EMP_P3 -10.196
Residual for   FAC_P2 and   FAC_P1  -3.536
Residual for   FAC_P3 and   EMP_P1  -6.817
Residual for   FAC_P3 and   EMP_P3  -9.735
Residual for   FAC_P3 and   FAC_P1  -9.958
Residual for   FAC_P4 and   FAC_P2  -6.883
Residual for   FAC_P4 and   FAC_P3  -7.409
Residual for   FAC_P5 and   EMP_P3  -2.859
Residual for   FAC_P5 and   FAC_P2  -5.674
Residual for   FAC_P5 and   FAC_P3  -9.826
Residual for   INT_P1 and   EMP_P1 -10.934
Residual for   INT_P1 and   EMP_P3 -12.627
Residual for   INT_P1 and   FAC_P2  -6.233
Residual for   INT_P1 and   FAC_P4  -3.148
Residual for   INT_P2 and   EMP_P1 -10.830
Residual for   INT_P2 and   EMP_P3 -10.501
Residual for   INT_P2 and   FAC_P2  -7.309
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Residual for   INT_P2 and   FAC_P4  -2.588
Residual for   INT_P3 and   INT_P1  -5.520
Residual for   INT_P4 and   INT_P3 -11.811
Residual for   INT_P5 and   FAC_P2  -3.789
Residual for   INT_P5 and   INT_P1  -8.375
Residual for   INT_P5 and   INT_P2  -6.501
Residual for   INT_P6 and   EMP_P1  -8.050
Residual for   INT_P6 and   EMP_P3  -9.262
Residual for   INT_P6 and   FAC_P2  -8.573
Residual for   INT_P6 and   INT_P3  -3.129
Residual for   INT_P6 and   INT_P4  -4.712
Residual for   IPR_P1 and   EMP_P3  -3.872
Residual for   IPR_P1 and   INT_P1  -3.604
Residual for   IPR_P1 and   INT_P2  -5.645
Residual for   IPR_P1 and   INT_P6  -5.701
Residual for   IPR_P2 and   EMP_P1  -3.502
Residual for   IPR_P2 and   EMP_P3  -4.582
Residual for   IPR_P2 and   INT_P1  -5.536
Residual for   IPR_P2 and   INT_P2  -9.781
Residual for   IPR_P2 and   INT_P6  -6.893
Residual for   IPR_P2 and   IPR_P1  -2.653
Residual for   IPR_P3 and   EMP_P1  -3.326
Residual for   IPR_P3 and   EMP_P3  -7.031
Residual for   IPR_P3 and   FAC_P3  -2.698
Residual for   IPR_P3 and   INT_P1  -3.022
Residual for   IPR_P3 and   INT_P2  -3.776
Residual for   IPR_P3 and   IPR_P1  -3.578
Residual for   IPR_P4 and   FAC_P1  -2.915
Residual for   IPR_P4 and   FAC_P2 -13.280
Residual for   IPR_P4 and   FAC_P3 -11.359
Residual for   IPR_P4 and   INT_P1  -3.109
Residual for   IPR_P4 and   INT_P2  -3.791
Residual for   IPR_P4 and   IPR_P1  -4.118
Residual for   SOC_P1 and   EMP_P1  -3.863
Residual for   SOC_P1 and   EMP_P3 -10.886
Residual for   SOC_P1 and   INT_P1  -5.159
Residual for   SOC_P1 and   INT_P2  -5.161
Residual for   SOC_P1 and   INT_P6  -4.888
Residual for   SOC_P1 and   IPR_P2  -2.888
Residual for   SOC_P2 and   FAC_P2  -5.086
Residual for   SOC_P2 and   FAC_P3  -7.180
Residual for   SOC_P2 and   INT_P1  -5.455
Residual for   SOC_P2 and   INT_P2  -4.592
Residual for   SOC_P2 and   INT_P6  -3.233
Residual for   SOC_P2 and   IPR_P2  -3.849
Residual for   WAR_P1 and   EMP_P1  -3.763
Residual for   WAR_P1 and   EMP_P3  -3.881
Residual for   WAR_P1 and   FAC_P2  -9.178
Residual for   WAR_P1 and   FAC_P3  -4.602
Residual for   WAR_P1 and   INT_P2  -3.089
Residual for   WAR_P1 and   INT_P6  -5.130
Residual for   WAR_P1 and   IPR_P3  -5.230
Residual for   WAR_P1 and   SOC_P1  -3.349
Residual for   WAR_P2 and   FAC_P2  -7.102
Residual for   WAR_P2 and   FAC_P3  -7.586
Residual for   WAR_P2 and   FAC_P5  -2.937
Residual for   WAR_P2 and   INT_P1  -4.895
Residual for   WAR_P2 and   INT_P2  -5.929
Residual for   WAR_P2 and   INT_P6  -8.100
Residual for   WAR_P3 and   FAC_P2 -13.525
Residual for   WAR_P3 and   FAC_P3 -12.154
Residual for   WAR_P3 and   INT_P1  -8.425
Residual for   WAR_P3 and   INT_P2  -9.567
Residual for   WAR_P3 and   INT_P6  -7.990
Residual for   WAR_P3 and   IPR_P1  -5.593
Residual for   WAR_P3 and   IPR_P2  -3.227
Residual for   WAR_P3 and   IPR_P3  -4.115
Residual for   WAR_P3 and   SOC_P1  -3.309
Residual for   WAR_P4 and   EMP_P1  -8.067
Residual for   WAR_P4 and   EMP_P3 -11.253
Residual for   WAR_P4 and   INT_P1  -6.723
Residual for   WAR_P4 and   INT_P2  -6.449
Residual for   WAR_P4 and   INT_P6  -4.090
Residual for   WAR_P4 and   WAR_P1  -3.655
Residual for   WAR_P4 and   WAR_P2  -4.425
Residual for   WAR_P4 and   WAR_P3  -4.039
Residual for   WAR_P5 and   EMP_P1  -4.824
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Residual for   WAR_P5 and   EMP_P3  -6.037
Residual for   WAR_P5 and   INT_P1  -7.057
Residual for   WAR_P5 and   INT_P2  -5.686
Residual for   WAR_P5 and   INT_P6  -3.883
Residual for   WAR_P5 and   SOC_P1  -3.629
Residual for   ARR_P1 and   INT_P4  -5.773
Residual for   ARR_P1 and   IPR_P4  -3.343
Residual for   ARR_P2 and   EMP_P2  -4.767
Residual for   ARR_P2 and   FAC_P1  -6.424
Residual for   ARR_P2 and   FAC_P4  -5.440
Residual for   ARR_P2 and   INT_P4  -6.755
Residual for   ARR_P2 and   INT_P5  -4.576
Residual for   ARR_P2 and   IPR_P4  -6.676
Residual for   ARR_P2 and   SOC_P2  -5.271
Residual for   ARR_P2 and   WAR_P1  -2.801
Residual for   ARR_P2 and   WAR_P2  -4.269
Residual for   ARR_P2 and   WAR_P3  -5.733
Residual for   ARR_P3 and   EMP_P2  -4.405
Residual for   ARR_P3 and   FAC_P1  -5.538
Residual for   ARR_P3 and   FAC_P4  -6.236
Residual for   ARR_P3 and   FAC_P5  -2.752
Residual for   ARR_P3 and   INT_P4  -8.228
Residual for   ARR_P3 and   IPR_P2  -2.915
Residual for   ARR_P3 and   IPR_P4  -8.312
Residual for   ARR_P3 and   SOC_P2  -3.020
Residual for   ARR_P3 and   WAR_P2  -3.382
Residual for   ARR_P3 and   WAR_P3  -3.803
Residual for   CON_P1 and   FAC_P1  -5.989
Residual for   CON_P1 and   FAC_P3  -5.591
Residual for   CON_P1 and   FAC_P4  -5.145
Residual for   CON_P1 and   FAC_P5  -2.728
Residual for   CON_P1 and   INT_P1  -4.860
Residual for   CON_P1 and   INT_P4  -8.267
Residual for   CON_P1 and   IPR_P2  -2.700
Residual for   CON_P1 and   IPR_P4  -3.774
Residual for   CON_P1 and   ARR_P2  -8.679
Residual for   CON_P2 and   EMP_P2  -9.446
Residual for   CON_P2 and   FAC_P1  -4.906
Residual for   CON_P2 and   FAC_P3  -3.326
Residual for   CON_P2 and   FAC_P4  -3.841
Residual for   CON_P2 and   FAC_P5  -3.411
Residual for   CON_P2 and   INT_P4  -6.951
Residual for   CON_P2 and   INT_P6  -3.889
Residual for   CON_P2 and   IPR_P4  -5.867
Residual for   CON_P2 and   SOC_P2  -4.349
Residual for   CON_P2 and   WAR_P1  -5.454
Residual for   CON_P2 and   WAR_P3  -3.301
Residual for   CON_P2 and   WAR_P4  -3.369
Residual for   CON_P2 and   CON_P1  -6.362
Residual for   CON_P3 and   EMP_P2  -4.490
Residual for   CON_P3 and   INT_P4  -2.673
Residual for   HOS_P1 and   INT_P4  -5.404
Residual for   HOS_P1 and   ARR_P1  -2.739
Residual for   HOS_P1 and   ARR_P2  -3.419
Residual for   HOS_P1 and   ARR_P3  -3.452
Residual for   HOS_P2 and   INT_P4  -3.997
Residual for   HOS_P3 and   EMP_P2  -9.602
Residual for   HOS_P3 and   FAC_P1  -5.272
Residual for   HOS_P3 and   FAC_P3  -3.717
Residual for   HOS_P3 and   FAC_P4  -5.532
Residual for   HOS_P3 and   FAC_P5  -3.531
Residual for   HOS_P3 and   INT_P3  -3.497
Residual for   HOS_P3 and   INT_P4  -6.363
Residual for   HOS_P3 and   INT_P5  -2.994
Residual for   HOS_P3 and   IPR_P1  -3.227
Residual for   HOS_P3 and   IPR_P2  -4.648
Residual for   HOS_P3 and   IPR_P4  -8.161
Residual for   HOS_P3 and   SOC_P1  -3.520
Residual for   HOS_P3 and   SOC_P2  -5.533
Residual for   HOS_P3 and   WAR_P1  -3.832
Residual for   HOS_P3 and   WAR_P3  -4.875
Residual for   HOS_P3 and   ARR_P1  -2.766
Residual for   HOS_P3 and   CON_P1  -9.451
Residual for   HOS_P3 and   HOS_P1  -3.568
Residual for   HOS_P4 and   EMP_P1  -7.269
Residual for   HOS_P4 and   EMP_P2 -10.222
Residual for   HOS_P4 and   EMP_P3  -3.777
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Residual for   HOS_P4 and   FAC_P1  -6.313
Residual for   HOS_P4 and   FAC_P4  -4.577
Residual for   HOS_P4 and   FAC_P5  -3.651
Residual for   HOS_P4 and   INT_P3  -4.996
Residual for   HOS_P4 and   INT_P4  -4.085
Residual for   HOS_P4 and   INT_P5  -4.529
Residual for   HOS_P4 and   IPR_P1  -3.234
Residual for   HOS_P4 and   IPR_P4  -7.119
Residual for   HOS_P4 and   SOC_P1  -2.838
Residual for   HOS_P4 and   SOC_P2  -4.977
Residual for   HOS_P4 and   WAR_P1  -7.370
Residual for   HOS_P4 and   WAR_P2  -5.599
Residual for   HOS_P4 and   WAR_P3  -7.947
Residual for   HOS_P4 and   WAR_P5  -4.352
Residual for   HOS_P4 and   CON_P1  -7.883
Residual for   HOS_P4 and   CON_P2  -5.348
Residual for   HOS_P4 and   CON_P3  -5.381
Residual for   HOS_P4 and   HOS_P1  -8.086
Residual for   HOS_P4 and   HOS_P2  -7.092
Residual for   HOS_P5 and   EMP_P2  -7.484
Residual for   HOS_P5 and   INT_P4  -6.648
Residual for   HOS_P5 and   INT_P5  -2.818
Residual for   HOS_P5 and   IPR_P4  -5.111
Residual for   HOS_P5 and   SOC_P2  -2.961
Residual for   HOS_P5 and   WAR_P3  -3.325
Residual for   HOS_P5 and   CON_P1  -8.296
Residual for   HOS_P6 and   FAC_P1  -5.047
Residual for   HOS_P6 and   FAC_P3  -5.792
Residual for   HOS_P6 and   FAC_P4  -5.566
Residual for   HOS_P6 and   INT_P4  -3.909
Residual for   HOS_P6 and   ARR_P1  -5.453
Residual for   HOS_P6 and   ARR_P2  -5.548
Residual for   HOS_P6 and   CON_P2  -4.669
Residual for   HOS_P6 and   CON_P3  -4.838
Residual for   HOS_P6 and   HOS_P5  -3.391
Residual for   HOS_P7 and   FAC_P3  -3.881
Residual for   HOS_P7 and   INT_P1 -10.565
Residual for   HOS_P7 and   INT_P2  -4.651
Residual for   HOS_P7 and   INT_P4  -5.515
Residual for   HOS_P7 and   INT_P6  -4.250
Residual for   HOS_P7 and   ARR_P1  -9.031
Residual for   HOS_P7 and   ARR_P2  -9.965
Residual for   HOS_P7 and   ARR_P3  -2.744
Residual for   HOS_P7 and   HOS_P3  -7.944
Residual for   HOS_P7 and   HOS_P4  -7.054
Residual for   HOS_P7 and   HOS_P5  -4.203
Residual for   DEC_P1 and   EMP_P2  -5.745
Residual for   DEC_P1 and   FAC_P3  -6.338
Residual for   DEC_P1 and   INT_P1 -11.515
Residual for   DEC_P1 and   INT_P2  -3.867
Residual for   DEC_P1 and   INT_P6  -3.324
Residual for   DEC_P1 and   ARR_P1  -4.137
Residual for   DEC_P1 and   HOS_P3  -3.441
Residual for   DEC_P1 and   HOS_P4  -3.004
Residual for   DEC_P1 and   HOS_P5  -6.613
Residual for   DEC_P2 and   INT_P1  -7.661
Residual for   DEC_P2 and   CON_P3  -3.324
Residual for   DEC_P2 and   HOS_P3  -4.624
Residual for   DEC_P2 and   HOS_P5  -3.647
Residual for   DEC_P3 and   EMP_P2  -9.974
Residual for   DEC_P3 and   FAC_P1  -3.867
Residual for   DEC_P3 and   FAC_P3  -7.942
Residual for   DEC_P3 and   FAC_P4  -2.681
Residual for   DEC_P3 and   INT_P1  -6.579
Residual for   DEC_P3 and   IPR_P1  -5.718
Residual for   DEC_P3 and   IPR_P2  -3.319
Residual for   DEC_P3 and   IPR_P4  -6.482
Residual for   DEC_P3 and   SOC_P1  -4.824
Residual for   DEC_P3 and   SOC_P2  -2.700
Residual for   DEC_P3 and   WAR_P1  -4.437
Residual for   DEC_P3 and   WAR_P2  -4.933
Residual for   DEC_P3 and   WAR_P4  -3.522
Residual for   DEC_P3 and   CON_P3  -7.931
Residual for   DEC_P3 and   HOS_P2  -4.989
Residual for   DEC_P3 and   DEC_P1  -4.192
Residual for   EMO_P1 and   ARR_P2  -6.144
Residual for   EMO_P1 and   ARR_P3  -5.552
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Residual for   EMO_P1 and   CON_P1  -5.404
Residual for   EMO_P1 and   CON_P2  -8.171
Residual for   EMO_P1 and   HOS_P1  -4.236
Residual for   EMO_P1 and   HOS_P3 -10.939
Residual for   EMO_P1 and   HOS_P4  -3.099
Residual for   EMO_P1 and   HOS_P5  -4.314
Residual for   EMO_P1 and   HOS_P6  -4.738
Residual for   EMO_P1 and   HOS_P7  -5.560
Residual for   EMO_P1 and   DEC_P1  -8.679
Residual for   EMO_P1 and   DEC_P2  -3.779
Residual for   EMO_P1 and   DEC_P3 -15.923
Residual for   EMO_P2 and   EMP_P3  -3.021
Residual for   EMO_P2 and   FAC_P1  -3.294
Residual for   EMO_P2 and   FAC_P2  -5.162
Residual for   EMO_P2 and   FAC_P4  -4.597
Residual for   EMO_P2 and   INT_P3  -2.815
Residual for   EMO_P2 and   IPR_P3  -2.749
Residual for   EMO_P2 and   WAR_P3  -3.334
Residual for   EMO_P2 and   ARR_P3  -3.234
Residual for   EMO_P2 and   HOS_P3  -4.774
Residual for   EMO_P2 and   EMO_P1  -6.167
Residual for   EMO_P3 and   EMP_P3  -3.854
Residual for   EMO_P3 and   FAC_P2  -3.398
Residual for   EMO_P3 and   INT_P1  -3.636
Residual for   EMO_P3 and   INT_P3  -3.228
Residual for   EMO_P3 and   WAR_P3  -5.637
Residual for   EMO_P3 and   HOS_P3  -3.601
Residual for   EMO_P3 and   EMO_P1  -3.544
Residual for   EMO_P4 and   EMP_P1  -3.531
Residual for   EMO_P4 and   EMP_P3  -6.987
Residual for   EMO_P4 and   INT_P3  -3.743
Residual for   EMO_P4 and   INT_P5  -3.332
Residual for   EMO_P4 and   IPR_P1  -2.729
Residual for   EMO_P4 and   SOC_P2  -4.260
Residual for   EMO_P4 and   WAR_P1  -2.691
Residual for   EMO_P4 and   WAR_P2  -3.813
Residual for   EMO_P4 and   WAR_P3  -5.419
Residual for   EMO_P4 and   HOS_P3  -2.794
Residual for   EMO_P4 and   EMO_P1  -4.221
Residual for   NEG_P1 and   EMP_P2  -6.204
Residual for   NEG_P1 and   INT_P4  -2.890
Residual for   NEG_P1 and   WAR_P4  -3.000
Residual for   NEG_P1 and   ARR_P2  -2.785
Residual for   NEG_P1 and   CON_P3  -4.724
Residual for   NEG_P1 and   HOS_P4  -5.790
Residual for   NEG_P1 and   HOS_P5  -7.404
Residual for   NEG_P1 and   DEC_P1  -3.738
Residual for   NEG_P1 and   DEC_P2  -5.490
Residual for   NEG_P1 and   DEC_P3  -9.009
Residual for   NEG_P1 and   EMO_P2  -6.252
Residual for   NEG_P1 and   EMO_P3  -2.852
Residual for   NEG_P1 and   EMO_P4  -7.322
Residual for   NEG_P2 and   EMP_P1  -2.865
Residual for   NEG_P2 and   EMP_P2 -10.028
Residual for   NEG_P2 and   FAC_P1  -5.872
Residual for   NEG_P2 and   FAC_P3  -9.071
Residual for   NEG_P2 and   FAC_P4  -3.231
Residual for   NEG_P2 and   INT_P1 -12.045
Residual for   NEG_P2 and   INT_P2  -7.732
Residual for   NEG_P2 and   INT_P4  -7.038
Residual for   NEG_P2 and   INT_P6  -5.236
Residual for   NEG_P2 and   IPR_P1  -2.724
Residual for   NEG_P2 and   IPR_P2  -2.974
Residual for   NEG_P2 and   SOC_P1  -5.025
Residual for   NEG_P2 and   WAR_P1  -4.989
Residual for   NEG_P2 and   WAR_P4  -4.944
Residual for   NEG_P2 and   WAR_P5  -4.717
Residual for   NEG_P2 and   EMO_P1  -8.531
Residual for   NEG_P2 and   NEG_P1  -9.612
Residual for   NEG_P3 and   EMP_P2  -3.344
Residual for   NEG_P3 and   FAC_P3  -3.205
Residual for   NEG_P3 and   ARR_P1  -8.135
Residual for   NEG_P3 and   ARR_P2 -10.196
Residual for   NEG_P3 and   CON_P2 -11.657
Residual for   NEG_P3 and   CON_P3 -13.936
Residual for   NEG_P3 and   HOS_P1  -5.813
Residual for   NEG_P3 and   HOS_P2 -11.969
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Residual for   NEG_P3 and   HOS_P3  -7.807
Residual for   NEG_P3 and   HOS_P4  -8.321
Residual for   NEG_P3 and   HOS_P5 -16.074
Residual for   NEG_P3 and   DEC_P1  -8.448
Residual for   NEG_P3 and   DEC_P2  -4.142
Residual for   NEG_P3 and   DEC_P3  -5.916
Residual for   NEG_P3 and   NEG_P1  -2.577
Residual for   NEG_P4 and   ARR_P1  -7.416
Residual for   NEG_P4 and   ARR_P2  -8.794
Residual for   NEG_P4 and   CON_P2 -10.234
Residual for   NEG_P4 and   CON_P3 -10.987
Residual for   NEG_P4 and   HOS_P1  -5.317
Residual for   NEG_P4 and   HOS_P2 -10.487
Residual for   NEG_P4 and   HOS_P3  -8.556
Residual for   NEG_P4 and   HOS_P4  -9.820
Residual for   NEG_P4 and   HOS_P5 -15.339
Residual for   NEG_P4 and   DEC_P1  -8.762
Residual for   NEG_P4 and   DEC_P2  -3.959
Residual for   NEG_P4 and   DEC_P3  -6.787
Residual for   NEG_P5 and   EMP_P1 -13.528
Residual for   NEG_P5 and   EMP_P2 -19.685
Residual for   NEG_P5 and   EMP_P3 -11.244
Residual for   NEG_P5 and   FAC_P1  -6.685
Residual for   NEG_P5 and   FAC_P3 -10.010
Residual for   NEG_P5 and   FAC_P4  -5.768
Residual for   NEG_P5 and   FAC_P5  -4.968
Residual for   NEG_P5 and   INT_P1  -9.371
Residual for   NEG_P5 and   INT_P2  -9.273
Residual for   NEG_P5 and   INT_P3  -4.570
Residual for   NEG_P5 and   INT_P4 -12.469
Residual for   NEG_P5 and   INT_P5  -6.122
Residual for   NEG_P5 and   INT_P6  -8.507
Residual for   NEG_P5 and   IPR_P1  -8.578
Residual for   NEG_P5 and   IPR_P2  -9.883
Residual for   NEG_P5 and   IPR_P3  -5.386
Residual for   NEG_P5 and   IPR_P4 -10.698
Residual for   NEG_P5 and   SOC_P1 -10.714
Residual for   NEG_P5 and   SOC_P2  -8.181
Residual for   NEG_P5 and   WAR_P1 -13.411
Residual for   NEG_P5 and   WAR_P2  -9.514
Residual for   NEG_P5 and   WAR_P3  -8.897
Residual for   NEG_P5 and   WAR_P4 -13.713
Residual for   NEG_P5 and   WAR_P5 -10.510
Residual for   NEG_P5 and   EMO_P1  -8.378
Residual for   NEG_P5 and   EMO_P2  -5.698
Residual for   NEG_P5 and   EMO_P3  -3.660
Residual for   NEG_P5 and   EMO_P4  -5.363
Residual for   NEG_P5 and   NEG_P2  -3.072
Residual for   NEG_P5 and   NEG_P3  -9.150
Residual for   NEG_P5 and   NEG_P4 -14.943
Residual for   PLA_P1 and   EMP_P1  -3.357
Residual for   PLA_P1 and   EMP_P3  -4.492
Residual for   PLA_P1 and   INT_P1  -6.478
Residual for   PLA_P1 and   INT_P2  -5.110
Residual for   PLA_P1 and   INT_P4  -3.048
Residual for   PLA_P1 and   INT_P6  -5.740
Residual for   PLA_P1 and   IPR_P2  -3.732
Residual for   PLA_P1 and   IPR_P4  -3.166
Residual for   PLA_P1 and   SOC_P2  -6.162
Residual for   PLA_P1 and   WAR_P1  -4.917
Residual for   PLA_P1 and   WAR_P2  -3.135
Residual for   PLA_P1 and   WAR_P3  -6.182
Residual for   PLA_P1 and   EMO_P1  -4.008
Residual for   PLA_P1 and   EMO_P4  -4.402
Residual for   PLA_P1 and   NEG_P3  -3.028
Residual for   PLA_P2 and   FAC_P3  -3.205
Residual for   PLA_P2 and   INT_P1  -3.863
Residual for   PLA_P2 and   INT_P2  -4.916
Residual for   PLA_P2 and   WAR_P3  -4.432
Residual for   PLA_P2 and   ARR_P2  -4.122
Residual for   PLA_P2 and   ARR_P3  -3.657
Residual for   PLA_P2 and   CON_P2  -9.234
Residual for   PLA_P2 and   CON_P3  -2.834
Residual for   PLA_P2 and   HOS_P3  -6.890
Residual for   PLA_P2 and   HOS_P4  -6.113
Residual for   PLA_P2 and   DEC_P3  -6.305
Residual for   PLA_P2 and   EMO_P4  -4.228
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Residual for   PLA_P2 and   NEG_P5  -3.998
Residual for   SOB_P1 and   EMP_P1  -5.018
Residual for   SOB_P1 and   EMP_P3  -7.128
Residual for   SOB_P1 and   FAC_P1  -3.024
Residual for   SOB_P1 and   FAC_P4  -2.905
Residual for   SOB_P1 and   INT_P1  -6.223
Residual for   SOB_P1 and   INT_P2  -7.617
Residual for   SOB_P1 and   INT_P6  -9.986
Residual for   SOB_P1 and   IPR_P2  -7.601
Residual for   SOB_P1 and   IPR_P3  -5.847
Residual for   SOB_P1 and   IPR_P4  -6.093
Residual for   SOB_P1 and   SOC_P2  -5.863
Residual for   SOB_P1 and   WAR_P1  -3.928
Residual for   SOB_P1 and   WAR_P3 -11.397
Residual for   SOB_P1 and   WAR_P5  -5.146
Residual for   SOB_P1 and   DEC_P3  -3.188
Residual for   SOB_P1 and   EMO_P2  -3.771
Residual for   SOB_P1 and   EMO_P3  -4.944
Residual for   SOB_P1 and   EMO_P4  -9.213
Residual for   SOB_P2 and   ARR_P2  -8.682
Residual for   SOB_P2 and   ARR_P3  -5.991
Residual for   SOB_P2 and   CON_P2 -12.051
Residual for   SOB_P2 and   CON_P3  -3.595
Residual for   SOB_P2 and   HOS_P3  -9.660
Residual for   SOB_P2 and   HOS_P4 -10.322
Residual for   SOB_P2 and   HOS_P5  -6.877
Residual for   SOB_P2 and   HOS_P6  -5.191
Residual for   SOB_P2 and   HOS_P7  -2.831
Residual for   SOB_P2 and   DEC_P3 -11.419
Residual for   SOB_P2 and   NEG_P2  -4.963
Residual for   SOB_P2 and   NEG_P3  -4.579
Residual for   SOB_P2 and   NEG_P5  -9.439
Residual for   SOB_P3 and   EMP_P1  -4.260
Residual for   SOB_P3 and   EMP_P3  -7.166
Residual for   SOB_P3 and   FAC_P1  -2.619
Residual for   SOB_P3 and   FAC_P5  -2.644
Residual for   SOB_P3 and   INT_P1  -3.753
Residual for   SOB_P3 and   INT_P2  -5.708
Residual for   SOB_P3 and   INT_P6  -6.278
Residual for   SOB_P3 and   IPR_P2  -3.392
Residual for   SOB_P3 and   IPR_P3  -4.143
Residual for   SOB_P3 and   IPR_P4  -3.102
Residual for   SOB_P3 and   SOC_P2  -8.434
Residual for   SOB_P3 and   WAR_P3  -8.523
Residual for   SOB_P3 and   HOS_P3  -2.800
Residual for   SOB_P3 and   HOS_P4  -2.921
Residual for   SOB_P3 and   HOS_P6  -3.151
Residual for   SOB_P3 and   DEC_P3  -8.504
Residual for   SOB_P3 and   EMO_P4  -3.517
Residual for   SOB_P3 and   NEG_P3  -3.707
Residual for   SOB_P3 and   NEG_P5  -4.839
Residual for   SOB_P3 and   SOB_P2  -9.278
Residual for   ACH_P1 and   EMP_P3  -4.025
Residual for   ACH_P1 and   FAC_P5  -2.583
Residual for   ACH_P1 and   INT_P4  -4.148
Residual for   ACH_P1 and   INT_P5  -5.395
Residual for   ACH_P1 and   IPR_P2  -3.269
Residual for   ACH_P1 and   WAR_P2  -2.649
Residual for   ACH_P1 and   WAR_P3  -4.447
Residual for   ACH_P1 and   HOS_P7  -4.847
Residual for   ACH_P1 and   EMO_P2  -7.994
Residual for   ACH_P1 and   EMO_P3  -4.493
Residual for   ACH_P1 and   NEG_P2  -6.107
Residual for   ACH_P1 and   NEG_P5  -4.594
Residual for   ACH_P1 and   PLA_P2  -3.684
Residual for   ACH_P1 and   SOB_P1  -2.943
Residual for   ACH_P1 and   SOB_P3  -4.894
Residual for   ACH_P2 and   EMP_P1  -3.155
Residual for   ACH_P2 and   EMP_P3  -4.468
Residual for   ACH_P2 and   INT_P4  -5.243
Residual for   ACH_P2 and   INT_P5  -8.655
Residual for   ACH_P2 and   WAR_P3  -4.624
Residual for   ACH_P2 and   ARR_P3  -4.555
Residual for   ACH_P2 and   CON_P1  -2.616
Residual for   ACH_P2 and   CON_P2  -2.599
Residual for   ACH_P2 and   HOS_P3  -3.815
Residual for   ACH_P2 and   HOS_P4  -3.157
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Residual for   ACH_P2 and   HOS_P6  -3.112
Residual for   ACH_P2 and   HOS_P7  -4.735
Residual for   ACH_P2 and   DEC_P3  -5.467
Residual for   ACH_P2 and   EMO_P2  -6.234
Residual for   ACH_P2 and   EMO_P3  -2.632
Residual for   ACH_P2 and   NEG_P2  -7.984
Residual for   ACH_P2 and   NEG_P5  -9.488
Residual for   ACH_P3 and   EMP_P1  -4.091
Residual for   ACH_P3 and   EMP_P3  -4.926
Residual for   ACH_P3 and   FAC_P1  -3.086
Residual for   ACH_P3 and   FAC_P2  -6.683
Residual for   ACH_P3 and   FAC_P4  -4.479
Residual for   ACH_P3 and   INT_P3  -3.319
Residual for   ACH_P3 and   INT_P5  -4.202
Residual for   ACH_P3 and   SOC_P2  -2.973
Residual for   ACH_P3 and   WAR_P2  -2.681
Residual for   ACH_P3 and   WAR_P3  -4.484
Residual for   ACH_P3 and   ARR_P2  -3.562
Residual for   ACH_P3 and   ARR_P3  -4.533
Residual for   ACH_P3 and   CON_P1  -5.846
Residual for   ACH_P3 and   CON_P2  -3.968
Residual for   ACH_P3 and   HOS_P3  -4.128
Residual for   ACH_P3 and   HOS_P6  -4.518
Residual for   ACH_P3 and   HOS_P7  -7.213
Residual for   ACH_P3 and   DEC_P3  -4.028
Residual for   ACH_P3 and   EMO_P3  -2.828
Residual for   ACH_P3 and   NEG_P2  -6.078
Residual for   ACH_P3 and   NEG_P5  -7.896
Residual for   ACH_P3 and   PLA_P1  -4.497
Residual for   ACH_P3 and   SOB_P1  -3.115
Residual for   ACH_P3 and   ACH_P1  -6.477
Residual for   ACH_P4 and   FAC_P1  -4.693
Residual for   ACH_P4 and   FAC_P2  -9.228
Residual for   ACH_P4 and   FAC_P4  -7.870
Residual for   ACH_P4 and   IPR_P2  -4.361
Residual for   ACH_P4 and   ARR_P1  -3.012
Residual for   ACH_P4 and   ARR_P2  -7.007
Residual for   ACH_P4 and   ARR_P3  -5.989
Residual for   ACH_P4 and   CON_P1  -3.721
Residual for   ACH_P4 and   CON_P2  -5.164
Residual for   ACH_P4 and   HOS_P3  -3.426
Residual for   ACH_P4 and   HOS_P4  -4.396
Residual for   ACH_P4 and   HOS_P5  -4.789
Residual for   ACH_P4 and   HOS_P7  -6.860
Residual for   ACH_P4 and   EMO_P2  -6.175
Residual for   ACH_P4 and   EMO_P3  -3.813
Residual for   ACH_P4 and   NEG_P5  -4.959
Residual for   ACH_P4 and   PLA_P1  -3.390
Residual for   ACH_P4 and   SOB_P1  -5.822
Residual for   ACH_P4 and   SOB_P3  -5.551
Residual for   ACH_P4 and   ACH_P1  -6.828
Residual for   ACH_P4 and   ACH_P2 -11.610
Residual for   ACH_P5 and   EMP_P1  -5.479
Residual for   ACH_P5 and   EMP_P3  -7.101
Residual for   ACH_P5 and   INT_P1  -4.829
Residual for   ACH_P5 and   INT_P4  -6.581
Residual for   ACH_P5 and   INT_P5  -5.209
Residual for   ACH_P5 and   WAR_P2  -4.484
Residual for   ACH_P5 and   WAR_P3  -8.427
Residual for   ACH_P5 and   EMO_P2  -5.333
Residual for   ACH_P5 and   EMO_P3  -4.066
Residual for   ACH_P5 and   NEG_P2  -3.915
Residual for   ACH_P5 and   NEG_P5  -3.617
Residual for   ACH_P5 and   ACH_P4  -4.677
Residual for   ORD_P1 and   FAC_P2  -5.092
Residual for   ORD_P1 and   FAC_P4  -2.813
Residual for   ORD_P1 and   FAC_P5  -3.775
Residual for   ORD_P1 and   INT_P3  -5.606
Residual for   ORD_P1 and   INT_P5  -5.175
Residual for   ORD_P1 and   SOC_P2  -2.689
Residual for   ORD_P1 and   WAR_P3  -2.581
Residual for   ORD_P1 and   ARR_P2  -5.526
Residual for   ORD_P1 and   CON_P1  -5.237
Residual for   ORD_P1 and   HOS_P1  -2.605
Residual for   ORD_P1 and   HOS_P2  -4.141
Residual for   ORD_P1 and   HOS_P5  -6.354
Residual for   ORD_P1 and   HOS_P6  -2.975
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Residual for   ORD_P1 and   HOS_P7   -9.281
Residual for   ORD_P1 and   EMO_P2   -5.470
Residual for   ORD_P1 and   EMO_P3   -4.598
Residual for   ORD_P1 and   EMO_P4   -2.741
Residual for   ORD_P1 and   NEG_P2   -4.381
Residual for   ORD_P1 and   NEG_P5   -5.166
Residual for   ORD_P1 and   PLA_P1   -2.755
Residual for   ORD_P1 and   SOB_P1   -3.910
Residual for   ORD_P1 and   ACH_P1   -5.530
Residual for   ORD_P1 and   ACH_P2   -8.060
Residual for   ORD_P1 and   ACH_P3   -4.934
Residual for   ORD_P1 and   ACH_P5   -8.654
Residual for   ORD_P2 and   EMP_P1   -4.335
Residual for   ORD_P2 and   EMP_P3   -4.566
Residual for   ORD_P2 and   FAC_P1   -4.597
Residual for   ORD_P2 and   FAC_P2   -7.163
Residual for   ORD_P2 and   FAC_P4   -4.778
Residual for   ORD_P2 and   FAC_P5   -2.700
Residual for   ORD_P2 and   INT_P3   -3.673
Residual for   ORD_P2 and   INT_P4   -7.513
Residual for   ORD_P2 and   INT_P5   -9.494
Residual for   ORD_P2 and   IPR_P1   -3.360
Residual for   ORD_P2 and   IPR_P2   -7.401
Residual for   ORD_P2 and   IPR_P4   -2.756
Residual for   ORD_P2 and   WAR_P2   -3.177
Residual for   ORD_P2 and   WAR_P3   -5.886
Residual for   ORD_P2 and   WAR_P4   -4.387
Residual for   ORD_P2 and   HOS_P7   -6.027
Residual for   ORD_P2 and   DEC_P1   -3.203
Residual for   ORD_P2 and   EMO_P2   -5.057
Residual for   ORD_P2 and   EMO_P3   -2.902
Residual for   ORD_P2 and   NEG_P2   -7.161
Residual for   ORD_P2 and   NEG_P5   -5.501
Residual for   ORD_P2 and   PLA_P1   -3.153
Residual for   ORD_P2 and   SOB_P1   -5.277
Residual for   ORD_P2 and   SOB_P3   -3.271
Residual for   ORD_P2 and   ACH_P2   -2.944
Residual for   ORD_P2 and   ACH_P5   -6.344
Residual for   ORD_P2 and   ORD_P1   -8.092
Residual for   ORD_P3 and   INT_P3   -3.085
Residual for   ORD_P3 and   INT_P5   -3.146
Residual for   ORD_P3 and   HOS_P7   -3.952
Residual for   ORD_P3 and   NEG_P2   -6.534
Residual for   ORD_P3 and   NEG_P5   -6.053
Residual for   ORD_P3 and   ORD_P1   -7.364
Residual for   ORD_P4 and   IPR_P2   -3.066
Residual for   ORD_P4 and   ARR_P2   -4.085
Residual for   ORD_P4 and   CON_P1   -4.976
Residual for   ORD_P4 and   HOS_P5   -3.699
Residual for   ORD_P4 and   HOS_P6   -2.625
Residual for   ORD_P4 and   HOS_P7   -7.841
Residual for   ORD_P4 and   DEC_P1   -6.342
Residual for   ORD_P4 and   DEC_P3   -4.550
Residual for   ORD_P4 and   EMO_P2   -2.666
Residual for   ORD_P4 and   NEG_P2   -9.706
Residual for   ORD_P4 and   NEG_P5   -9.201
Residual for   ORD_P4 and   PLA_P1   -3.347
Residual for   ORD_P4 and   ORD_P1  -10.171
Residual for   ORD_P5 and   INT_P3   -5.547
Residual for   ORD_P5 and   INT_P4   -3.352
Residual for   ORD_P5 and   INT_P5   -5.416
Residual for   ORD_P5 and   ARR_P2   -2.861
Residual for   ORD_P5 and   HOS_P7   -4.205
Residual for   ORD_P5 and   EMO_P2   -5.105
Residual for   ORD_P5 and   EMO_P3   -3.251
Residual for   ORD_P5 and   NEG_P2   -3.715
Residual for   ORD_P5 and   NEG_P5   -3.484
Residual for   ORD_P5 and   ACH_P1   -5.450
Residual for   ORD_P5 and   ACH_P2   -9.940
Residual for   ORD_P5 and   ACH_P5   -7.067
Residual for   ORD_P5 and   ORD_P2   -7.011
Residual for   ORD_P5 and   ORD_P4  -15.012
Residual for   ORD_P6 and   EMP_P1   -5.086
Residual for   ORD_P6 and   EMP_P3   -4.615
Residual for   ORD_P6 and   FAC_P1   -2.798
Residual for   ORD_P6 and   FAC_P2   -6.257
Residual for   ORD_P6 and   FAC_P4   -2.912
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Residual for   ORD_P6 and   INT_P3  -7.699
Residual for   ORD_P6 and   INT_P4  -6.139
Residual for   ORD_P6 and   INT_P5  -8.081
Residual for   ORD_P6 and   SOC_P2  -2.888
Residual for   ORD_P6 and   WAR_P2  -3.899
Residual for   ORD_P6 and   WAR_P3  -5.779
Residual for   ORD_P6 and   HOS_P7  -5.561
Residual for   ORD_P6 and   EMO_P2  -6.244
Residual for   ORD_P6 and   EMO_P3  -3.382
Residual for   ORD_P6 and   NEG_P2  -7.562
Residual for   ORD_P6 and   NEG_P5  -5.259
Residual for   ORD_P6 and   SOB_P1  -4.650
Residual for   ORD_P6 and   ACH_P1  -4.516
Residual for   ORD_P6 and   ACH_P2 -10.889
Residual for   ORD_P6 and   ACH_P3  -3.782
Residual for   ORD_P6 and   ACH_P5  -9.620
Residual for   ORD_P6 and   ORD_P3  -4.485
Residual for   ORD_P6 and   ORD_P4 -13.843
Residual for   TRA_P1 and   EMP_P1  -3.971
Residual for   TRA_P1 and   EMP_P3  -4.566
Residual for   TRA_P1 and   FAC_P5  -3.085
Residual for   TRA_P1 and   INT_P1  -3.165
Residual for   TRA_P1 and   INT_P2  -3.531
Residual for   TRA_P1 and   IPR_P3  -6.170
Residual for   TRA_P1 and   WAR_P3  -5.591
Residual for   TRA_P1 and   DEC_P3  -3.183
Residual for   TRA_P1 and   EMO_P2  -3.334
Residual for   TRA_P1 and   EMO_P3  -2.928
Residual for   TRA_P1 and   EMO_P4  -3.502
Residual for   TRA_P1 and   NEG_P2  -3.266
Residual for   TRA_P1 and   NEG_P5  -5.727
Residual for   TRA_P1 and   PLA_P1  -3.397
Residual for   TRA_P1 and   ORD_P2  -5.349
Residual for   TRA_P2 and   EMP_P1  -3.147
Residual for   TRA_P2 and   FAC_P2  -3.821
Residual for   TRA_P2 and   FAC_P5  -3.501
Residual for   TRA_P2 and   INT_P1  -4.134
Residual for   TRA_P2 and   INT_P2  -6.404
Residual for   TRA_P2 and   IPR_P3  -3.557
Residual for   TRA_P2 and   WAR_P3  -3.642
Residual for   TRA_P2 and   ARR_P2  -2.919
Residual for   TRA_P2 and   DEC_P3  -7.417
Residual for   TRA_P2 and   EMO_P2  -2.966
Residual for   TRA_P2 and   EMO_P4  -4.441
Residual for   TRA_P2 and   NEG_P2  -6.065
Residual for   TRA_P2 and   NEG_P5 -10.062
Residual for   TRA_P2 and   PLA_P1  -5.421
Residual for   TRA_P2 and   SOB_P1  -3.146
Residual for   TRA_P2 and   ORD_P2  -6.981
Residual for   TRA_P2 and   ORD_P6  -3.940
Residual for   BRO_P1 and   FAC_P2  -2.951
Residual for   BRO_P1 and   FAC_P3  -5.463
Residual for   BRO_P1 and   INT_P1  -4.387
Residual for   BRO_P1 and   INT_P2  -2.622
Residual for   BRO_P1 and   IPR_P2  -3.604
Residual for   BRO_P1 and   ARR_P2  -4.129
Residual for   BRO_P1 and   ARR_P3  -2.943
Residual for   BRO_P1 and   CON_P2  -3.221
Residual for   BRO_P1 and   HOS_P3  -5.244
Residual for   BRO_P1 and   HOS_P4  -3.295
Residual for   BRO_P1 and   EMO_P3  -5.430
Residual for   BRO_P1 and   EMO_P4  -4.029
Residual for   BRO_P1 and   SOB_P3  -3.499
Residual for   BRO_P1 and   ACH_P2  -5.167
Residual for   BRO_P1 and   ACH_P3  -8.429
Residual for   BRO_P1 and   ACH_P4  -4.115
Residual for   BRO_P1 and   ORD_P1  -5.501
Residual for   BRO_P1 and   ORD_P2  -3.453
Residual for   BRO_P1 and   ORD_P6  -4.415
Residual for   BRO_P1 and   TRA_P1  -2.925
Residual for   BRO_P2 and   EMP_P1  -6.081
Residual for   BRO_P2 and   EMP_P3  -4.938
Residual for   BRO_P2 and   INT_P1  -2.604
Residual for   BRO_P2 and   INT_P6  -3.376
Residual for   BRO_P2 and   WAR_P3  -6.703
Residual for   BRO_P2 and   NEG_P2  -4.102
Residual for   BRO_P2 and   NEG_P3  -4.910
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Residual for   BRO_P2 and   NEG_P5  -3.923
Residual for   BRO_P2 and   ORD_P1  -3.943
Residual for   BRO_P3 and   EMP_P1  -4.383
Residual for   BRO_P3 and   FAC_P2  -3.884
Residual for   BRO_P3 and   FAC_P3  -4.026
Residual for   BRO_P3 and   FAC_P4  -4.439
Residual for   BRO_P3 and   IPR_P2  -4.961
Residual for   BRO_P3 and   WAR_P3  -5.328
Residual for   BRO_P3 and   ARR_P3  -4.305
Residual for   BRO_P3 and   CON_P2  -5.308
Residual for   BRO_P3 and   HOS_P3  -6.103
Residual for   BRO_P3 and   HOS_P4  -3.111
Residual for   BRO_P3 and   NEG_P2  -3.613
Residual for   BRO_P3 and   NEG_P5  -6.247
Residual for   BRO_P3 and   ACH_P2  -3.891
Residual for   BRO_P3 and   ACH_P3  -2.892
Residual for   BRO_P3 and   ORD_P1  -3.385
Residual for   BRO_P3 and   TRA_P1  -3.203
Residual for   BRO_P3 and   BRO_P1  -4.888
Residual for   EPI_P1 and   ARR_P1  -5.058
Residual for   EPI_P1 and   ARR_P2  -8.233
Residual for   EPI_P1 and   ARR_P3  -7.170
Residual for   EPI_P1 and   CON_P1  -4.072
Residual for   EPI_P1 and   CON_P2  -9.792
Residual for   EPI_P1 and   CON_P3  -5.179
Residual for   EPI_P1 and   HOS_P3 -11.270
Residual for   EPI_P1 and   HOS_P4  -7.679
Residual for   EPI_P1 and   HOS_P5  -8.529
Residual for   EPI_P1 and   HOS_P7  -4.019
Residual for   EPI_P1 and   DEC_P1  -7.459
Residual for   EPI_P1 and   DEC_P2  -5.710
Residual for   EPI_P1 and   DEC_P3  -8.405
Residual for   EPI_P1 and   NEG_P1  -4.122
Residual for   EPI_P1 and   NEG_P2  -6.929
Residual for   EPI_P1 and   NEG_P5 -11.999
Residual for   EPI_P1 and   PLA_P1  -3.496
Residual for   EPI_P1 and   PLA_P2  -3.504
Residual for   EPI_P1 and   BRO_P2  -8.490
Residual for   EPI_P2 and   FAC_P2  -6.970
Residual for   EPI_P2 and   FAC_P3  -9.190
Residual for   EPI_P2 and   FAC_P4  -4.576
Residual for   EPI_P2 and   INT_P1  -7.224
Residual for   EPI_P2 and   INT_P4  -4.488
Residual for   EPI_P2 and   INT_P6  -3.941
Residual for   EPI_P2 and   IPR_P2  -8.981
Residual for   EPI_P2 and   WAR_P1  -4.003
Residual for   EPI_P2 and   WAR_P2  -3.826
Residual for   EPI_P2 and   WAR_P3  -3.818
Residual for   EPI_P2 and   HOS_P4  -2.918
Residual for   EPI_P2 and   EMO_P1  -4.104
Residual for   EPI_P2 and   EMO_P2  -2.997
Residual for   EPI_P2 and   EMO_P3  -4.678
Residual for   EPI_P2 and   EMO_P4  -5.370
Residual for   EPI_P2 and   SOB_P3  -3.811
Residual for   EPI_P2 and   ACH_P1  -5.256
Residual for   EPI_P2 and   ACH_P2 -13.327
Residual for   EPI_P2 and   ACH_P3 -12.772
Residual for   EPI_P2 and   ACH_P5  -9.278
Residual for   EPI_P2 and   ORD_P1 -10.863
Residual for   EPI_P2 and   ORD_P2  -5.725
Residual for   EPI_P2 and   ORD_P4  -4.791
Residual for   EPI_P2 and   ORD_P5  -5.164
Residual for   EPI_P2 and   ORD_P6  -7.423
Residual for   EPI_P2 and   TRA_P1  -8.180
Residual for   EPI_P2 and   TRA_P2  -5.877
Residual for   EPI_P2 and   EPI_P1  -8.528
Residual for   EPI_P3 and   EMP_P1  -7.463
Residual for   EPI_P3 and   EMP_P3  -5.682
Residual for   EPI_P3 and   FAC_P2  -3.410
Residual for   EPI_P3 and   INT_P1  -3.031
Residual for   EPI_P3 and   IPR_P2  -6.101
Residual for   EPI_P3 and   WAR_P2  -3.351
Residual for   EPI_P3 and   WAR_P3  -2.782
Residual for   EPI_P3 and   CON_P2  -3.967
Residual for   EPI_P3 and   HOS_P3  -4.307
Residual for   EPI_P3 and   HOS_P4  -2.904
Residual for   EPI_P3 and   NEG_P2  -3.692
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Residual for   EPI_P3 and   NEG_P5  -9.467
Residual for   EPI_P3 and   SOB_P1  -3.444
Residual for   EPI_P3 and   SOB_P3  -3.477
Residual for   EPI_P3 and   ACH_P2  -2.909
Residual for   EPI_P3 and   ORD_P1  -5.351
Residual for   EPI_P3 and   TRA_P1  -3.591
Residual for   EPI_P3 and   BRO_P1  -5.512
Residual for   EPI_P3 and   BRO_P2  -8.111
Residual for   ITL_P1 and   FAC_P1  -3.663
Residual for   ITL_P1 and   FAC_P2  -7.515
Residual for   ITL_P1 and   FAC_P3  -5.456
Residual for   ITL_P1 and   FAC_P4  -7.492
Residual for   ITL_P1 and   INT_P1  -2.798
Residual for   ITL_P1 and   IPR_P2  -5.976
Residual for   ITL_P1 and   WAR_P3  -3.945
Residual for   ITL_P1 and   ARR_P3  -4.052
Residual for   ITL_P1 and   CON_P2  -2.624
Residual for   ITL_P1 and   HOS_P3  -4.500
Residual for   ITL_P1 and   HOS_P4  -2.584
Residual for   ITL_P1 and   NEG_P5  -3.312
Residual for   ITL_P1 and   ACH_P1  -2.760
Residual for   ITL_P1 and   ACH_P2  -5.092
Residual for   ITL_P1 and   ORD_P1  -8.235
Residual for   ITL_P1 and   ORD_P5  -4.679
Residual for   ITL_P1 and   ORD_P6  -4.455
Residual for   ITL_P1 and   BRO_P1  -3.038
Residual for   ITL_P2 and   EMP_P3  -4.063
Residual for   ITL_P2 and   FAC_P1  -4.698
Residual for   ITL_P2 and   FAC_P2  -2.981
Residual for   ITL_P2 and   FAC_P3  -4.149
Residual for   ITL_P2 and   FAC_P4  -7.500
Residual for   ITL_P2 and   IPR_P2  -6.002
Residual for   ITL_P2 and   IPR_P4  -4.355
Residual for   ITL_P2 and   SOC_P2  -5.470
Residual for   ITL_P2 and   WAR_P1  -2.894
Residual for   ITL_P2 and   WAR_P2  -6.504
Residual for   ITL_P2 and   WAR_P3  -4.622
Residual for   ITL_P2 and   HOS_P4  -3.011
Residual for   ITL_P2 and   PLA_P2  -3.698
Residual for   ITL_P2 and   SOB_P1  -7.716
Residual for   ITL_P2 and   SOB_P3  -8.215
Residual for   ITL_P2 and   ACH_P2  -4.837
Residual for   ITL_P2 and   ACH_P3  -4.878
Residual for   ITL_P2 and   ACH_P5  -4.099
Residual for   ITL_P2 and   ORD_P1  -5.138
Residual for   ITL_P2 and   TRA_P1  -3.714
Residual for   ITL_P2 and   TRA_P2  -4.178
Residual for   ITL_P2 and   BRO_P1  -3.423
Residual for   ITL_P2 and   BRO_P2  -3.082
Residual for   ITL_P3 and   EMP_P1  -4.627
Residual for   ITL_P3 and   EMP_P3  -5.776
Residual for   ITL_P3 and   INT_P1  -2.908
Residual for   ITL_P3 and   INT_P3  -6.957
Residual for   ITL_P3 and   INT_P5  -4.931
Residual for   ITL_P3 and   INT_P6  -3.860
Residual for   ITL_P3 and   IPR_P4  -3.809
Residual for   ITL_P3 and   SOC_P2  -7.624
Residual for   ITL_P3 and   WAR_P1  -2.931
Residual for   ITL_P3 and   WAR_P2  -3.175
Residual for   ITL_P3 and   WAR_P3  -5.958
Residual for   ITL_P3 and   HOS_P7  -3.099
Residual for   ITL_P3 and   NEG_P2  -2.719
Residual for   ITL_P3 and   NEG_P3  -2.705
Residual for   ITL_P3 and   NEG_P5  -3.688
Residual for   ITL_P3 and   PLA_P2  -3.121
Residual for   ITL_P3 and   SOB_P1  -6.247
Residual for   ITL_P3 and   SOB_P3  -3.953
Residual for   ITL_P3 and   ACH_P2  -2.986
Residual for   ITL_P3 and   ORD_P1 -11.691
Residual for   ITL_P3 and   ORD_P2  -5.710
Residual for   ITL_P3 and   ORD_P4  -2.766
Residual for   ITL_P3 and   ORD_P5  -4.554
Residual for   ITL_P3 and   ORD_P6  -7.700
Residual for   ITL_P3 and   ITL_P1  -3.115
Residual for   ITL_P4 and   EMP_P3  -3.745
Residual for   ITL_P4 and   IPR_P2  -3.225
Residual for   ITL_P4 and   WAR_P2  -2.840
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Residual for   ITL_P4 and   ARR_P3  -3.233
Residual for   ITL_P4 and   CON_P2  -3.316
Residual for   ITL_P4 and   HOS_P3  -3.660
Residual for   ITL_P4 and   HOS_P6  -2.903
Residual for   ITL_P4 and   HOS_P7  -4.048
Residual for   ITL_P4 and   DEC_P1  -3.904
Residual for   ITL_P4 and   EMO_P3  -2.985
Residual for   ITL_P4 and   SOB_P1  -2.819
Residual for   ITL_P4 and   SOB_P3  -4.249
Residual for   ITL_P4 and   ACH_P2  -5.299
Residual for   ITL_P4 and   ACH_P3  -4.158
Residual for   ITL_P4 and   ORD_P1  -6.136
Residual for   ITL_P4 and   ORD_P5  -3.264
Residual for   ITL_P4 and   BRO_P1  -6.012
Residual for   ITL_P4 and   BRO_P2  -4.902
Residual for   ITL_P4 and   BRO_P3  -4.080
Residual for   ITL_P4 and   EPI_P2  -4.606
Residual for   ITL_P5 and   EMP_P3  -4.631
Residual for   ITL_P5 and   WAR_P3  -3.571
Residual for   ITL_P5 and   CON_P1  -4.127
Residual for   ITL_P5 and   CON_P2  -3.992
Residual for   ITL_P5 and   HOS_P3  -4.461
Residual for   ITL_P5 and   HOS_P4  -4.405
Residual for   ITL_P5 and   HOS_P6  -3.873
Residual for   ITL_P5 and   HOS_P7  -7.587
Residual for   ITL_P5 and   DEC_P1  -8.323
Residual for   ITL_P5 and   DEC_P3  -8.119
Residual for   ITL_P5 and   NEG_P2  -7.177
Residual for   ITL_P5 and   NEG_P3  -6.223
Residual for   ITL_P5 and   NEG_P5  -6.367
Residual for   ITL_P5 and   BRO_P1  -6.373
Residual for   ITL_P5 and   BRO_P2  -3.184
Residual for   ITL_P5 and   BRO_P3  -6.556
Residual for   ITL_P5 and   EPI_P2  -9.467
Residual for   ITL_P5 and   EPI_P3  -7.846
Residual for   ITL_P5 and   ITL_P1  -4.407
Residual for   ITL_P5 and   ITL_P3  -4.699
Largest Positive Standardized Residuals
Residual for   EMP_P3 and   EMP_P1   5.766
Residual for   FAC_P1 and   EMP_P1   2.759
Residual for   FAC_P1 and   EMP_P2  10.232
Residual for   FAC_P2 and   EMP_P2   3.058
Residual for   FAC_P3 and   EMP_P2   4.506
Residual for   FAC_P3 and   FAC_P2  19.127
Residual for   FAC_P4 and   EMP_P1   2.906
Residual for   FAC_P4 and   EMP_P2  10.203
Residual for   FAC_P4 and   FAC_P1   2.658
Residual for   FAC_P5 and   EMP_P2   8.993
Residual for   FAC_P5 and   FAC_P1   3.386
Residual for   FAC_P5 and   FAC_P4   4.552
Residual for   INT_P2 and   EMP_P2   5.772
Residual for   INT_P2 and   INT_P1  10.887
Residual for   INT_P3 and   EMP_P1   5.630
Residual for   INT_P3 and   EMP_P2  16.208
Residual for   INT_P3 and   EMP_P3   8.269
Residual for   INT_P3 and   FAC_P1   4.540
Residual for   INT_P3 and   FAC_P4   3.456
Residual for   INT_P4 and   EMP_P2  11.207
Residual for   INT_P4 and   FAC_P1   6.716
Residual for   INT_P4 and   FAC_P4   6.509
Residual for   INT_P4 and   FAC_P5   6.034
Residual for   INT_P5 and   EMP_P1   6.847
Residual for   INT_P5 and   EMP_P2  15.018
Residual for   INT_P5 and   EMP_P3   7.087
Residual for   INT_P5 and   FAC_P1   3.476
Residual for   INT_P5 and   FAC_P4   3.412
Residual for   INT_P5 and   FAC_P5   4.205
Residual for   INT_P5 and   INT_P3   9.263
Residual for   INT_P5 and   INT_P4   2.900
Residual for   INT_P6 and   EMP_P2   5.702
Residual for   INT_P6 and   INT_P1   4.297
Residual for   INT_P6 and   INT_P2   4.458
Residual for   IPR_P1 and   EMP_P2   5.516
Residual for   IPR_P1 and   FAC_P1   2.883
Residual for   IPR_P1 and   FAC_P4   3.527
Residual for   IPR_P1 and   INT_P5   2.998
Residual for   IPR_P2 and   EMP_P2   3.803
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Residual for   IPR_P2 and   FAC_P1    2.758
Residual for   IPR_P2 and   FAC_P4    5.601
Residual for   IPR_P2 and   INT_P4    6.299
Residual for   IPR_P3 and   EMP_P2    4.343
Residual for   IPR_P3 and   FAC_P1    3.785
Residual for   IPR_P3 and   FAC_P4    5.275
Residual for   IPR_P3 and   FAC_P5    6.593
Residual for   IPR_P3 and   INT_P4    4.410
Residual for   IPR_P3 and   INT_P5    4.455
Residual for   IPR_P3 and   IPR_P2    6.345
Residual for   IPR_P4 and   EMP_P1    2.762
Residual for   IPR_P4 and   EMP_P2   13.219
Residual for   IPR_P4 and   INT_P3    4.451
Residual for   IPR_P4 and   INT_P4   12.039
Residual for   IPR_P4 and   INT_P5   10.843
Residual for   SOC_P1 and   FAC_P2    3.994
Residual for   SOC_P1 and   FAC_P4    2.937
Residual for   SOC_P1 and   INT_P3    6.370
Residual for   SOC_P1 and   INT_P5    4.486
Residual for   SOC_P1 and   IPR_P1    5.053
Residual for   SOC_P2 and   EMP_P1    6.187
Residual for   SOC_P2 and   EMP_P2    5.785
Residual for   SOC_P2 and   EMP_P3    3.507
Residual for   SOC_P2 and   INT_P3    8.372
Residual for   SOC_P2 and   INT_P4    2.781
Residual for   SOC_P2 and   INT_P5    7.652
Residual for   SOC_P2 and   IPR_P1    3.287
Residual for   WAR_P1 and   EMP_P2    4.466
Residual for   WAR_P1 and   INT_P3   11.172
Residual for   WAR_P1 and   INT_P4    3.277
Residual for   WAR_P1 and   INT_P5    7.412
Residual for   WAR_P2 and   EMP_P2    2.832
Residual for   WAR_P2 and   INT_P3    9.769
Residual for   WAR_P2 and   INT_P5    4.834
Residual for   WAR_P2 and   SOC_P2    4.054
Residual for   WAR_P2 and   WAR_P1    8.747
Residual for   WAR_P3 and   EMP_P1    7.295
Residual for   WAR_P3 and   EMP_P2    6.816
Residual for   WAR_P3 and   EMP_P3    8.439
Residual for   WAR_P3 and   INT_P3    8.220
Residual for   WAR_P3 and   INT_P5    7.530
Residual for   WAR_P4 and   EMP_P2    3.679
Residual for   WAR_P4 and   FAC_P1    8.833
Residual for   WAR_P4 and   FAC_P2    3.294
Residual for   WAR_P4 and   FAC_P4    9.243
Residual for   WAR_P4 and   FAC_P5    8.028
Residual for   WAR_P4 and   INT_P3    3.999
Residual for   WAR_P4 and   INT_P4    6.821
Residual for   WAR_P4 and   INT_P5   12.517
Residual for   WAR_P4 and   IPR_P1    3.014
Residual for   WAR_P4 and   IPR_P2    4.668
Residual for   WAR_P4 and   IPR_P3    7.411
Residual for   WAR_P4 and   SOC_P1    2.675
Residual for   WAR_P5 and   EMP_P2    5.223
Residual for   WAR_P5 and   FAC_P1    4.713
Residual for   WAR_P5 and   FAC_P4    6.578
Residual for   WAR_P5 and   FAC_P5    5.594
Residual for   WAR_P5 and   INT_P3    6.987
Residual for   WAR_P5 and   INT_P4    3.154
Residual for   WAR_P5 and   INT_P5    7.982
Residual for   WAR_P5 and   WAR_P1    2.709
Residual for   ARR_P1 and   FAC_P2    9.638
Residual for   ARR_P1 and   FAC_P3    5.677
Residual for   ARR_P1 and   INT_P2    4.053
Residual for   ARR_P1 and   INT_P6    3.596
Residual for   ARR_P1 and   IPR_P1    3.866
Residual for   ARR_P1 and   IPR_P2    4.626
Residual for   ARR_P1 and   IPR_P3    6.746
Residual for   ARR_P1 and   SOC_P1    6.060
Residual for   ARR_P1 and   WAR_P4    8.082
Residual for   ARR_P1 and   WAR_P5    5.519
Residual for   ARR_P2 and   FAC_P2    5.322
Residual for   ARR_P2 and   INT_P2    4.276
Residual for   ARR_P2 and   INT_P6    3.284
Residual for   ARR_P2 and   IPR_P3    6.377
Residual for   ARR_P2 and   WAR_P4    3.124
Residual for   ARR_P2 and   WAR_P5    2.673
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Residual	for	ARR_P3	and	EMP_P3	3.419
Residual	for	ARR_P3	and	FAC_P2	4.117
Residual	for	CON_P1	and	EMP_P1	7.746
Residual	for	CON_P1	and	EMP_P3	5.806
Residual	for	CON_P1	and	INT_P3	6.465
Residual	for	CON_P1	and	INT_P5	6.173
Residual	for	CON_P2	and	FAC_P2	4.459
Residual	for	CON_P3	and	FAC_P1	3.645
Residual	for	CON_P3	and	FAC_P2	12.272
Residual	for	CON_P3	and	FAC_P3	2.632
Residual	for	CON_P3	and	FAC_P4	3.172
Residual	for	CON_P3	and	FAC_P5	5.194
Residual	for	CON_P3	and	INT_P2	4.699
Residual	for	CON_P3	and	INT_P3	4.073
Residual	for	CON_P3	and	INT_P5	2.694
Residual	for	CON_P3	and	IPR_P1	3.519
Residual	for	CON_P3	and	IPR_P2	5.425
Residual	for	CON_P3	and	IPR_P3	5.889
Residual	for	CON_P3	and	SOC_P1	4.268
Residual	for	CON_P3	and	WAR_P2	3.137
Residual	for	CON_P3	and	WAR_P5	4.616
Residual	for	CON_P3	and	ARR_P1	3.914
Residual	for	CON_P3	and	ARR_P3	5.536
Residual	for	CON_P3	and	CON_P2	5.196
Residual	for	HOS_P1	and	EMP_P1	6.936
Residual	for	HOS_P1	and	EMP_P3	6.042
Residual	for	HOS_P1	and	FAC_P2	8.323
Residual	for	HOS_P1	and	INT_P2	7.909
Residual	for	HOS_P1	and	INT_P3	6.101
Residual	for	HOS_P1	and	INT_P5	3.427
Residual	for	HOS_P1	and	INT_P6	6.165
Residual	for	HOS_P1	and	IPR_P1	2.788
Residual	for	HOS_P1	and	IPR_P3	7.107
Residual	for	HOS_P1	and	SOC_P1	5.404
Residual	for	HOS_P1	and	SOC_P2	2.808
Residual	for	HOS_P1	and	WAR_P1	2.917
Residual	for	HOS_P1	and	WAR_P2	2.907
Residual	for	HOS_P1	and	WAR_P3	3.303
Residual	for	HOS_P1	and	WAR_P4	6.142
Residual	for	HOS_P1	and	WAR_P5	7.587
Residual	for	HOS_P1	and	CON_P1	9.570
Residual	for	HOS_P1	and	CON_P3	3.408
Residual	for	HOS_P2	and	EMP_P1	2.836
Residual	for	HOS_P2	and	FAC_P1	4.726
Residual	for	HOS_P2	and	FAC_P2	10.475
Residual	for	HOS_P2	and	FAC_P3	5.698
Residual	for	HOS_P2	and	FAC_P4	4.230
Residual	for	HOS_P2	and	FAC_P5	5.709
Residual	for	HOS_P2	and	INT_P2	5.306
Residual	for	HOS_P2	and	INT_P3	4.371
Residual	for	HOS_P2	and	INT_P6	3.614
Residual	for	HOS_P2	and	IPR_P1	4.286
Residual	for	HOS_P2	and	IPR_P3	5.357
Residual	for	HOS_P2	and	SOC_P1	4.670
Residual	for	HOS_P2	and	SOC_P2	2.774
Residual	for	HOS_P2	and	WAR_P4	4.290
Residual	for	HOS_P2	and	WAR_P5	5.995
Residual	for	HOS_P2	and	ARR_P1	3.040
Residual	for	HOS_P2	and	CON_P3	3.199
Residual	for	HOS_P2	and	HOS_P1	6.153
Residual	for	HOS_P3	and	INT_P1	2.593
Residual	for	HOS_P3	and	INT_P2	3.242
Residual	for	HOS_P3	and	CON_P2	8.798
Residual	for	HOS_P3	and	HOS_P2	3.032
Residual	for	HOS_P4	and	FAC_P2	2.762
Residual	for	HOS_P4	and	ARR_P1	6.210
Residual	for	HOS_P4	and	ARR_P2	8.743
Residual	for	HOS_P4	and	ARR_P3	7.279
Residual	for	HOS_P4	and	HOS_P3	4.288
Residual	for	HOS_P5	and	FAC_P2	8.523
Residual	for	HOS_P5	and	INT_P2	4.385
Residual	for	HOS_P5	and	IPR_P3	5.071
Residual	for	HOS_P5	and	SOC_P1	2.866
Residual	for	HOS_P5	and	ARR_P2	6.923
Residual	for	HOS_P5	and	ARR_P3	3.350
Residual	for	HOS_P5	and	CON_P2	6.978
Residual	for	HOS_P5	and	HOS_P2	2.587

Residual	for	HOS_P5	and	HOS_P3	8.903
Residual	for	HOS_P6	and	EMP_P3	4.312
Residual	for	HOS_P6	and	INT_P6	3.366
Residual	for	HOS_P6	and	HOS_P1	3.964
Residual	for	HOS_P6	and	HOS_P4	2.906
Residual	for	HOS_P7	and	EMP_P1	7.715
Residual	for	HOS_P7	and	EMP_P3	8.798
Residual	for	HOS_P7	and	FAC_P2	3.061
Residual	for	HOS_P7	and	IPR_P2	4.828
Residual	for	HOS_P7	and	IPR_P3	4.433
Residual	for	HOS_P7	and	SOC_P1	3.039
Residual	for	HOS_P7	and	SOC_P2	2.927
Residual	for	HOS_P7	and	WAR_P2	5.212
Residual	for	HOS_P7	and	WAR_P3	5.057
Residual	for	HOS_P7	and	WAR_P4	2.895
Residual	for	HOS_P7	and	WAR_P5	7.320
Residual	for	HOS_P7	and	CON_P1	6.270
Residual	for	HOS_P7	and	CON_P2	3.384
Residual	for	HOS_P7	and	CON_P3	2.882
Residual	for	HOS_P7	and	HOS_P1	4.456
Residual	for	HOS_P7	and	HOS_P6	8.084
Residual	for	DEC_P1	and	EMP_P1	2.862
Residual	for	DEC_P1	and	EMP_P3	4.153
Residual	for	DEC_P1	and	FAC_P2	4.377
Residual	for	DEC_P1	and	INT_P5	4.214
Residual	for	DEC_P1	and	IPR_P2	3.922
Residual	for	DEC_P1	and	WAR_P5	2.822
Residual	for	DEC_P1	and	CON_P1	3.094
Residual	for	DEC_P1	and	CON_P2	3.668
Residual	for	DEC_P1	and	HOS_P6	3.255
Residual	for	DEC_P1	and	HOS_P7	16.694
Residual	for	DEC_P2	and	EMP_P1	4.948
Residual	for	DEC_P2	and	EMP_P3	3.389
Residual	for	DEC_P2	and	FAC_P2	6.531
Residual	for	DEC_P2	and	FAC_P4	4.436
Residual	for	DEC_P2	and	FAC_P5	3.589
Residual	for	DEC_P2	and	INT_P3	2.622
Residual	for	DEC_P2	and	INT_P5	4.935
Residual	for	DEC_P2	and	IPR_P1	4.213
Residual	for	DEC_P2	and	IPR_P2	4.509
Residual	for	DEC_P2	and	IPR_P3	4.675
Residual	for	DEC_P2	and	IPR_P4	2.614
Residual	for	DEC_P2	and	SOC_P1	7.687
Residual	for	DEC_P2	and	SOC_P2	4.626
Residual	for	DEC_P2	and	WAR_P1	2.857
Residual	for	DEC_P2	and	WAR_P3	3.553
Residual	for	DEC_P2	and	WAR_P4	3.963
Residual	for	DEC_P2	and	WAR_P5	3.667
Residual	for	DEC_P2	and	CON_P1	6.027
Residual	for	DEC_P2	and	HOS_P7	9.370
Residual	for	DEC_P3	and	INT_P2	4.483
Residual	for	DEC_P3	and	INT_P3	2.790
Residual	for	DEC_P3	and	INT_P5	7.241
Residual	for	DEC_P3	and	INT_P6	3.547
Residual	for	DEC_P3	and	ARR_P3	4.147
Residual	for	DEC_P3	and	HOS_P7	5.453
Residual	for	DEC_P3	and	DEC_P2	2.905
Residual	for	EMO_P1	and	EMP_P2	12.339
Residual	for	EMO_P1	and	FAC_P1	4.758
Residual	for	EMO_P1	and	FAC_P2	4.175
Residual	for	EMO_P1	and	FAC_P3	13.576
Residual	for	EMO_P1	and	FAC_P4	4.623
Residual	for	EMO_P1	and	FAC_P5	2.724
Residual	for	EMO_P1	and	INT_P1	7.520
Residual	for	EMO_P1	and	INT_P2	4.964
Residual	for	EMO_P1	and	INT_P3	5.022
Residual	for	EMO_P1	and	INT_P4	5.291
Residual	for	EMO_P1	and	INT_P6	6.680
Residual	for	EMO_P1	and	IPR_P1	3.639
Residual	for	EMO_P1	and	IPR_P4	3.131
Residual	for	EMO_P1	and	SOC_P1	4.038
Residual	for	EMO_P1	and	WAR_P1	6.312
Residual	for	EMO_P1	and	WAR_P2	2.669
Residual	for	EMO_P1	and	WAR_P4	5.827
Residual	for	EMO_P1	and	WAR_P5	5.092
Residual	for	EMO_P2	and	EMP_P2	6.626
Residual	for	EMO_P2	and	INT_P4	2.765

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Residual for   EMO_P2 and   WAR_P4   4.116
Residual for   EMO_P2 and   HOS_P2   3.030
Residual for   EMO_P2 and   HOS_P5   4.436
Residual for   EMO_P2 and   DEC_P2   7.582
Residual for   EMO_P2 and   DEC_P3   4.634
Residual for   EMO_P3 and   EMP_P2   6.789
Residual for   EMO_P3 and   INT_P4   2.961
Residual for   EMO_P3 and   WAR_P4   3.251
Residual for   EMO_P3 and   ARR_P1   2.944
Residual for   EMO_P3 and   CON_P3   6.348
Residual for   EMO_P3 and   HOS_P2   4.474
Residual for   EMO_P3 and   HOS_P5   5.502
Residual for   EMO_P3 and   DEC_P2   5.477
Residual for   EMO_P3 and   EMO_P2   4.622
Residual for   EMO_P4 and   EMP_P2   7.077
Residual for   EMO_P4 and   FAC_P3   3.965
Residual for   EMO_P4 and   ARR_P1   4.459
Residual for   EMO_P4 and   CON_P3   3.215
Residual for   EMO_P4 and   HOS_P2   4.869
Residual for   EMO_P4 and   HOS_P4   2.736
Residual for   EMO_P4 and   HOS_P5   5.596
Residual for   EMO_P4 and   DEC_P2   5.695
Residual for   EMO_P4 and   EMO_P3   2.816
Residual for   NEG_P1 and   EMP_P3   6.721
Residual for   NEG_P1 and   FAC_P1   3.085
Residual for   NEG_P1 and   FAC_P2   7.011
Residual for   NEG_P1 and   FAC_P4   3.868
Residual for   NEG_P1 and   INT_P3   7.472
Residual for   NEG_P1 and   INT_P5   4.546
Residual for   NEG_P1 and   IPR_P3   2.814
Residual for   NEG_P1 and   SOC_P2   3.624
Residual for   NEG_P1 and   WAR_P2   3.315
Residual for   NEG_P1 and   WAR_P3   3.386
Residual for   NEG_P1 and   WAR_P5   2.779
Residual for   NEG_P1 and   HOS_P6   4.255
Residual for   NEG_P1 and   HOS_P7   3.819
Residual for   NEG_P1 and   EMO_P1   5.396
Residual for   NEG_P2 and   ARR_P1   3.110
Residual for   NEG_P2 and   ARR_P3   7.132
Residual for   NEG_P2 and   CON_P1   9.522
Residual for   NEG_P2 and   HOS_P1   5.916
Residual for   NEG_P2 and   HOS_P6   7.483
Residual for   NEG_P2 and   HOS_P7   9.098
Residual for   NEG_P2 and   DEC_P1   7.975
Residual for   NEG_P2 and   DEC_P2   7.652
Residual for   NEG_P2 and   DEC_P3  11.316
Residual for   NEG_P2 and   EMO_P2   2.867
Residual for   NEG_P2 and   EMO_P3   4.062
Residual for   NEG_P3 and   EMP_P1   3.817
Residual for   NEG_P3 and   EMP_P3   8.657
Residual for   NEG_P3 and   INT_P3   8.354
Residual for   NEG_P3 and   INT_P5  10.553
Residual for   NEG_P3 and   INT_P6   3.661
Residual for   NEG_P3 and   IPR_P3   3.259
Residual for   NEG_P3 and   IPR_P4   4.083
Residual for   NEG_P3 and   SOC_P2   3.792
Residual for   NEG_P3 and   WAR_P2   3.846
Residual for   NEG_P3 and   WAR_P3   8.455
Residual for   NEG_P3 and   EMO_P4   3.103
Residual for   NEG_P3 and   NEG_P2   6.138
Residual for   NEG_P4 and   EMP_P1  14.649
Residual for   NEG_P4 and   EMP_P2   4.998
Residual for   NEG_P4 and   EMP_P3  18.903
Residual for   NEG_P4 and   FAC_P1   8.997
Residual for   NEG_P4 and   FAC_P2  10.191
Residual for   NEG_P4 and   FAC_P3   2.743
Residual for   NEG_P4 and   FAC_P4  10.676
Residual for   NEG_P4 and   FAC_P5   8.930
Residual for   NEG_P4 and   INT_P2   6.879
Residual for   NEG_P4 and   INT_P3  15.185
Residual for   NEG_P4 and   INT_P4   4.920
Residual for   NEG_P4 and   INT_P5  15.583
Residual for   NEG_P4 and   INT_P6   9.708
Residual for   NEG_P4 and   IPR_P1   7.073
Residual for   NEG_P4 and   IPR_P2   6.140
Residual for   NEG_P4 and   IPR_P3  11.120
Residual for   NEG_P4 and   IPR_P4  10.759
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Residual for   NEG_P4 and   SOC_P1   8.940
Residual for   NEG_P4 and   SOC_P2  14.227
Residual for   NEG_P4 and   WAR_P1   9.250
Residual for   NEG_P4 and   WAR_P2  10.338
Residual for   NEG_P4 and   WAR_P3  14.344
Residual for   NEG_P4 and   WAR_P4   7.443
Residual for   NEG_P4 and   WAR_P5   9.666
Residual for   NEG_P4 and   EMO_P1   5.124
Residual for   NEG_P4 and   EMO_P2   8.523
Residual for   NEG_P4 and   EMO_P3   7.822
Residual for   NEG_P4 and   EMO_P4   9.596
Residual for   NEG_P4 and   NEG_P3  16.505
Residual for   NEG_P5 and   ARR_P1  11.622
Residual for   NEG_P5 and   ARR_P2  12.585
Residual for   NEG_P5 and   ARR_P3  12.927
Residual for   NEG_P5 and   CON_P1  12.999
Residual for   NEG_P5 and   CON_P2  17.251
Residual for   NEG_P5 and   CON_P3  10.464
Residual for   NEG_P5 and   HOS_P1  14.799
Residual for   NEG_P5 and   HOS_P2   6.345
Residual for   NEG_P5 and   HOS_P3  16.872
Residual for   NEG_P5 and   HOS_P4   9.279
Residual for   NEG_P5 and   HOS_P5  10.731
Residual for   NEG_P5 and   HOS_P6  14.671
Residual for   NEG_P5 and   HOS_P7  15.284
Residual for   NEG_P5 and   DEC_P1  10.008
Residual for   NEG_P5 and   DEC_P2   3.403
Residual for   NEG_P5 and   DEC_P3   9.332
Residual for   NEG_P5 and   NEG_P1   8.067
Residual for   PLA_P1 and   FAC_P2   3.696
Residual for   PLA_P1 and   FAC_P5   3.882
Residual for   PLA_P1 and   INT_P3   3.147
Residual for   PLA_P1 and   ARR_P1   6.904
Residual for   PLA_P1 and   ARR_P2   4.490
Residual for   PLA_P1 and   CON_P1   9.567
Residual for   PLA_P1 and   CON_P3   4.260
Residual for   PLA_P1 and   HOS_P1   6.982
Residual for   PLA_P1 and   HOS_P2   6.352
Residual for   PLA_P1 and   HOS_P5   6.424
Residual for   PLA_P1 and   HOS_P6   2.674
Residual for   PLA_P1 and   HOS_P7   3.551
Residual for   PLA_P1 and   DEC_P1   5.287
Residual for   PLA_P1 and   DEC_P2   5.012
Residual for   PLA_P1 and   NEG_P4   4.639
Residual for   PLA_P2 and   EMP_P2   7.297
Residual for   PLA_P2 and   INT_P3   9.251
Residual for   PLA_P2 and   INT_P5   7.748
Residual for   PLA_P2 and   IPR_P1   5.690
Residual for   PLA_P2 and   WAR_P4   6.054
Residual for   PLA_P2 and   WAR_P5   2.736
Residual for   PLA_P2 and   CON_P1   7.746
Residual for   PLA_P2 and   HOS_P1   2.748
Residual for   PLA_P2 and   HOS_P2   3.093
Residual for   PLA_P2 and   DEC_P2   4.053
Residual for   PLA_P2 and   EMO_P2   6.548
Residual for   PLA_P2 and   NEG_P4   6.942
Residual for   SOB_P1 and   EMP_P2   4.193
Residual for   SOB_P1 and   IPR_P1   6.920
Residual for   SOB_P1 and   ARR_P1   7.290
Residual for   SOB_P1 and   ARR_P2   3.149
Residual for   SOB_P1 and   CON_P1   4.605
Residual for   SOB_P1 and   CON_P3   8.077
Residual for   SOB_P1 and   HOS_P1   9.973
Residual for   SOB_P1 and   HOS_P2   9.340
Residual for   SOB_P1 and   HOS_P5   7.414
Residual for   SOB_P1 and   HOS_P6   3.179
Residual for   SOB_P1 and   HOS_P7   3.336
Residual for   SOB_P1 and   DEC_P1   8.794
Residual for   SOB_P1 and   DEC_P2   8.360
Residual for   SOB_P1 and   NEG_P1   8.514
Residual for   SOB_P1 and   NEG_P4   7.354
Residual for   SOB_P2 and   EMP_P1   4.720
Residual for   SOB_P2 and   EMP_P2  12.408
Residual for   SOB_P2 and   FAC_P1   4.008
Residual for   SOB_P2 and   FAC_P2   3.854
Residual for   SOB_P2 and   FAC_P3   3.928
Residual for   SOB_P2 and   FAC_P4   2.795
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Residual for  SOB_P2 and  FAC_P5   4.126
Residual for  SOB_P2 and  INT_P2   4.438
Residual for  SOB_P2 and  INT_P3  11.408
Residual for  SOB_P2 and  INT_P4   5.824
Residual for  SOB_P2 and  INT_P5   9.839
Residual for  SOB_P2 and  IPR_P1  13.355
Residual for  SOB_P2 and  IPR_P3   3.136
Residual for  SOB_P2 and  IPR_P4   2.602
Residual for  SOB_P2 and  SOC_P1   8.915
Residual for  SOB_P2 and  SOC_P2   4.484
Residual for  SOB_P2 and  WAR_P1   5.618
Residual for  SOB_P2 and  WAR_P2   6.402
Residual for  SOB_P2 and  WAR_P4  11.190
Residual for  SOB_P2 and  WAR_P5   4.330
Residual for  SOB_P2 and  DEC_P2   5.418
Residual for  SOB_P2 and  EMO_P1   7.539
Residual for  SOB_P2 and  EMO_P2   7.400
Residual for  SOB_P2 and  EMO_P3   3.382
Residual for  SOB_P2 and  EMO_P4   3.234
Residual for  SOB_P2 and  NEG_P4   6.217
Residual for  SOB_P3 and  EMP_P2   6.712
Residual for  SOB_P3 and  INT_P3   5.709
Residual for  SOB_P3 and  INT_P5   3.858
Residual for  SOB_P3 and  IPR_P1   5.757
Residual for  SOB_P3 and  WAR_P4   4.894
Residual for  SOB_P3 and  ARR_P1   5.573
Residual for  SOB_P3 and  CON_P3   5.142
Residual for  SOB_P3 and  HOS_P2   6.001
Residual for  SOB_P3 and  HOS_P5   2.943
Residual for  SOB_P3 and  DEC_P1   4.045
Residual for  SOB_P3 and  DEC_P2   6.827
Residual for  SOB_P3 and  EMO_P1   4.043
Residual for  SOB_P3 and  NEG_P1   2.702
Residual for  SOB_P3 and  NEG_P4   3.749
Residual for  SOB_P3 and  SOB_P1  12.120
Residual for  ACH_P1 and  EMP_P2   7.469
Residual for  ACH_P1 and  FAC_P1   3.929
Residual for  ACH_P1 and  FAC_P3   4.783
Residual for  ACH_P1 and  INT_P2   2.974
Residual for  ACH_P1 and  CON_P3   4.957
Residual for  ACH_P1 and  HOS_P1   3.230
Residual for  ACH_P1 and  HOS_P2   4.265
Residual for  ACH_P1 and  EMO_P1  11.046
Residual for  ACH_P1 and  NEG_P1   3.271
Residual for  ACH_P1 and  NEG_P3   4.253
Residual for  ACH_P1 and  NEG_P4   7.701
Residual for  ACH_P2 and  EMP_P2  11.315
Residual for  ACH_P2 and  FAC_P3   8.841
Residual for  ACH_P2 and  INT_P2   4.379
Residual for  ACH_P2 and  CON_P3   4.470
Residual for  ACH_P2 and  HOS_P1   2.799
Residual for  ACH_P2 and  HOS_P2   5.345
Residual for  ACH_P2 and  EMO_P1  14.807
Residual for  ACH_P2 and  NEG_P1   3.701
Residual for  ACH_P2 and  NEG_P4   3.885
Residual for  ACH_P2 and  SOB_P2   2.785
Residual for  ACH_P2 and  ACH_P1   7.506
Residual for  ACH_P3 and  EMP_P2   7.978
Residual for  ACH_P3 and  FAC_P3   3.647
Residual for  ACH_P3 and  INT_P2   2.821
Residual for  ACH_P3 and  INT_P6   3.456
Residual for  ACH_P3 and  WAR_P4   4.449
Residual for  ACH_P3 and  WAR_P5   3.149
Residual for  ACH_P3 and  HOS_P2   4.223
Residual for  ACH_P3 and  EMO_P1  10.116
Residual for  ACH_P3 and  NEG_P4   3.659
Residual for  ACH_P3 and  ACH_P2   5.356
Residual for  ACH_P4 and  EMP_P2  10.330
Residual for  ACH_P4 and  FAC_P3   2.756
Residual for  ACH_P4 and  INT_P1   3.584
Residual for  ACH_P4 and  INT_P2  10.199
Residual for  ACH_P4 and  INT_P3   3.469
Residual for  ACH_P4 and  INT_P6  10.732
Residual for  ACH_P4 and  WAR_P1   2.678
Residual for  ACH_P4 and  WAR_P4   3.685
Residual for  ACH_P4 and  WAR_P5   5.702
Residual for  ACH_P4 and  EMO_P1   6.125
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Residual	for	ACH_P4	and	NEG_P1	6.742
Residual	for	ACH_P4	and	NEG_P3	8.007
Residual	for	ACH_P4	and	NEG_P4	10.830
Residual	for	ACH_P4	and	ACH_P3	3.713
Residual	for	ACH_P5	and	EMP_P2	9.506
Residual	for	ACH_P5	and	FAC_P2	2.595
Residual	for	ACH_P5	and	FAC_P3	11.116
Residual	for	ACH_P5	and	SOC_P1	4.190
Residual	for	ACH_P5	and	WAR_P4	4.481
Residual	for	ACH_P5	and	WAR_P5	4.415
Residual	for	ACH_P5	and	ARR_P1	11.937
Residual	for	ACH_P5	and	ARR_P2	6.024
Residual	for	ACH_P5	and	CON_P1	3.016
Residual	for	ACH_P5	and	CON_P2	3.806
Residual	for	ACH_P5	and	CON_P3	8.561
Residual	for	ACH_P5	and	HOS_P1	7.768
Residual	for	ACH_P5	and	HOS_P2	10.986
Residual	for	ACH_P5	and	HOS_P4	3.955
Residual	for	ACH_P5	and	HOS_P5	5.977
Residual	for	ACH_P5	and	DEC_P1	5.892
Residual	for	ACH_P5	and	DEC_P2	7.004
Residual	for	ACH_P5	and	EMO_P1	13.852
Residual	for	ACH_P5	and	NEG_P1	3.865
Residual	for	ACH_P5	and	NEG_P4	7.033
Residual	for	ACH_P5	and	PLA_P1	3.066
Residual	for	ACH_P5	and	PLA_P2	8.460
Residual	for	ACH_P5	and	SOB_P1	4.344
Residual	for	ACH_P5	and	SOB_P2	6.654
Residual	for	ACH_P5	and	SOB_P3	7.117
Residual	for	ORD_P1	and	EMP_P2	4.836
Residual	for	ORD_P1	and	FAC_P3	4.262
Residual	for	ORD_P1	and	INT_P1	5.429
Residual	for	ORD_P1	and	INT_P6	4.441
Residual	for	ORD_P1	and	EMO_P1	7.002
Residual	for	ORD_P1	and	NEG_P1	4.131
Residual	for	ORD_P1	and	NEG_P3	8.396
Residual	for	ORD_P1	and	NEG_P4	8.435
Residual	for	ORD_P2	and	EMP_P2	3.160
Residual	for	ORD_P2	and	FAC_P3	3.523
Residual	for	ORD_P2	and	INT_P1	4.036
Residual	for	ORD_P2	and	INT_P2	5.318
Residual	for	ORD_P2	and	INT_P6	3.898
Residual	for	ORD_P2	and	ARR_P1	2.583
Residual	for	ORD_P2	and	CON_P2	3.672
Residual	for	ORD_P2	and	CON_P3	3.212
Residual	for	ORD_P2	and	HOS_P1	4.691
Residual	for	ORD_P2	and	HOS_P2	3.549
Residual	for	ORD_P2	and	HOS_P3	2.709
Residual	for	ORD_P2	and	HOS_P5	2.846
Residual	for	ORD_P2	and	DEC_P3	2.941
Residual	for	ORD_P2	and	EMO_P1	6.255
Residual	for	ORD_P2	and	NEG_P1	3.704
Residual	for	ORD_P2	and	NEG_P3	3.221
Residual	for	ORD_P2	and	NEG_P4	6.622
Residual	for	ORD_P2	and	ACH_P4	11.105
Residual	for	ORD_P3	and	EMP_P2	7.484
Residual	for	ORD_P3	and	FAC_P1	6.735
Residual	for	ORD_P3	and	FAC_P2	3.570
Residual	for	ORD_P3	and	FAC_P3	9.767
Residual	for	ORD_P3	and	FAC_P4	4.367
Residual	for	ORD_P3	and	FAC_P5	6.211
Residual	for	ORD_P3	and	INT_P1	4.008
Residual	for	ORD_P3	and	INT_P2	7.304
Residual	for	ORD_P3	and	INT_P6	7.616
Residual	for	ORD_P3	and	IPR_P1	2.776
Residual	for	ORD_P3	and	IPR_P3	8.046
Residual	for	ORD_P3	and	IPR_P4	3.955
Residual	for	ORD_P3	and	SOC_P1	4.143
Residual	for	ORD_P3	and	SOC_P2	3.051
Residual	for	ORD_P3	and	WAR_P1	3.284
Residual	for	ORD_P3	and	WAR_P4	5.156
Residual	for	ORD_P3	and	WAR_P5	5.303
Residual	for	ORD_P3	and	ARR_P1	3.673
Residual	for	ORD_P3	and	CON_P3	4.444
Residual	for	ORD_P3	and	HOS_P1	5.136
Residual	for	ORD_P3	and	HOS_P2	5.439
Residual	for	ORD_P3	and	HOS_P3	2.687

Residual	for	ORD_P3	and	HOS_P5	2.757
Residual	for	ORD_P3	and	EMO_P1	9.093
Residual	for	ORD_P3	and	EMO_P3	2.668
Residual	for	ORD_P3	and	EMO_P4	3.930
Residual	for	ORD_P3	and	NEG_P4	5.329
Residual	for	ORD_P3	and	PLA_P1	2.798
Residual	for	ORD_P3	and	PLA_P2	4.575
Residual	for	ORD_P3	and	SOB_P2	5.345
Residual	for	ORD_P3	and	ACH_P1	4.816
Residual	for	ORD_P3	and	ACH_P2	4.258
Residual	for	ORD_P3	and	ACH_P3	8.327
Residual	for	ORD_P3	and	ACH_P4	12.418
Residual	for	ORD_P3	and	ACH_P5	4.364
Residual	for	ORD_P4	and	EMP_P2	9.041
Residual	for	ORD_P4	and	FAC_P3	9.356
Residual	for	ORD_P4	and	INT_P1	4.656
Residual	for	ORD_P4	and	INT_P2	10.485
Residual	for	ORD_P4	and	INT_P6	8.631
Residual	for	ORD_P4	and	IPR_P3	2.829
Residual	for	ORD_P4	and	SOC_P1	3.317
Residual	for	ORD_P4	and	WAR_P5	3.686
Residual	for	ORD_P4	and	EMO_P1	11.614
Residual	for	ORD_P4	and	EMO_P4	4.003
Residual	for	ORD_P4	and	NEG_P4	2.670
Residual	for	ORD_P4	and	SOB_P2	4.872
Residual	for	ORD_P4	and	ACH_P1	7.653
Residual	for	ORD_P4	and	ACH_P2	7.798
Residual	for	ORD_P4	and	ACH_P3	10.351
Residual	for	ORD_P4	and	ACH_P4	15.903
Residual	for	ORD_P4	and	ACH_P5	4.242
Residual	for	ORD_P4	and	ORD_P2	10.444
Residual	for	ORD_P5	and	EMP_P2	7.170
Residual	for	ORD_P5	and	FAC_P3	6.687
Residual	for	ORD_P5	and	IPR_P3	3.176
Residual	for	ORD_P5	and	WAR_P4	3.559
Residual	for	ORD_P5	and	WAR_P5	5.518
Residual	for	ORD_P5	and	DEC_P1	3.357
Residual	for	ORD_P5	and	EMO_P1	5.538
Residual	for	ORD_P5	and	NEG_P1	5.321
Residual	for	ORD_P5	and	NEG_P3	6.631
Residual	for	ORD_P5	and	NEG_P4	9.727
Residual	for	ORD_P5	and	SOB_P2	3.521
Residual	for	ORD_P5	and	ORD_P1	14.068
Residual	for	ORD_P6	and	EMP_P2	4.429
Residual	for	ORD_P6	and	FAC_P3	4.835
Residual	for	ORD_P6	and	INT_P6	3.597
Residual	for	ORD_P6	and	ARR_P1	3.384
Residual	for	ORD_P6	and	ARR_P3	3.046
Residual	for	ORD_P6	and	CON_P3	3.377
Residual	for	ORD_P6	and	HOS_P1	2.596
Residual	for	ORD_P6	and	HOS_P3	2.822
Residual	for	ORD_P6	and	HOS_P4	3.354
Residual	for	ORD_P6	and	DEC_P3	3.996
Residual	for	ORD_P6	and	EMO_P1	5.386
Residual	for	ORD_P6	and	NEG_P1	3.120
Residual	for	ORD_P6	and	NEG_P3	3.700
Residual	for	ORD_P6	and	NEG_P4	5.954
Residual	for	ORD_P6	and	ACH_P4	4.093
Residual	for	ORD_P6	and	ORD_P1	13.386
Residual	for	ORD_P6	and	ORD_P5	14.187
Residual	for	TRA_P1	and	FAC_P3	3.593
Residual	for	TRA_P1	and	ARR_P1	3.999
Residual	for	TRA_P1	and	HOS_P2	4.380
Residual	for	TRA_P1	and	HOS_P7	2.925
Residual	for	TRA_P1	and	DEC_P1	5.732
Residual	for	TRA_P1	and	EMO_P1	9.199
Residual	for	TRA_P1	and	NEG_P1	3.488
Residual	for	TRA_P1	and	NEG_P4	8.054
Residual	for	TRA_P1	and	ACH_P5	4.229
Residual	for	TRA_P1	and	ORD_P1	9.725
Residual	for	TRA_P1	and	ORD_P5	3.554
Residual	for	TRA_P2	and	EMP_P2	5.737
Residual	for	TRA_P2	and	FAC_P3	2.751
Residual	for	TRA_P2	and	FAC_P4	3.939
Residual	for	TRA_P2	and	INT_P3	5.284
Residual	for	TRA_P2	and	IPR_P2	3.524
Residual	for	TRA_P2	and	WAR_P5	5.160

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Residual for   TRA_P2 and   ARR_P1   3.292
Residual for   TRA_P2 and   HOS_P2   3.921
Residual for   TRA_P2 and   HOS_P7   3.557
Residual for   TRA_P2 and   DEC_P1   5.476
Residual for   TRA_P2 and   EMO_P1  13.499
Residual for   TRA_P2 and   NEG_P1   4.815
Residual for   TRA_P2 and   NEG_P4  10.547
Residual for   TRA_P2 and   PLA_P2   2.585
Residual for   TRA_P2 and   ACH_P5   2.971
Residual for   TRA_P2 and   ORD_P1   6.722
Residual for   TRA_P2 and   ORD_P5   3.554
Residual for   BRO_P1 and   EMP_P2   9.928
Residual for   BRO_P1 and   EMP_P3   3.445
Residual for   BRO_P1 and   INT_P3   3.813
Residual for   BRO_P1 and   INT_P5   2.960
Residual for   BRO_P1 and   WAR_P4   3.098
Residual for   BRO_P1 and   CON_P1   3.491
Residual for   BRO_P1 and   HOS_P2   3.565
Residual for   BRO_P1 and   DEC_P1   2.875
Residual for   BRO_P1 and   NEG_P1   5.897
Residual for   BRO_P1 and   NEG_P3   4.339
Residual for   BRO_P1 and   NEG_P4  13.101
Residual for   BRO_P1 and   PLA_P1   4.212
Residual for   BRO_P1 and   ORD_P3   2.661
Residual for   BRO_P2 and   EMP_P2   5.604
Residual for   BRO_P2 and   FAC_P1   5.321
Residual for   BRO_P2 and   FAC_P2   3.411
Residual for   BRO_P2 and   FAC_P3   2.595
Residual for   BRO_P2 and   FAC_P4   2.750
Residual for   BRO_P2 and   FAC_P5   5.303
Residual for   BRO_P2 and   IPR_P1   2.963
Residual for   BRO_P2 and   WAR_P4   5.735
Residual for   BRO_P2 and   WAR_P5   4.454
Residual for   BRO_P2 and   ARR_P1   5.993
Residual for   BRO_P2 and   ARR_P2   2.607
Residual for   BRO_P2 and   CON_P3   5.530
Residual for   BRO_P2 and   HOS_P2   5.994
Residual for   BRO_P2 and   HOS_P5   3.500
Residual for   BRO_P2 and   NEG_P4   4.665
Residual for   BRO_P2 and   ACH_P1   3.884
Residual for   BRO_P2 and   ACH_P5  10.653
Residual for   BRO_P2 and   ORD_P3   5.559
Residual for   BRO_P2 and   ORD_P5   3.386
Residual for   BRO_P2 and   BRO_P1   5.946
Residual for   BRO_P3 and   EMP_P2   6.725
Residual for   BRO_P3 and   INT_P3   3.813
Residual for   BRO_P3 and   INT_P5   4.423
Residual for   BRO_P3 and   WAR_P4   4.033
Residual for   BRO_P3 and   EMO_P1   3.524
Residual for   BRO_P3 and   EMO_P2   5.011
Residual for   BRO_P3 and   NEG_P4   6.417
Residual for   BRO_P3 and   ACH_P5   4.611
Residual for   BRO_P3 and   ORD_P3   5.075
Residual for   EPI_P1 and   EMP_P2  10.420
Residual for   EPI_P1 and   FAC_P1   7.643
Residual for   EPI_P1 and   FAC_P3   4.893
Residual for   EPI_P1 and   FAC_P4   3.313
Residual for   EPI_P1 and   FAC_P5   6.924
Residual for   EPI_P1 and   INT_P1   3.901
Residual for   EPI_P1 and   INT_P2   3.818
Residual for   EPI_P1 and   INT_P3   3.654
Residual for   EPI_P1 and   INT_P4   4.472
Residual for   EPI_P1 and   INT_P5   4.186
Residual for   EPI_P1 and   INT_P6   5.344
Residual for   EPI_P1 and   IPR_P1   5.289
Residual for   EPI_P1 and   IPR_P3   5.849
Residual for   EPI_P1 and   IPR_P4   4.060
Residual for   EPI_P1 and   SOC_P2   2.730
Residual for   EPI_P1 and   WAR_P1   4.667
Residual for   EPI_P1 and   WAR_P2   3.562
Residual for   EPI_P1 and   WAR_P4   6.036
Residual for   EPI_P1 and   WAR_P5   3.656
Residual for   EPI_P1 and   EMO_P1  13.130
Residual for   EPI_P1 and   EMO_P4   3.191
Residual for   EPI_P1 and   NEG_P4   3.870
Residual for   EPI_P1 and   SOB_P2   7.735
Residual for   EPI_P1 and   ACH_P1  12.549
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Residual for   EPI_P1 and   ACH_P2   9.213
Residual for   EPI_P1 and   ACH_P3   8.695
Residual for   EPI_P1 and   ACH_P4  13.685
Residual for   EPI_P1 and   ACH_P5   8.665
Residual for   EPI_P1 and   ORD_P1   5.432
Residual for   EPI_P1 and   ORD_P2   6.809
Residual for   EPI_P1 and   ORD_P3  10.580
Residual for   EPI_P1 and   ORD_P4   9.977
Residual for   EPI_P1 and   ORD_P5   4.564
Residual for   EPI_P1 and   ORD_P6   5.068
Residual for   EPI_P1 and   TRA_P1   5.252
Residual for   EPI_P1 and   TRA_P2   9.220
Residual for   EPI_P2 and   EMP_P2   6.695
Residual for   EPI_P2 and   FAC_P5   4.487
Residual for   EPI_P2 and   CON_P1   9.772
Residual for   EPI_P2 and   CON_P3   4.303
Residual for   EPI_P2 and   HOS_P1   8.915
Residual for   EPI_P2 and   HOS_P2   5.549
Residual for   EPI_P2 and   HOS_P5   3.638
Residual for   EPI_P2 and   HOS_P6   7.809
Residual for   EPI_P2 and   HOS_P7   4.041
Residual for   EPI_P2 and   DEC_P2   3.831
Residual for   EPI_P2 and   DEC_P3   7.856
Residual for   EPI_P2 and   NEG_P2   2.943
Residual for   EPI_P2 and   NEG_P3   5.976
Residual for   EPI_P2 and   NEG_P4  13.851
Residual for   EPI_P2 and   PLA_P1   4.204
Residual for   EPI_P2 and   SOB_P2   3.551
Residual for   EPI_P2 and   BRO_P1  10.153
Residual for   EPI_P2 and   BRO_P3   8.538
Residual for   EPI_P3 and   EMP_P2   7.626
Residual for   EPI_P3 and   FAC_P1   2.727
Residual for   EPI_P3 and   FAC_P5   7.953
Residual for   EPI_P3 and   WAR_P4   3.607
Residual for   EPI_P3 and   ARR_P1   2.932
Residual for   EPI_P3 and   ARR_P2   4.202
Residual for   EPI_P3 and   CON_P1   2.621
Residual for   EPI_P3 and   HOS_P1   4.592
Residual for   EPI_P3 and   HOS_P2   2.705
Residual for   EPI_P3 and   EMO_P1   2.785
Residual for   EPI_P3 and   NEG_P4   7.893
Residual for   EPI_P3 and   SOB_P2   4.149
Residual for   EPI_P3 and   ACH_P4   7.945
Residual for   EPI_P3 and   ORD_P3   8.169
Residual for   EPI_P3 and   ORD_P4   3.197
Residual for   EPI_P3 and   BRO_P3   6.112
Residual for   ITL_P1 and   EMP_P2   7.766
Residual for   ITL_P1 and   SOC_P1   2.766
Residual for   ITL_P1 and   WAR_P4   4.602
Residual for   ITL_P1 and   HOS_P2   3.629
Residual for   ITL_P1 and   DEC_P2   4.951
Residual for   ITL_P1 and   DEC_P3   4.167
Residual for   ITL_P1 and   EMO_P2   5.166
Residual for   ITL_P1 and   EMO_P3   3.839
Residual for   ITL_P1 and   EMO_P4   3.494
Residual for   ITL_P1 and   NEG_P4   7.480
Residual for   ITL_P1 and   SOB_P2   5.957
Residual for   ITL_P1 and   ACH_P4   4.112
Residual for   ITL_P1 and   ORD_P2   2.699
Residual for   ITL_P1 and   ORD_P3   2.652
Residual for   ITL_P1 and   BRO_P3   3.862
Residual for   ITL_P1 and   EPI_P1   6.004
Residual for   ITL_P1 and   EPI_P3   4.234
Residual for   ITL_P2 and   EMP_P2   6.541
Residual for   ITL_P2 and   INT_P2   6.497
Residual for   ITL_P2 and   INT_P6   3.489
Residual for   ITL_P2 and   CON_P3   3.036
Residual for   ITL_P2 and   HOS_P1   4.844
Residual for   ITL_P2 and   HOS_P2   4.654
Residual for   ITL_P2 and   HOS_P5   3.155
Residual for   ITL_P2 and   DEC_P2   4.556
Residual for   ITL_P2 and   DEC_P3   5.997
Residual for   ITL_P2 and   NEG_P1   3.272
Residual for   ITL_P2 and   NEG_P3   2.986
Residual for   ITL_P2 and   NEG_P4  10.659
Residual for   ITL_P2 and   PLA_P1   2.731
Residual for   ITL_P2 and   ACH_P4   3.474
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Residual for  ITL_P2 and  ORD_P2   3.153
Residual for  ITL_P2 and  ORD_P3   6.160
Residual for  ITL_P2 and  EPI_P1   4.574
Residual for  ITL_P2 and  EPI_P2   5.546
Residual for  ITL_P2 and  EPI_P3   5.862
Residual for  ITL_P3 and  EMP_P2   6.242
Residual for  ITL_P3 and  FAC_P1   3.851
Residual for  ITL_P3 and  FAC_P5   5.091
Residual for  ITL_P3 and  IPR_P3   4.125
Residual for  ITL_P3 and  WAR_P4   5.698
Residual for  ITL_P3 and  WAR_P5   3.136
Residual for  ITL_P3 and  ARR_P1   5.373
Residual for  ITL_P3 and  CON_P3   6.368
Residual for  ITL_P3 and  HOS_P1   3.902
Residual for  ITL_P3 and  HOS_P2   5.667
Residual for  ITL_P3 and  HOS_P5   6.646
Residual for  ITL_P3 and  DEC_P2   3.192
Residual for  ITL_P3 and  DEC_P3   3.273
Residual for  ITL_P3 and  NEG_P4   5.286
Residual for  ITL_P3 and  PLA_P1   3.181
Residual for  ITL_P3 and  ACH_P1   3.200
Residual for  ITL_P3 and  ORD_P3   4.095
Residual for  ITL_P3 and  BRO_P1   5.161
Residual for  ITL_P3 and  BRO_P2  17.294
Residual for  ITL_P3 and  BRO_P3   4.796
Residual for  ITL_P3 and  EPI_P3   3.840
Residual for  ITL_P4 and  EMP_P2   7.792
Residual for  ITL_P4 and  FAC_P5   4.565
Residual for  ITL_P4 and  INT_P6   3.109
Residual for  ITL_P4 and  IPR_P3   6.485
Residual for  ITL_P4 and  SOC_P1   4.192
Residual for  ITL_P4 and  WAR_P4   5.808
Residual for  ITL_P4 and  WAR_P5   2.753
Residual for  ITL_P4 and  HOS_P2   3.537
Residual for  ITL_P4 and  DEC_P2   3.314
Residual for  ITL_P4 and  DEC_P3   2.992
Residual for  ITL_P4 and  NEG_P4   8.714
Residual for  ITL_P4 and  PLA_P1   3.695
Residual for  ITL_P4 and  SOB_P2   4.198
Residual for  ITL_P4 and  ORD_P2   3.902
Residual for  ITL_P4 and  ORD_P3   7.175
Residual for  ITL_P4 and  ITL_P1   7.841
Residual for  ITL_P4 and  ITL_P2   3.731
Residual for  ITL_P5 and  EMP_P2   8.311
Residual for  ITL_P5 and  FAC_P1   3.114
Residual for  ITL_P5 and  FAC_P2   4.138
Residual for  ITL_P5 and  FAC_P3   7.456
Residual for  ITL_P5 and  FAC_P5   6.532
Residual for  ITL_P5 and  INT_P2   3.041
Residual for  ITL_P5 and  INT_P6   3.981
Residual for  ITL_P5 and  IPR_P1   3.719
Residual for  ITL_P5 and  IPR_P3   4.601
Residual for  ITL_P5 and  SOC_P1   6.111
Residual for  ITL_P5 and  WAR_P4   5.341
Residual for  ITL_P5 and  WAR_P5   3.260
Residual for  ITL_P5 and  CON_P3   4.567
Residual for  ITL_P5 and  HOS_P2   3.940
Residual for  ITL_P5 and  EMO_P1   5.793
Residual for  ITL_P5 and  EMO_P4   3.479
Residual for  ITL_P5 and  NEG_P4   4.696
Residual for  ITL_P5 and  PLA_P1   6.955
Residual for  ITL_P5 and  SOB_P1   7.193
Residual for  ITL_P5 and  SOB_P2  12.342
Residual for  ITL_P5 and  SOB_P3   4.324
Residual for  ITL_P5 and  ACH_P1   8.317
Residual for  ITL_P5 and  ACH_P2   6.370
Residual for  ITL_P5 and  ACH_P4   3.786
Residual for  ITL_P5 and  ACH_P5   7.037
Residual for  ITL_P5 and  ORD_P2   5.277
Residual for  ITL_P5 and  ORD_P3   8.556
Residual for  ITL_P5 and  ORD_P4   7.285
Residual for  ITL_P5 and  ORD_P5   3.035
Residual for  ITL_P5 and  ORD_P6   6.563
Residual for  ITL_P5 and  TRA_P1   3.333
Residual for  ITL_P5 and  TRA_P2   5.488

SAPI FIRST-ORDER MEASUREMENT MODEL WITH ITEM PAQRCELS AS INDICATORS
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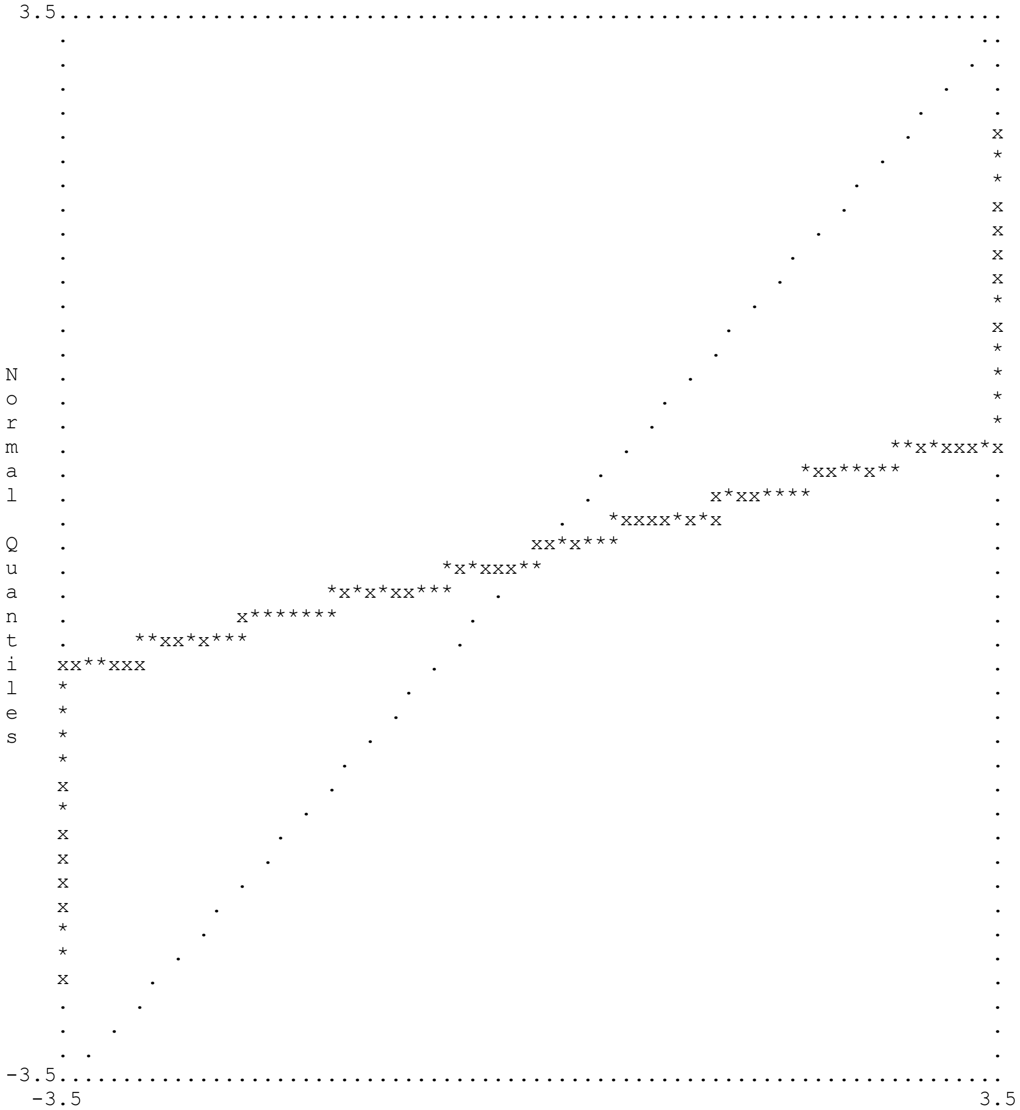
Qplot of Standardized Residuals



SAPI FIRST-ORDER MEASUREMENT MODEL WITH ITEM PAQRCELS AS INDICATORS

Modification Indices and Expected Change

Modification Indices for LAMBDA-X

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMP_P1	- -	8.951	79.956	30.514	0.286	26.005
EMP_P2	- -	236.063	445.444	422.979	107.435	298.829
EMP_P3	- -	111.971	80.915	140.874	86.192	68.984
FAC_P1	61.951	- -	36.043	46.212	5.334	67.510
FAC_P2	105.734	- -	203.200	124.310	6.879	143.863
FAC_P3	119.681	- -	6.152	73.707	50.097	100.114
FAC_P4	101.387	- -	9.667	86.215	22.634	118.705
FAC_P5	15.722	- -	21.473	62.806	10.481	31.871
INT_P1	184.428	10.191	- -	77.168	82.711	130.482
INT_P2	136.462	11.652	- -	125.276	76.369	141.696
INT_P3	264.871	19.040	- -	76.158	161.191	185.164
INT_P4	22.576	33.340	- -	138.060	26.010	72.024
INT_P5	323.426	8.312	- -	171.077	132.174	283.807
INT_P6	83.566	20.893	- -	75.292	63.622	99.919
IPR_P1	5.647	46.550	23.143	- -	1197.594	- -
IPR_P2	17.557	4.034	45.576	- -	39.356	2.508
IPR_P3	20.056	65.068	0.514	- -	1.176	1.900
IPR_P4	146.053	232.321	93.600	- -	3.774	1220.422

SOC_P1	158.205	69.325	5.331	0.709	- -	26.520
SOC_P2	212.711	72.262	5.784	1.009	- -	36.898
WAR_P1	5.277	10.899	14.311	5.963	21.010	- -
WAR_P2	15.176	45.060	4.621	4.216	9.770	- -
WAR_P3	289.479	120.971	15.409	97.739	7.212	- -
WAR_P4	177.485	233.822	3.336	220.878	65.305	- -
WAR_P5	48.363	45.299	0.930	6.376	17.823	- -
ARR_P1	12.492	35.590	12.992	43.765	32.587	35.374
ARR_P2	12.927	8.066	2.414	7.014	12.805	12.503
ARR_P3	0.184	14.310	6.057	23.756	5.926	7.769
CON_P1	47.833	30.371	0.370	0.105	6.652	3.100
CON_P2	34.342	15.224	18.960	32.281	40.342	30.801
CON_P3	0.080	87.644	19.851	42.717	18.640	19.212
HOS_P1	80.206	20.508	64.109	37.504	46.886	66.663
HOS_P2	5.431	84.930	25.272	49.490	38.719	29.146
HOS_P3	29.964	26.765	5.887	52.028	48.561	32.927
HOS_P4	133.087	20.148	28.538	54.840	59.220	94.829
HOS_P5	19.507	6.457	0.002	1.371	0.223	3.120
HOS_P6	10.560	33.333	0.991	8.264	2.816	1.000
HOS_P7	93.061	0.341	37.433	18.942	16.328	43.693
DEC_P1	2.637	0.824	13.333	5.027	1.042	5.324
DEC_P2	20.056	36.038	6.916	59.523	79.536	37.237
DEC_P3	25.021	29.759	4.187	63.613	60.302	47.440
EMO_P1	28.067	106.194	152.635	45.849	18.399	61.643
EMO_P2	0.348	32.736	14.789	0.114	0.102	0.408
EMO_P3	0.189	9.757	14.875	1.583	0.015	2.610
EMO_P4	18.560	0.183	8.723	16.141	12.854	17.740
NEG_P1	3.147	29.574	11.233	3.957	5.731	7.207
NEG_P2	42.694	60.333	118.760	35.626	24.447	49.946
NEG_P3	61.013	0.049	86.945	23.462	2.465	41.949
NEG_P4	513.345	206.120	385.485	377.623	342.002	411.569
NEG_P5	578.086	121.167	444.004	388.953	272.795	456.856
PLA_P1	42.323	2.354	34.362	16.682	35.619	29.521
PLA_P2	65.803	3.716	44.279	27.683	58.288	49.695
SOB_P1	60.518	33.349	138.604	141.563	72.799	102.219
SOB_P2	187.625	91.160	226.105	258.236	246.543	213.630
SOB_P3	34.546	15.179	11.265	21.005	61.970	21.949
ACH_P1	0.051	0.366	0.524	1.966	1.051	2.033
ACH_P2	0.039	7.230	10.138	0.056	1.030	0.326
ACH_P3	1.649	17.879	1.702	0.144	9.698	0.120
ACH_P4	34.097	43.138	157.090	0.050	1.349	9.547
ACH_P5	11.207	45.807	65.384	3.770	14.385	0.319
ORD_P1	3.549	14.957	0.100	0.486	4.642	1.118
ORD_P2	25.000	31.744	8.506	47.633	14.810	48.037
ORD_P3	14.060	125.750	44.699	71.275	48.425	46.143
ORD_P4	9.217	7.263	66.520	11.835	15.223	8.646
ORD_P5	13.657	3.457	10.065	5.156	1.859	12.226
ORD_P6	26.387	19.076	40.127	18.688	20.735	23.640
TRA_P1	34.453	0.309	10.830	30.536	12.288	31.878
TRA_P2	49.693	0.355	9.321	30.486	17.563	32.222
BRO_P1	44.304	15.525	2.668	1.112	1.344	3.340
BRO_P2	33.533	70.595	3.779	1.396	0.767	0.636
BRO_P3	0.030	24.133	11.657	0.059	0.033	0.677
EPI_P1	15.425	56.587	107.610	59.232	16.455	51.315
EPI_P2	3.054	50.220	71.918	30.203	2.536	15.425
EPI_P3	23.212	0.980	0.035	0.603	2.953	3.548
ITL_P1	7.730	73.224	0.538	0.464	3.889	0.228
ITL_P2	0.305	64.629	5.256	37.054	33.399	12.272
ITL_P3	14.896	11.864	46.047	1.981	38.193	5.030
ITL_P4	2.933	1.643	1.396	2.592	8.644	2.913
ITL_P5	0.078	89.134	26.299	31.823	48.380	16.480

Modification Indices for LAMBDA-X

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
EMP_P1	6.850	27.148	15.869	30.296	20.153	7.100
EMP_P2	31.398	123.184	110.967	261.033	342.771	263.502
EMP_P3	5.614	22.718	29.372	80.167	137.831	143.793
FAC_P1	68.590	30.470	44.427	10.872	0.004	0.000
FAC_P2	187.846	183.525	192.379	111.347	41.348	23.453
FAC_P3	9.524	18.677	2.554	103.209	62.736	104.882
FAC_P4	66.035	16.468	37.168	0.124	10.662	13.229
FAC_P5	0.411	0.225	0.036	5.370	11.151	0.882
INT_P1	4.330	9.866	1.731	112.710	0.000	82.561
INT_P2	42.300	10.062	41.722	0.388	0.242	11.059
INT_P3	0.122	30.059	1.629	27.558	17.479	100.024

INT_P4	116.625	93.480	133.120	15.158	32.775	41.359
INT_P5	25.398	13.707	1.242	78.822	18.765	100.786
INT_P6	26.002	0.535	14.663	0.000	5.748	1.910
IPR_P1	2.204	4.933	0.746	5.316	0.105	1.718
IPR_P2	1.406	0.506	0.147	4.049	0.003	6.551
IPR_P3	77.129	32.654	61.015	20.463	1.989	10.761
IPR_P4	128.376	69.186	82.944	21.893	3.057	0.088
SOC_P1	56.158	8.481	16.108	1.681	35.945	61.243
SOC_P2	56.425	8.544	16.599	1.723	37.734	61.363
WAR_P1	3.921	10.657	9.592	12.916	0.412	4.768
WAR_P2	13.395	0.004	3.653	0.000	10.179	5.466
WAR_P3	67.006	6.417	15.143	13.608	101.813	68.112
WAR_P4	63.761	2.058	11.892	5.551	93.550	63.196
WAR_P5	34.300	20.751	30.629	4.301	11.465	0.271
ARR_P1	- -	0.023	4.466	9.610	26.288	5.047
ARR_P2	- -	5.025	0.518	0.002	0.449	6.886
ARR_P3	- -	13.413	28.022	17.450	31.750	40.997
CON_P1	67.558	- -	4.540	45.448	6.845	87.537
CON_P2	1.295	- -	4.021	5.694	16.045	0.004
CON_P3	46.635	- -	1.232	89.958	46.208	76.313
HOS_P1	32.813	69.407	- -	1.710	0.208	26.024
HOS_P2	10.489	15.559	- -	55.205	58.857	38.042
HOS_P3	0.001	3.043	- -	4.150	64.410	5.705
HOS_P4	130.929	126.626	- -	10.291	1.257	43.447
HOS_P5	58.331	0.662	- -	39.050	48.920	111.502
HOS_P6	71.355	21.887	- -	54.136	17.520	78.585
HOS_P7	124.827	50.476	- -	277.003	23.824	105.663
DEC_P1	16.220	10.221	2.606	- -	6.941	1.171
DEC_P2	1.737	8.236	0.012	- -	50.514	2.828
DEC_P3	10.531	29.428	3.544	- -	6.605	0.007
EMO_P1	47.916	92.821	109.354	318.837	- -	9.320
EMO_P2	0.708	2.064	0.419	28.459	- -	0.161
EMO_P3	4.323	22.240	15.583	33.215	- -	5.381
EMO_P4	16.821	3.080	14.762	16.706	- -	0.011
NEG_P1	4.877	7.643	13.834	79.926	13.692	- -
NEG_P2	34.894	63.183	70.305	239.183	1.602	- -
NEG_P3	215.169	285.057	248.342	160.598	1.212	- -
NEG_P4	163.856	205.231	251.966	220.466	264.668	- -
NEG_P5	557.734	714.618	760.291	497.176	172.781	- -
PLA_P1	70.983	61.683	70.034	45.313	4.255	1.675
PLA_P2	76.253	65.418	77.833	50.280	6.785	2.260
SOB_P1	79.968	129.030	134.576	116.572	143.513	99.561
SOB_P2	133.255	170.460	178.836	118.157	162.914	58.389
SOB_P3	6.046	2.538	2.754	0.014	0.946	5.181
ACH_P1	0.327	0.049	0.001	0.113	3.169	0.492
ACH_P2	5.233	1.721	6.154	11.260	3.458	24.814
ACH_P3	15.231	28.167	22.686	12.098	0.320	10.339
ACH_P4	70.887	55.317	36.043	9.218	7.646	37.284
ACH_P5	177.558	157.106	139.661	86.100	2.884	4.310
ORD_P1	42.473	37.562	39.874	9.354	29.580	8.466
ORD_P2	8.900	6.353	13.697	3.076	1.474	0.041
ORD_P3	12.658	10.708	7.287	0.009	70.258	5.497
ORD_P4	20.218	27.342	30.672	85.250	52.341	43.336
ORD_P5	1.259	1.335	0.000	15.847	17.179	30.571
ORD_P6	13.526	7.556	11.827	21.540	14.133	0.465
TRA_P1	13.116	9.801	15.597	4.406	5.320	1.425
TRA_P2	15.880	10.922	16.806	4.120	5.934	1.676
BRO_P1	15.487	0.190	0.166	17.179	60.060	80.665
BRO_P2	48.694	17.564	17.903	0.417	9.225	20.821
BRO_P3	12.798	22.059	15.714	9.455	14.696	12.158
EPI_P1	91.322	121.374	129.907	173.937	65.971	61.025
EPI_P2	10.923	69.028	54.421	117.606	109.193	111.164
EPI_P3	16.955	0.211	2.707	0.086	15.399	16.791
ITL_P1	10.474	0.979	1.223	8.149	28.039	0.679
ITL_P2	0.887	3.153	10.743	18.315	29.479	36.409
ITL_P3	21.723	17.726	21.259	26.401	6.618	0.123
ITL_P4	3.052	2.606	2.474	0.041	7.667	4.315
ITL_P5	0.774	10.866	24.060	139.262	32.980	56.106

Modification Indices for LAMBDA-X

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
EMP_P1	22.357	12.836	49.056	34.394	28.743	70.583
EMP_P2	94.588	186.313	361.557	170.913	55.419	236.017
EMP_P3	14.428	70.722	93.207	32.558	1.633	25.081
FAC_P1	6.391	2.204	0.301	0.361	0.096	7.931

FAC_P2	5.846	3.555	38.473	67.162	22.234	5.177
FAC_P3	26.510	0.012	228.632	176.891	13.352	23.163
FAC_P4	1.814	0.409	42.347	6.864	27.203	9.522
FAC_P5	16.524	0.076	1.849	0.230	21.452	72.063
INT_P1	43.592	20.974	0.288	17.759	24.569	32.326
INT_P2	46.873	32.496	38.170	66.097	51.459	6.249
INT_P3	126.856	100.848	2.698	43.456	36.662	22.085
INT_P4	0.061	8.169	18.478	47.198	8.031	1.799
INT_P5	97.325	56.877	78.168	133.030	7.105	26.258
INT_P6	33.944	58.039	42.744	106.479	2.040	4.808
IPR_P1	84.687	289.279	5.540	1.840	1.749	23.516
IPR_P2	24.826	26.079	15.581	14.603	17.314	48.633
IPR_P3	0.528	12.543	7.476	17.407	29.160	8.245
IPR_P4	5.692	23.666	0.558	0.373	6.373	0.001
SOC_P1	0.153	53.105	23.505	3.390	5.040	0.334
SOC_P2	0.158	65.980	25.005	3.485	5.386	0.346
WAR_P1	7.093	0.547	6.261	6.036	5.656	5.668
WAR_P2	1.617	6.518	24.960	7.883	0.039	8.739
WAR_P3	85.320	167.065	128.190	45.178	27.669	105.948
WAR_P4	68.997	137.635	57.397	2.447	7.456	106.336
WAR_P5	7.126	0.006	47.189	34.815	38.707	30.579
ARR_P1	34.891	53.654	38.536	13.934	26.415	20.647
ARR_P2	10.903	15.059	8.745	11.994	15.717	2.029
ARR_P3	9.720	17.011	15.311	0.015	1.841	14.848
CON_P1	101.146	3.960	18.226	22.538	0.433	6.686
CON_P2	82.541	43.900	8.376	0.047	0.829	33.904
CON_P3	0.069	26.590	51.035	17.609	0.130	14.362
HOS_P1	33.452	29.817	25.700	16.073	0.257	18.987
HOS_P2	32.563	62.258	74.099	11.435	23.348	43.315
HOS_P3	45.955	28.568	13.210	2.515	6.282	53.365
HOS_P4	60.292	52.157	2.376	1.421	1.466	22.343
HOS_P5	1.322	4.559	2.170	0.242	4.385	0.834
HOS_P6	0.064	8.759	7.065	0.697	2.296	1.267
HOS_P7	6.703	0.145	55.195	93.035	15.277	0.065
DEC_P1	8.141	32.159	0.040	8.398	47.694	0.119
DEC_P2	44.329	90.613	23.868	3.971	6.615	11.236
DEC_P3	64.024	164.858	14.232	2.327	81.756	4.821
EMO_P1	0.202	44.170	475.487	204.036	262.469	15.368
EMO_P2	58.250	10.072	131.051	83.901	15.329	11.762
EMO_P3	1.204	2.075	52.404	20.739	10.106	9.731
EMO_P4	50.701	42.407	0.359	1.146	37.974	9.306
NEG_P1	0.047	23.818	38.058	32.559	31.921	0.914
NEG_P2	0.436	11.950	116.832	156.911	59.239	13.354
NEG_P3	16.973	13.639	18.910	54.164	6.536	3.707
NEG_P4	100.736	102.296	162.495	137.550	175.550	189.377
NEG_P5	22.333	49.661	144.638	137.855	164.772	68.098
PLA_P1	- -	12.231	4.714	9.234	51.802	11.529
PLA_P2	- -	5.956	5.988	10.877	63.760	9.337
SOB_P1	2.106	- -	24.211	34.182	20.224	4.578
SOB_P2	3.070	- -	46.685	51.780	5.429	21.114
SOB_P3	0.272	- -	3.938	1.791	4.253	6.390
ACH_P1	17.036	17.532	- -	0.292	5.591	2.463
ACH_P2	2.575	0.001	- -	49.129	0.209	36.521
ACH_P3	20.692	8.378	- -	10.616	0.013	45.460
ACH_P4	11.747	33.204	- -	254.733	3.590	0.100
ACH_P5	148.154	126.698	- -	89.904	17.042	119.853
ORD_P1	5.828	4.785	86.409	- -	76.839	57.163
ORD_P2	15.233	19.986	0.025	- -	80.105	3.727
ORD_P3	41.539	32.490	210.843	- -	3.877	107.714
ORD_P4	0.040	10.359	193.048	- -	4.460	5.152
ORD_P5	6.084	3.371	42.586	- -	22.852	1.556
ORD_P6	2.576	8.309	84.548	- -	26.548	13.020
TRA_P1	0.422	0.693	0.675	5.593	- -	21.397
TRA_P2	0.545	0.900	0.631	6.549	- -	26.358
BRO_P1	0.395	8.242	48.414	22.152	0.477	- -
BRO_P2	0.000	9.335	38.192	10.895	0.077	- -
BRO_P3	0.293	0.200	0.038	0.779	0.118	- -
EPI_P1	14.243	19.191	262.135	150.976	99.267	19.863
EPI_P2	18.127	3.111	240.119	154.165	70.499	48.460
EPI_P3	1.302	3.232	8.478	6.288	0.067	11.063
ITL_P1	8.881	2.223	11.917	14.072	0.019	12.747
ITL_P2	11.445	70.736	17.921	1.127	28.334	0.421
ITL_P3	3.633	31.245	2.206	84.408	0.290	178.312
ITL_P4	2.036	2.464	19.622	1.576	4.925	53.433
ITL_P5	12.925	181.202	186.383	130.209	54.222	102.747

Modification Indices for LAMBDA-X

	EPISTEM	INTELLEC
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EMP_P1	73.767	32.431
EMP_P2	267.667	365.505
EMP_P3	29.512	121.225
FAC_P1	34.767	0.014
FAC_P2	61.233	8.187
FAC_P3	20.247	14.629
FAC_P4	10.342	68.222
FAC_P5	132.172	90.664
INT_P1	25.377	1.406
INT_P2	3.308	14.216
INT_P3	0.008	4.915
INT_P4	0.155	0.064
INT_P5	4.634	9.715
INT_P6	0.816	5.127
IPR_P1	0.073	21.876
IPR_P2	93.681	55.051
IPR_P3	24.757	69.635
IPR_P4	18.032	21.441
SOC_P1	3.948	56.715
SOC_P2	3.911	58.652
WAR_P1	1.170	3.830
WAR_P2	17.270	34.881
WAR_P3	27.245	151.028
WAR_P4	41.154	207.384
WAR_P5	15.769	37.546
ARR_P1	4.240	23.085
ARR_P2	0.028	1.700
ARR_P3	8.010	18.722
CON_P1	15.938	7.335
CON_P2	37.575	22.690
CON_P3	8.290	58.751
HOS_P1	45.716	25.966
HOS_P2	22.018	66.273
HOS_P3	52.123	38.954
HOS_P4	33.485	10.394
HOS_P5	0.266	17.344
HOS_P6	14.689	6.286
HOS_P7	0.170	36.664
DEC_P1	11.163	21.936
DEC_P2	1.439	32.863
DEC_P3	6.065	0.188
EMO_P1	24.288	21.084
EMO_P2	0.080	11.809
EMO_P3	9.227	10.252
EMO_P4	0.610	4.581
NEG_P1	0.782	3.362
NEG_P2	21.988	34.479
NEG_P3	15.208	2.550
NEG_P4	244.668	223.189
NEG_P5	175.592	75.452
PLA_P1	1.091	17.734
PLA_P2	1.159	22.536
SOB_P1	21.490	39.354
SOB_P2	104.420	124.668
SOB_P3	30.045	25.798
ACH_P1	10.349	5.843
ACH_P2	44.892	30.532
ACH_P3	18.524	35.973
ACH_P4	85.640	6.930
ACH_P5	0.039	36.290
ORD_P1	73.559	124.677
ORD_P2	0.413	1.248
ORD_P3	117.673	175.417
ORD_P4	20.293	16.488
ORD_P5	4.815	10.951
ORD_P6	19.341	11.376
TRA_P1	28.969	5.717
TRA_P2	33.258	6.811
BRO_P1	0.350	57.851
BRO_P2	55.186	34.226
BRO_P3	46.277	0.230
EPI_P1	- -	19.343
EPI_P2	- -	38.375
EPI_P3	- -	8.150

ITL_P1	41.338	- -
ITL_P2	65.029	- -
ITL_P3	25.418	- -
ITL_P4	14.901	- -
ITL_P5	182.470	- -

Expected Change for LAMBDA-X

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMP_P1	- -	-0.032	-0.101	-0.077	0.007	-0.079
EMP_P2	- -	0.133	0.204	0.242	0.120	0.256
EMP_P3	- -	-0.105	-0.097	-0.153	-0.120	-0.126
FAC_P1	0.072	- -	0.058	0.098	0.027	0.100
FAC_P2	-0.097	- -	-0.141	-0.146	-0.031	-0.140
FAC_P3	-0.113	- -	0.027	-0.130	-0.091	-0.132
FAC_P4	0.092	- -	0.030	0.133	0.056	0.132
FAC_P5	0.036	- -	0.044	0.123	0.038	0.070
INT_P1	-0.152	-0.034	- -	-0.113	-0.100	-0.144
INT_P2	-0.108	-0.030	- -	-0.123	-0.079	-0.128
INT_P3	0.176	0.044	- -	0.108	0.133	0.167
INT_P4	0.058	0.065	- -	0.169	0.060	0.120
INT_P5	0.172	0.026	- -	0.148	0.107	0.188
INT_P6	-0.076	-0.036	- -	-0.083	-0.066	-0.093
IPR_P1	-0.047	0.212	-0.098	- -	2.287	- -
IPR_P2	-0.068	0.036	-0.108	- -	-0.126	-0.042
IPR_P3	-0.062	0.128	0.009	- -	-0.020	-0.034
IPR_P4	0.187	-0.260	0.133	- -	-0.047	5.781
SOC_P1	-0.153	0.110	-0.025	0.012	- -	-0.075
SOC_P2	0.199	-0.111	0.026	-0.017	- -	0.101
WAR_P1	-0.039	-0.039	0.044	-0.057	-0.068	- -
WAR_P2	0.059	-0.077	-0.025	-0.036	0.043	- -
WAR_P3	0.250	-0.117	-0.041	-0.169	-0.034	- -
WAR_P4	-0.197	0.170	0.021	0.311	0.113	- -
WAR_P5	-0.112	0.078	0.011	0.057	-0.059	- -
ARR_P1	0.044	0.062	0.045	0.076	0.063	0.069
ARR_P2	-0.041	-0.028	-0.018	-0.028	-0.037	-0.038
ARR_P3	0.005	-0.040	-0.032	-0.058	-0.028	-0.034
CON_P1	0.093	-0.069	0.010	-0.004	0.034	0.023
CON_P2	-0.058	-0.035	-0.046	-0.055	-0.061	-0.053
CON_P3	-0.003	0.086	0.052	0.066	0.041	0.043
HOS_P1	0.111	0.049	0.118	0.078	0.080	0.102
HOS_P2	0.028	0.098	0.070	0.086	0.070	0.065
HOS_P3	-0.052	-0.044	-0.026	-0.070	-0.063	-0.055
HOS_P4	-0.128	-0.044	-0.070	-0.084	-0.080	-0.108
HOS_P5	-0.041	0.022	0.000	0.011	0.004	-0.016
HOS_P6	0.037	-0.058	0.013	-0.034	-0.018	-0.011
HOS_P7	0.133	-0.007	-0.097	0.062	0.053	0.091
DEC_P1	0.018	0.011	-0.052	0.028	0.012	0.027
DEC_P2	0.054	0.074	0.046	0.105	0.111	0.078
DEC_P3	-0.064	-0.072	0.034	-0.115	-0.104	-0.093
EMO_P1	0.059	0.137	0.173	0.095	0.054	0.095
EMO_P2	0.006	-0.073	-0.052	-0.005	0.004	-0.007
EMO_P3	-0.005	-0.039	-0.050	-0.017	-0.001	-0.018
EMO_P4	-0.042	-0.005	-0.037	-0.051	-0.040	-0.045
NEG_P1	0.023	0.072	0.046	0.027	0.031	0.034
NEG_P2	-0.078	-0.097	-0.141	-0.075	-0.060	-0.083
NEG_P3	0.103	-0.003	0.131	0.066	0.021	0.084
NEG_P4	0.265	0.172	0.242	0.233	0.217	0.231
NEG_P5	-0.273	-0.132	-0.264	-0.240	-0.193	-0.242
PLA_P1	-0.092	0.021	-0.074	-0.065	-0.114	-0.081
PLA_P2	0.152	-0.035	0.102	0.115	0.200	0.145
SOB_P1	-0.095	-0.076	-0.139	-0.177	-0.150	-0.137
SOB_P2	0.135	0.099	0.143	0.188	0.208	0.157
SOB_P3	-0.072	-0.051	-0.039	-0.067	-0.134	-0.063
ACH_P1	-0.002	0.007	-0.009	-0.014	-0.010	-0.014
ACH_P2	-0.002	0.032	-0.041	-0.003	0.010	-0.006
ACH_P3	-0.012	-0.050	0.016	-0.004	-0.032	-0.004
ACH_P4	0.045	-0.063	0.132	-0.002	-0.010	0.026
ACH_P5	-0.029	0.075	-0.092	0.020	0.036	-0.005
ORD_P1	0.017	-0.038	0.004	-0.007	-0.020	0.010
ORD_P2	-0.038	-0.046	-0.031	-0.056	-0.030	-0.055
ORD_P3	0.031	0.099	0.079	0.075	0.059	0.060
ORD_P4	0.027	0.025	0.096	0.032	0.035	0.027
ORD_P5	0.033	0.018	-0.038	0.021	0.012	0.033
ORD_P6	-0.037	-0.033	-0.060	-0.033	-0.034	-0.037
TRA_P1	-0.109	-0.009	-0.065	-0.131	-0.062	-0.152

TRA_P2	0.187	0.013	0.067	0.155	0.105	0.182
BRO_P1	0.068	-0.045	-0.017	-0.013	0.013	0.020
BRO_P2	-0.068	0.107	-0.023	0.016	-0.012	-0.010
BRO_P3	-0.002	-0.052	0.034	-0.003	-0.002	-0.008
EPI_P1	0.036	0.071	0.109	0.077	0.038	0.068
EPI_P2	0.015	-0.063	-0.083	-0.052	-0.014	-0.036
EPI_P3	-0.042	0.009	0.002	-0.008	-0.016	-0.017
ITL_P1	0.025	-0.110	-0.008	-0.008	0.022	-0.005
ITL_P2	-0.005	-0.099	0.025	-0.068	-0.060	-0.034
ITL_P3	-0.038	0.045	-0.080	-0.017	-0.071	-0.025
ITL_P4	0.015	0.017	0.013	0.019	0.032	0.017
ITL_P5	0.002	0.123	0.057	0.066	0.075	0.041

Expected Change for LAMBDA-X

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
EMP_P1	0.026	0.048	0.038	0.052	-0.041	0.023
EMP_P2	-0.046	-0.084	-0.084	-0.123	0.139	-0.115
EMP_P3	0.023	0.042	0.050	0.080	-0.101	0.101
FAC_P1	-0.061	-0.041	-0.050	-0.027	-0.001	0.000
FAC_P2	0.108	0.108	0.110	0.092	-0.064	0.040
FAC_P3	0.026	-0.037	-0.014	-0.097	0.088	-0.092
FAC_P4	-0.060	-0.030	-0.045	-0.003	-0.031	0.028
FAC_P5	-0.005	-0.003	-0.001	0.019	0.033	0.007
INT_P1	0.021	-0.034	-0.015	-0.133	0.000	-0.085
INT_P2	0.053	0.028	0.059	-0.006	0.005	-0.025
INT_P3	-0.003	0.054	0.013	0.059	-0.043	0.086
INT_P4	-0.115	-0.111	-0.135	-0.051	0.068	-0.062
INT_P5	-0.041	0.032	-0.010	0.088	-0.040	0.075
INT_P6	0.038	-0.006	0.031	0.000	0.020	-0.010
IPR_P1	0.015	0.022	0.009	-0.026	-0.004	-0.012
IPR_P2	0.013	0.008	0.004	0.024	-0.001	-0.026
IPR_P3	0.076	0.049	0.071	0.043	-0.015	0.027
IPR_P4	-0.095	-0.069	-0.081	-0.043	0.018	0.002
SOC_P1	0.066	0.025	0.035	-0.012	0.059	-0.066
SOC_P2	-0.064	-0.024	-0.035	0.012	-0.060	0.064
WAR_P1	-0.016	-0.025	-0.025	-0.029	0.005	-0.015
WAR_P2	-0.031	-0.001	-0.016	0.000	-0.028	0.018
WAR_P3	-0.062	-0.018	-0.030	0.028	-0.079	0.055
WAR_P4	0.060	0.010	0.027	-0.018	0.077	-0.053
WAR_P5	0.045	0.033	0.043	0.016	0.027	-0.004
ARR_P1	- -	0.003	-0.042	-0.044	0.055	-0.024
ARR_P2	- -	-0.034	-0.011	-0.001	-0.007	-0.027
ARR_P3	- -	0.078	0.147	0.063	-0.063	0.072
CON_P1	-0.173	- -	-0.064	0.160	-0.037	0.142
CON_P2	0.016	- -	0.030	0.033	-0.039	0.001
CON_P3	0.113	- -	-0.025	-0.166	0.069	-0.096
HOS_P1	-0.144	0.326	- -	-0.030	0.005	0.063
HOS_P2	0.079	0.135	- -	-0.156	0.089	-0.075
HOS_P3	0.001	-0.031	- -	-0.029	-0.075	0.023
HOS_P4	0.243	-0.296	- -	-0.060	0.012	-0.073
HOS_P5	0.126	-0.015	- -	-0.090	0.065	-0.101
HOS_P6	-0.206	-0.210	- -	0.163	-0.046	0.101
HOS_P7	-0.248	0.192	- -	0.360	-0.066	0.144
DEC_P1	-0.059	0.060	-0.029	- -	-0.035	0.015
DEC_P2	0.021	0.076	-0.003	- -	0.104	-0.027
DEC_P3	0.057	-0.131	0.043	- -	-0.040	0.001
EMO_P1	-0.075	-0.112	-0.120	-0.242	- -	-0.047
EMO_P2	-0.008	0.016	0.007	0.070	- -	0.007
EMO_P3	0.021	0.050	0.042	0.072	- -	0.034
EMO_P4	0.038	0.017	0.038	0.049	- -	-0.001
NEG_P1	-0.029	-0.042	-0.054	-0.159	-0.074	- -
NEG_P2	0.074	0.115	0.115	0.270	-0.023	- -
NEG_P3	-0.200	-0.260	-0.230	-0.225	0.022	- -
NEG_P4	-0.155	-0.195	-0.205	-0.231	0.273	- -
NEG_P5	0.284	0.372	0.365	0.363	-0.241	- -
PLA_P1	0.097	0.090	0.093	0.078	-0.027	0.015
PLA_P2	-0.111	-0.102	-0.111	-0.092	0.045	-0.022
SOB_P1	0.092	0.115	0.118	0.119	-0.144	0.105
SOB_P2	-0.098	-0.109	-0.112	-0.098	0.124	-0.066
SOB_P3	0.026	0.016	0.017	0.001	-0.012	-0.024
ACH_P1	-0.005	-0.002	0.000	-0.003	-0.021	0.006
ACH_P2	-0.019	-0.011	-0.021	-0.035	0.023	-0.045
ACH_P3	-0.034	-0.049	-0.043	-0.037	0.007	-0.031
ACH_P4	-0.062	-0.058	-0.046	-0.028	-0.028	0.049
ACH_P5	0.108	0.107	0.099	0.093	0.020	0.019

ORD_P1	-0.059	-0.060	-0.059	-0.034	-0.056	0.027
ORD_P2	0.022	0.020	0.029	0.016	-0.010	-0.002
ORD_P3	0.029	0.029	0.023	-0.001	0.078	-0.019
ORD_P4	-0.039	-0.048	-0.049	-0.096	0.071	-0.058
ORD_P5	-0.010	0.011	0.000	0.041	-0.041	0.049
ORD_P6	0.026	0.021	0.025	0.039	-0.030	0.005
TRA_P1	0.048	0.041	0.055	0.031	-0.032	0.014
TRA_P2	-0.069	-0.054	-0.070	-0.035	0.043	-0.019
BRO_P1	-0.035	0.004	-0.004	0.038	-0.086	0.081
BRO_P2	0.070	0.042	0.042	-0.007	0.038	-0.047
BRO_P3	-0.031	-0.040	-0.033	-0.027	0.040	-0.031
EPI_P1	-0.080	-0.094	-0.095	-0.117	0.081	-0.066
EPI_P2	0.026	0.066	0.057	0.090	-0.098	0.084
EPI_P3	0.031	0.004	0.012	-0.002	0.038	-0.033
ITL_P1	-0.026	-0.008	-0.009	0.027	0.074	0.008
ITL_P2	0.007	0.014	0.025	0.037	-0.071	0.052
ITL_P3	0.043	0.040	0.042	0.052	-0.034	-0.004
ITL_P4	-0.014	-0.013	-0.013	0.002	-0.037	0.019
ITL_P5	-0.007	-0.027	-0.039	-0.108	0.078	-0.067

Expected Change for LAMBDA-X

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
EMP_P1	-0.046	-0.035	-0.064	-0.053	-0.051	-0.081
EMP_P2	0.078	0.111	0.143	0.097	0.058	0.124
EMP_P3	-0.035	-0.079	-0.083	-0.049	-0.012	-0.046
FAC_P1	-0.021	-0.014	0.006	-0.005	0.002	0.026
FAC_P2	0.021	0.018	-0.066	-0.071	-0.040	-0.022
FAC_P3	-0.049	-0.001	0.184	0.128	0.034	-0.051
FAC_P4	0.011	-0.006	-0.067	-0.021	0.041	-0.028
FAC_P5	0.033	0.002	-0.014	-0.004	-0.036	0.079
INT_P1	-0.061	-0.044	0.006	0.050	-0.047	-0.057
INT_P2	-0.051	-0.044	0.063	0.083	-0.055	-0.020
INT_P3	0.097	0.090	-0.018	-0.071	0.053	0.044
INT_P4	0.002	0.029	-0.054	-0.085	0.028	0.014
INT_P5	0.074	0.059	-0.086	-0.110	0.020	0.042
INT_P6	-0.040	-0.054	0.059	0.092	0.010	-0.016
IPR_P1	0.102	0.235	0.030	-0.014	-0.014	0.060
IPR_P2	-0.059	-0.067	-0.049	-0.041	0.046	-0.088
IPR_P3	-0.007	-0.039	0.028	0.037	-0.049	0.030
IPR_P4	-0.023	-0.054	-0.007	0.005	0.022	0.000
SOC_P1	0.004	0.090	0.047	0.016	-0.020	0.006
SOC_P2	-0.004	-0.109	-0.049	-0.016	0.021	-0.006
WAR_P1	-0.022	-0.007	0.021	0.019	0.019	-0.020
WAR_P2	0.011	0.024	-0.045	-0.024	0.002	-0.027
WAR_P3	-0.073	-0.109	-0.090	-0.049	-0.040	-0.083
WAR_P4	0.065	0.101	0.061	0.012	-0.021	0.083
WAR_P5	0.021	0.001	0.057	0.044	0.049	0.046
ARR_P1	0.063	0.077	0.065	0.040	0.055	0.048
ARR_P2	-0.033	-0.039	-0.029	-0.035	-0.041	-0.014
ARR_P3	-0.034	-0.044	-0.042	-0.001	-0.015	-0.042
CON_P1	0.128	0.025	-0.057	-0.066	0.008	0.033
CON_P2	-0.084	-0.061	-0.027	0.002	-0.008	-0.054
CON_P3	0.002	0.047	0.070	0.043	0.003	0.035
HOS_P1	0.061	0.059	0.057	0.046	0.006	0.047
HOS_P2	0.059	0.083	0.094	0.038	0.052	0.069
HOS_P3	-0.057	-0.045	-0.032	0.014	-0.022	-0.062
HOS_P4	-0.074	-0.070	-0.016	0.012	-0.012	-0.046
HOS_P5	0.010	0.018	0.013	-0.004	-0.018	0.008
HOS_P6	0.002	-0.029	-0.027	-0.009	-0.015	0.011
HOS_P7	0.032	0.005	-0.096	-0.126	0.049	0.003
DEC_P1	0.032	0.064	0.003	-0.037	0.076	-0.004
DEC_P2	0.076	0.114	0.070	0.028	0.030	0.039
DEC_P3	-0.100	-0.165	-0.056	0.023	-0.116	-0.028
EMO_P1	-0.005	0.079	0.331	0.174	0.179	0.049
EMO_P2	0.082	0.036	-0.168	-0.103	-0.040	0.042
EMO_P3	0.012	-0.016	-0.100	-0.051	-0.032	-0.037
EMO_P4	-0.070	-0.067	-0.008	0.011	-0.058	-0.034
NEG_P1	0.003	0.063	0.086	0.075	0.071	0.013
NEG_P2	-0.008	-0.042	-0.144	-0.155	-0.090	-0.045
NEG_P3	-0.055	-0.049	0.063	0.099	0.033	-0.026
NEG_P4	0.118	0.119	0.161	0.140	0.151	0.164
NEG_P5	-0.055	-0.082	-0.154	-0.139	-0.144	-0.097
PLA_P1	- -	-0.114	-0.027	-0.035	-0.087	0.058
PLA_P2	- -	0.059	0.036	0.044	0.114	-0.050
SOB_P1	0.027	- -	-0.058	-0.062	-0.050	-0.028

SOB_P2	-0.023	- -	0.064	0.062	0.021	0.047
SOB_P3	0.009	- -	-0.023	-0.014	0.023	-0.033
ACH_P1	-0.035	-0.038	- -	-0.007	-0.021	0.016
ACH_P2	-0.014	0.000	- -	-0.100	-0.004	-0.063
ACH_P3	-0.042	-0.028	- -	0.045	-0.001	-0.072
ACH_P4	-0.026	-0.046	- -	0.187	-0.015	-0.003
ACH_P5	0.104	0.102	- -	-0.120	0.036	0.109
ORD_P1	-0.021	-0.020	-0.136	- -	0.081	-0.069
ORD_P2	-0.029	-0.033	-0.002	- -	-0.068	-0.015
ORD_P3	0.051	0.046	0.201	- -	0.016	0.086
ORD_P4	-0.002	0.028	0.186	- -	0.019	0.020
ORD_P5	0.021	0.016	-0.089	- -	0.043	0.011
ORD_P6	-0.011	-0.020	-0.098	- -	-0.037	-0.026
TRA_P1	-0.008	0.013	0.014	0.035	- -	-0.061
TRA_P2	0.013	-0.019	-0.015	-0.049	- -	0.090
BRO_P1	-0.007	-0.032	-0.079	-0.044	-0.006	- -
BRO_P2	0.000	0.039	0.077	0.035	0.003	- -
BRO_P3	0.006	-0.005	-0.002	0.008	0.003	- -
EPI_P1	-0.034	0.038	0.174	0.113	0.082	-0.061
EPI_P2	0.036	-0.015	-0.151	-0.106	-0.066	0.096
EPI_P3	-0.010	-0.015	0.030	0.021	0.002	-0.050
ITL_P1	0.028	0.015	-0.048	-0.038	-0.001	0.048
ITL_P2	-0.030	-0.079	-0.057	0.010	-0.041	-0.008
ITL_P3	-0.020	-0.060	-0.020	-0.101	-0.005	0.182
ITL_P4	-0.014	-0.016	-0.059	0.012	-0.018	-0.094
ITL_P5	0.033	0.133	0.195	0.116	0.060	-0.131

Expected Change for LAMBDA-X

	EPISTEM	INTELLEC
EMP_P1	-0.082	-0.053
EMP_P2	0.134	0.149
EMP_P3	-0.050	-0.098
FAC_P1	0.053	0.001
FAC_P2	-0.073	-0.034
FAC_P3	-0.046	0.051
FAC_P4	-0.028	-0.096
FAC_P5	0.102	0.117
INT_P1	-0.056	-0.013
INT_P2	0.017	0.036
INT_P3	0.001	-0.023
INT_P4	-0.005	-0.003
INT_P5	0.020	-0.029
INT_P6	0.008	0.020
IPR_P1	0.003	0.073
IPR_P2	-0.120	-0.105
IPR_P3	0.050	0.098
IPR_P4	0.042	-0.055
SOC_P1	-0.020	0.081
SOC_P2	0.019	-0.080
WAR_P1	-0.009	-0.017
WAR_P2	-0.038	-0.056
WAR_P3	-0.042	-0.103
WAR_P4	0.052	0.123
WAR_P5	0.033	0.053
ARR_P1	0.022	0.050
ARR_P2	0.002	-0.013
ARR_P3	-0.032	-0.046
CON_P1	0.053	-0.034
CON_P2	-0.059	-0.043
CON_P3	0.028	0.071
HOS_P1	0.076	0.055
HOS_P2	0.052	0.086
HOS_P3	-0.063	-0.053
HOS_P4	-0.059	-0.031
HOS_P5	-0.004	0.035
HOS_P6	0.040	-0.025
HOS_P7	-0.005	-0.075
DEC_P1	-0.038	-0.055
DEC_P2	0.015	0.072
DEC_P3	0.032	0.006
EMO_P1	0.064	0.076
EMO_P2	-0.004	-0.060
EMO_P3	-0.037	-0.051
EMO_P4	-0.009	0.034
NEG_P1	-0.012	0.026

NEG_P2	-0.058	-0.078
NEG_P3	0.053	-0.023
NEG_P4	0.189	0.189
NEG_P5	-0.159	-0.112
PLA_P1	0.014	0.060
PLA_P2	-0.016	-0.082
SOB_P1	-0.053	-0.081
SOB_P2	0.094	0.113
SOB_P3	-0.063	-0.065
ACH_P1	0.035	0.033
ACH_P2	-0.075	-0.087
ACH_P3	-0.049	-0.086
ACH_P4	0.089	0.031
ACH_P5	-0.002	0.082
ORD_P1	-0.085	-0.119
ORD_P2	0.005	0.010
ORD_P3	0.099	0.132
ORD_P4	0.043	0.042
ORD_P5	-0.021	-0.034
ORD_P6	-0.034	-0.028
TRA_P1	-0.070	-0.033
TRA_P2	0.096	0.047
BRO_P1	0.011	-0.119
BRO_P2	-0.139	0.097
BRO_P3	0.104	0.006
EPI_P1	- -	0.055
EPI_P2	- -	-0.072
EPI_P3	- -	0.036
ITL_P1	0.088	- -
ITL_P2	0.107	- -
ITL_P3	0.070	- -
ITL_P4	-0.050	- -
ITL_P5	-0.176	- -

Standardized Expected Change for LAMBDA-X

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMP_P1	- -	-0.032	-0.101	-0.077	0.007	-0.079
EMP_P2	- -	0.133	0.204	0.242	0.120	0.256
EMP_P3	- -	-0.105	-0.097	-0.153	-0.120	-0.126
FAC_P1	0.072	- -	0.058	0.098	0.027	0.100
FAC_P2	-0.097	- -	-0.141	-0.146	-0.031	-0.140
FAC_P3	-0.113	- -	0.027	-0.130	-0.091	-0.132
FAC_P4	0.092	- -	0.030	0.133	0.056	0.132
FAC_P5	0.036	- -	0.044	0.123	0.038	0.070
INT_P1	-0.152	-0.034	- -	-0.113	-0.100	-0.144
INT_P2	-0.108	-0.030	- -	-0.123	-0.079	-0.128
INT_P3	0.176	0.044	- -	0.108	0.133	0.167
INT_P4	0.058	0.065	- -	0.169	0.060	0.120
INT_P5	0.172	0.026	- -	0.148	0.107	0.188
INT_P6	-0.076	-0.036	- -	-0.083	-0.066	-0.093
IPR_P1	-0.047	0.212	-0.098	- -	2.287	- -
IPR_P2	-0.068	0.036	-0.108	- -	-0.126	-0.042
IPR_P3	-0.062	0.128	0.009	- -	-0.020	-0.034
IPR_P4	0.187	-0.260	0.133	- -	-0.047	5.781
SOC_P1	-0.153	0.110	-0.025	0.012	- -	-0.075
SOC_P2	0.199	-0.111	0.026	-0.017	- -	0.101
WAR_P1	-0.039	-0.039	0.044	-0.057	-0.068	- -
WAR_P2	0.059	-0.077	-0.025	-0.036	0.043	- -
WAR_P3	0.250	-0.117	-0.041	-0.169	-0.034	- -
WAR_P4	-0.197	0.170	0.021	0.311	0.113	- -
WAR_P5	-0.112	0.078	0.011	0.057	-0.059	- -
ARR_P1	0.044	0.062	0.045	0.076	0.063	0.069
ARR_P2	-0.041	-0.028	-0.018	-0.028	-0.037	-0.038
ARR_P3	0.005	-0.040	-0.032	-0.058	-0.028	-0.034
CON_P1	0.093	-0.069	0.010	-0.004	0.034	0.023
CON_P2	-0.058	-0.035	-0.046	-0.055	-0.061	-0.053
CON_P3	-0.003	0.086	0.052	0.066	0.041	0.043
HOS_P1	0.111	0.049	0.118	0.078	0.080	0.102
HOS_P2	0.028	0.098	0.070	0.086	0.070	0.065
HOS_P3	-0.052	-0.044	-0.026	-0.070	-0.063	-0.055
HOS_P4	-0.128	-0.044	-0.070	-0.084	-0.080	-0.108
HOS_P5	-0.041	0.022	0.000	0.011	0.004	-0.016
HOS_P6	0.037	-0.058	0.013	-0.034	-0.018	-0.011
HOS_P7	0.133	-0.007	-0.097	0.062	0.053	0.091
DEC_P1	0.018	0.011	-0.052	0.028	0.012	0.027

DEC_P2	0.054	0.074	0.046	0.105	0.111	0.078
DEC_P3	-0.064	-0.072	0.034	-0.115	-0.104	-0.093
EMO_P1	0.059	0.137	0.173	0.095	0.054	0.095
EMO_P2	0.006	-0.073	-0.052	-0.005	0.004	-0.007
EMO_P3	-0.005	-0.039	-0.050	-0.017	-0.001	-0.018
EMO_P4	-0.042	-0.005	-0.037	-0.051	-0.040	-0.045
NEG_P1	0.023	0.072	0.046	0.027	0.031	0.034
NEG_P2	-0.078	-0.097	-0.141	-0.075	-0.060	-0.083
NEG_P3	0.103	-0.003	0.131	0.066	0.021	0.084
NEG_P4	0.265	0.172	0.242	0.233	0.217	0.231
NEG_P5	-0.273	-0.132	-0.264	-0.240	-0.193	-0.242
PLA_P1	-0.092	0.021	-0.074	-0.065	-0.114	-0.081
PLA_P2	0.152	-0.035	0.102	0.115	0.200	0.145
SOB_P1	-0.095	-0.076	-0.139	-0.177	-0.150	-0.137
SOB_P2	0.135	0.099	0.143	0.188	0.208	0.157
SOB_P3	-0.072	-0.051	-0.039	-0.067	-0.134	-0.063
ACH_P1	-0.002	0.007	-0.009	-0.014	-0.010	-0.014
ACH_P2	-0.002	0.032	-0.041	-0.003	0.010	-0.006
ACH_P3	-0.012	-0.050	0.016	-0.004	-0.032	-0.004
ACH_P4	0.045	-0.063	0.132	-0.002	-0.010	0.026
ACH_P5	-0.029	0.075	-0.092	0.020	0.036	-0.005
ORD_P1	0.017	-0.038	0.004	-0.007	-0.020	0.010
ORD_P2	-0.038	-0.046	-0.031	-0.056	-0.030	-0.055
ORD_P3	0.031	0.099	0.079	0.075	0.059	0.060
ORD_P4	0.027	0.025	0.096	0.032	0.035	0.027
ORD_P5	0.033	0.018	-0.038	0.021	0.012	0.033
ORD_P6	-0.037	-0.033	-0.060	-0.033	-0.034	-0.037
TRA_P1	-0.109	-0.009	-0.065	-0.131	-0.062	-0.152
TRA_P2	0.187	0.013	0.067	0.155	0.105	0.182
BRO_P1	0.068	-0.045	-0.017	-0.013	0.013	0.020
BRO_P2	-0.068	0.107	-0.023	0.016	-0.012	-0.010
BRO_P3	-0.002	-0.052	0.034	-0.003	-0.002	-0.008
EPI_P1	0.036	0.071	0.109	0.077	0.038	0.068
EPI_P2	0.015	-0.063	-0.083	-0.052	-0.014	-0.036
EPI_P3	-0.042	0.009	0.002	-0.008	-0.016	-0.017
ITL_P1	0.025	-0.110	-0.008	-0.008	0.022	-0.005
ITL_P2	-0.005	-0.099	0.025	-0.068	-0.060	-0.034
ITL_P3	-0.038	0.045	-0.080	-0.017	-0.071	-0.025
ITL_P4	0.015	0.017	0.013	0.019	0.032	0.017
ITL_P5	0.002	0.123	0.057	0.066	0.075	0.041

Standardized Expected Change for LAMBDA-X

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
EMP_P1	0.026	0.048	0.038	0.052	-0.041	0.023
EMP_P2	-0.046	-0.084	-0.084	-0.123	0.139	-0.115
EMP_P3	0.023	0.042	0.050	0.080	-0.101	0.101
FAC_P1	-0.061	-0.041	-0.050	-0.027	-0.001	0.000
FAC_P2	0.108	0.108	0.110	0.092	-0.064	0.040
FAC_P3	0.026	-0.037	-0.014	-0.097	0.088	-0.092
FAC_P4	-0.060	-0.030	-0.045	-0.003	-0.031	0.028
FAC_P5	-0.005	-0.003	-0.001	0.019	0.033	0.007
INT_P1	0.021	-0.034	-0.015	-0.133	0.000	-0.085
INT_P2	0.053	0.028	0.059	-0.006	0.005	-0.025
INT_P3	-0.003	0.054	0.013	0.059	-0.043	0.086
INT_P4	-0.115	-0.111	-0.135	-0.051	0.068	-0.062
INT_P5	-0.041	0.032	-0.010	0.088	-0.040	0.075
INT_P6	0.038	-0.006	0.031	0.000	0.020	-0.010
IPR_P1	0.015	0.022	0.009	-0.026	-0.004	-0.012
IPR_P2	0.013	0.008	0.004	0.024	-0.001	-0.026
IPR_P3	0.076	0.049	0.071	0.043	-0.015	0.027
IPR_P4	-0.095	-0.069	-0.081	-0.043	0.018	0.002
SOC_P1	0.066	0.025	0.035	-0.012	0.059	-0.066
SOC_P2	-0.064	-0.024	-0.035	0.012	-0.060	0.064
WAR_P1	-0.016	-0.025	-0.025	-0.029	0.005	-0.015
WAR_P2	-0.031	-0.001	-0.016	0.000	-0.028	0.018
WAR_P3	-0.062	-0.018	-0.030	0.028	-0.079	0.055
WAR_P4	0.060	0.010	0.027	-0.018	0.077	-0.053
WAR_P5	0.045	0.033	0.043	0.016	0.027	-0.004
ARR_P1	- -	0.003	-0.042	-0.044	0.055	-0.024
ARR_P2	- -	-0.034	-0.011	-0.001	-0.007	-0.027
ARR_P3	- -	0.078	0.147	0.063	-0.063	0.072
CON_P1	-0.173	- -	-0.064	0.160	-0.037	0.142
CON_P2	0.016	- -	0.030	0.033	-0.039	0.001
CON_P3	0.113	- -	-0.025	-0.166	0.069	-0.096
HOS_P1	-0.144	0.326	- -	-0.030	0.005	0.063

HOS_P2	0.079	0.135	- -	-0.156	0.089	-0.075
HOS_P3	0.001	-0.031	- -	-0.029	-0.075	0.023
HOS_P4	0.243	-0.296	- -	-0.060	0.012	-0.073
HOS_P5	0.126	-0.015	- -	-0.090	0.065	-0.101
HOS_P6	-0.206	-0.210	- -	0.163	-0.046	0.101
HOS_P7	-0.248	0.192	- -	0.360	-0.066	0.144
DEC_P1	-0.059	0.060	-0.029	- -	-0.035	0.015
DEC_P2	0.021	0.076	-0.003	- -	0.104	-0.027
DEC_P3	0.057	-0.131	0.043	- -	-0.040	0.001
EMO_P1	-0.075	-0.112	-0.120	-0.242	- -	-0.047
EMO_P2	-0.008	0.016	0.007	0.070	- -	0.007
EMO_P3	0.021	0.050	0.042	0.072	- -	0.034
EMO_P4	0.038	0.017	0.038	0.049	- -	-0.001
NEG_P1	-0.029	-0.042	-0.054	-0.159	-0.074	- -
NEG_P2	0.074	0.115	0.115	0.270	-0.023	- -
NEG_P3	-0.200	-0.260	-0.230	-0.225	0.022	- -
NEG_P4	-0.155	-0.195	-0.205	-0.231	0.273	- -
NEG_P5	0.284	0.372	0.365	0.363	-0.241	- -
PLA_P1	0.097	0.090	0.093	0.078	-0.027	0.015
PLA_P2	-0.111	-0.102	-0.111	-0.092	0.045	-0.022
SOB_P1	0.092	0.115	0.118	0.119	-0.144	0.105
SOB_P2	-0.098	-0.109	-0.112	-0.098	0.124	-0.066
SOB_P3	0.026	0.016	0.017	0.001	-0.012	-0.024
ACH_P1	-0.005	-0.002	0.000	-0.003	-0.021	0.006
ACH_P2	-0.019	-0.011	-0.021	-0.035	0.023	-0.045
ACH_P3	-0.034	-0.049	-0.043	-0.037	0.007	-0.031
ACH_P4	-0.062	-0.058	-0.046	-0.028	-0.028	0.049
ACH_P5	0.108	0.107	0.099	0.093	0.020	0.019
ORD_P1	-0.059	-0.060	-0.059	-0.034	-0.056	0.027
ORD_P2	0.022	0.020	0.029	0.016	-0.010	-0.002
ORD_P3	0.029	0.029	0.023	-0.001	0.078	-0.019
ORD_P4	-0.039	-0.048	-0.049	-0.096	0.071	-0.058
ORD_P5	-0.010	0.011	0.000	0.041	-0.041	0.049
ORD_P6	0.026	0.021	0.025	0.039	-0.030	0.005
TRA_P1	0.048	0.041	0.055	0.031	-0.032	0.014
TRA_P2	-0.069	-0.054	-0.070	-0.035	0.043	-0.019
BRO_P1	-0.035	0.004	-0.004	0.038	-0.086	0.081
BRO_P2	0.070	0.042	0.042	-0.007	0.038	-0.047
BRO_P3	-0.031	-0.040	-0.033	-0.027	0.040	-0.031
EPI_P1	-0.080	-0.094	-0.095	-0.117	0.081	-0.066
EPI_P2	0.026	0.066	0.057	0.090	-0.098	0.084
EPI_P3	0.031	0.004	0.012	-0.002	0.038	-0.033
ITL_P1	-0.026	-0.008	-0.009	0.027	0.074	0.008
ITL_P2	0.007	0.014	0.025	0.037	-0.071	0.052
ITL_P3	0.043	0.040	0.042	0.052	-0.034	-0.004
ITL_P4	-0.014	-0.013	-0.013	0.002	-0.037	0.019
ITL_P5	-0.007	-0.027	-0.039	-0.108	0.078	-0.067

Standardized Expected Change for LAMBDA-X

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
EMP_P1	-0.046	-0.035	-0.064	-0.053	-0.051	-0.081
EMP_P2	0.078	0.111	0.143	0.097	0.058	0.124
EMP_P3	-0.035	-0.079	-0.083	-0.049	-0.012	-0.046
FAC_P1	-0.021	-0.014	0.006	-0.005	0.002	0.026
FAC_P2	0.021	0.018	-0.066	-0.071	-0.040	-0.022
FAC_P3	-0.049	-0.001	0.184	0.128	0.034	-0.051
FAC_P4	0.011	-0.006	-0.067	-0.021	0.041	-0.028
FAC_P5	0.033	0.002	-0.014	-0.004	-0.036	0.079
INT_P1	-0.061	-0.044	0.006	0.050	-0.047	-0.057
INT_P2	-0.051	-0.044	0.063	0.083	-0.055	-0.020
INT_P3	0.097	0.090	-0.018	-0.071	0.053	0.044
INT_P4	0.002	0.029	-0.054	-0.085	0.028	0.014
INT_P5	0.074	0.059	-0.086	-0.110	0.020	0.042
INT_P6	-0.040	-0.054	0.059	0.092	0.010	-0.016
IPR_P1	0.102	0.235	0.030	-0.014	-0.014	0.060
IPR_P2	-0.059	-0.067	-0.049	-0.041	0.046	-0.088
IPR_P3	-0.007	-0.039	0.028	0.037	-0.049	0.030
IPR_P4	-0.023	-0.054	-0.007	0.005	0.022	0.000
SOC_P1	0.004	0.090	0.047	0.016	-0.020	0.006
SOC_P2	-0.004	-0.109	-0.049	-0.016	0.021	-0.006
WAR_P1	-0.022	-0.007	0.021	0.019	0.019	-0.020
WAR_P2	0.011	0.024	-0.045	-0.024	0.002	-0.027
WAR_P3	-0.073	-0.109	-0.090	-0.049	-0.040	-0.083
WAR_P4	0.065	0.101	0.061	0.012	-0.021	0.083
WAR_P5	0.021	0.001	0.057	0.044	0.049	0.046

ARR_P1	0.063	0.077	0.065	0.040	0.055	0.048
ARR_P2	-0.033	-0.039	-0.029	-0.035	-0.041	-0.014
ARR_P3	-0.034	-0.044	-0.042	-0.001	-0.015	-0.042
CON_P1	0.128	0.025	-0.057	-0.066	0.008	0.033
CON_P2	-0.084	-0.061	-0.027	0.002	-0.008	-0.054
CON_P3	0.002	0.047	0.070	0.043	0.003	0.035
HOS_P1	0.061	0.059	0.057	0.046	0.006	0.047
HOS_P2	0.059	0.083	0.094	0.038	0.052	0.069
HOS_P3	-0.057	-0.045	-0.032	0.014	-0.022	-0.062
HOS_P4	-0.074	-0.070	-0.016	0.012	-0.012	-0.046
HOS_P5	0.010	0.018	0.013	-0.004	-0.018	0.008
HOS_P6	0.002	-0.029	-0.027	-0.009	-0.015	0.011
HOS_P7	0.032	0.005	-0.096	-0.126	0.049	0.003
DEC_P1	0.032	0.064	0.003	-0.037	0.076	-0.004
DEC_P2	0.076	0.114	0.070	0.028	0.030	0.039
DEC_P3	-0.100	-0.165	-0.056	0.023	-0.116	-0.028
EMO_P1	-0.005	0.079	0.331	0.174	0.179	0.049
EMO_P2	0.082	0.036	-0.168	-0.103	-0.040	0.042
EMO_P3	0.012	-0.016	-0.100	-0.051	-0.032	-0.037
EMO_P4	-0.070	-0.067	-0.008	0.011	-0.058	-0.034
NEG_P1	0.003	0.063	0.086	0.075	0.071	0.013
NEG_P2	-0.008	-0.042	-0.144	-0.155	-0.090	-0.045
NEG_P3	-0.055	-0.049	0.063	0.099	0.033	-0.026
NEG_P4	0.118	0.119	0.161	0.140	0.151	0.164
NEG_P5	-0.055	-0.082	-0.154	-0.139	-0.144	-0.097
PLA_P1	- -	-0.114	-0.027	-0.035	-0.087	0.058
PLA_P2	- -	0.059	0.036	0.044	0.114	-0.050
SOB_P1	0.027	- -	-0.058	-0.062	-0.050	-0.028
SOB_P2	-0.023	- -	0.064	0.062	0.021	0.047
SOB_P3	0.009	- -	-0.023	-0.014	0.023	-0.033
ACH_P1	-0.035	-0.038	- -	-0.007	-0.021	0.016
ACH_P2	-0.014	0.000	- -	-0.100	-0.004	-0.063
ACH_P3	-0.042	-0.028	- -	0.045	-0.001	-0.072
ACH_P4	-0.026	-0.046	- -	0.187	-0.015	-0.003
ACH_P5	0.104	0.102	- -	-0.120	0.036	0.109
ORD_P1	-0.021	-0.020	-0.136	- -	0.081	-0.069
ORD_P2	-0.029	-0.033	-0.002	- -	-0.068	-0.015
ORD_P3	0.051	0.046	0.201	- -	0.016	0.086
ORD_P4	-0.002	0.028	0.186	- -	0.019	0.020
ORD_P5	0.021	0.016	-0.089	- -	0.043	0.011
ORD_P6	-0.011	-0.020	-0.098	- -	-0.037	-0.026
TRA_P1	-0.008	0.013	0.014	0.035	- -	-0.061
TRA_P2	0.013	-0.019	-0.015	-0.049	- -	0.090
BRO_P1	-0.007	-0.032	-0.079	-0.044	-0.006	- -
BRO_P2	0.000	0.039	0.077	0.035	0.003	- -
BRO_P3	0.006	-0.005	-0.002	0.008	0.003	- -
EPI_P1	-0.034	0.038	0.174	0.113	0.082	-0.061
EPI_P2	0.036	-0.015	-0.151	-0.106	-0.066	0.096
EPI_P3	-0.010	-0.015	0.030	0.021	0.002	-0.050
ITL_P1	0.028	0.015	-0.048	-0.038	-0.001	0.048
ITL_P2	-0.030	-0.079	-0.057	0.010	-0.041	-0.008
ITL_P3	-0.020	-0.060	-0.020	-0.101	-0.005	0.182
ITL_P4	-0.014	-0.016	-0.059	0.012	-0.018	-0.094
ITL_P5	0.033	0.133	0.195	0.116	0.060	-0.131

Standardized Expected Change for LAMBDA-X

	EPISTEM	INTELLEC
EMP_P1	-0.082	-0.053
EMP_P2	0.134	0.149
EMP_P3	-0.050	-0.098
FAC_P1	0.053	0.001
FAC_P2	-0.073	-0.034
FAC_P3	-0.046	0.051
FAC_P4	-0.028	-0.096
FAC_P5	0.102	0.117
INT_P1	-0.056	-0.013
INT_P2	0.017	0.036
INT_P3	0.001	-0.023
INT_P4	-0.005	-0.003
INT_P5	0.020	-0.029
INT_P6	0.008	0.020
IPR_P1	0.003	0.073
IPR_P2	-0.120	-0.105
IPR_P3	0.050	0.098
IPR_P4	0.042	-0.055

SOC_P1	-0.020	0.081
SOC_P2	0.019	-0.080
WAR_P1	-0.009	-0.017
WAR_P2	-0.038	-0.056
WAR_P3	-0.042	-0.103
WAR_P4	0.052	0.123
WAR_P5	0.033	0.053
ARR_P1	0.022	0.050
ARR_P2	0.002	-0.013
ARR_P3	-0.032	-0.046
CON_P1	0.053	-0.034
CON_P2	-0.059	-0.043
CON_P3	0.028	0.071
HOS_P1	0.076	0.055
HOS_P2	0.052	0.086
HOS_P3	-0.063	-0.053
HOS_P4	-0.059	-0.031
HOS_P5	-0.004	0.035
HOS_P6	0.040	-0.025
HOS_P7	-0.005	-0.075
DEC_P1	-0.038	-0.055
DEC_P2	0.015	0.072
DEC_P3	0.032	0.006
EMO_P1	0.064	0.076
EMO_P2	-0.004	-0.060
EMO_P3	-0.037	-0.051
EMO_P4	-0.009	0.034
NEG_P1	-0.012	0.026
NEG_P2	-0.058	-0.078
NEG_P3	0.053	-0.023
NEG_P4	0.189	0.189
NEG_P5	-0.159	-0.112
PLA_P1	0.014	0.060
PLA_P2	-0.016	-0.082
SOB_P1	-0.053	-0.081
SOB_P2	0.094	0.113
SOB_P3	-0.063	-0.065
ACH_P1	0.035	0.033
ACH_P2	-0.075	-0.087
ACH_P3	-0.049	-0.086
ACH_P4	0.089	0.031
ACH_P5	-0.002	0.082
ORD_P1	-0.085	-0.119
ORD_P2	0.005	0.010
ORD_P3	0.099	0.132
ORD_P4	0.043	0.042
ORD_P5	-0.021	-0.034
ORD_P6	-0.034	-0.028
TRA_P1	-0.070	-0.033
TRA_P2	0.096	0.047
BRO_P1	0.011	-0.119
BRO_P2	-0.139	0.097
BRO_P3	0.104	0.006
EPI_P1	- -	0.055
EPI_P2	- -	-0.072
EPI_P3	- -	0.036
ITL_P1	0.088	- -
ITL_P2	0.107	- -
ITL_P3	0.070	- -
ITL_P4	-0.050	- -
ITL_P5	-0.176	- -

Completely Standardized Expected Change for LAMBDA-X

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMP_P1	- -	-0.051	-0.162	-0.124	0.012	-0.128
EMP_P2	- -	0.263	0.404	0.480	0.239	0.508
EMP_P3	- -	-0.176	-0.161	-0.256	-0.200	-0.210
FAC_P1	0.110	- -	0.089	0.150	0.041	0.154
FAC_P2	-0.137	- -	-0.198	-0.206	-0.043	-0.197
FAC_P3	-0.155	- -	0.038	-0.179	-0.126	-0.182
FAC_P4	0.142	- -	0.046	0.206	0.086	0.205
FAC_P5	0.060	- -	0.075	0.208	0.065	0.119
INT_P1	-0.251	-0.056	- -	-0.186	-0.164	-0.238
INT_P2	-0.213	-0.059	- -	-0.243	-0.155	-0.252
INT_P3	0.313	0.078	- -	0.192	0.237	0.298

INT_P4	0.093	0.105	- -	0.273	0.097	0.193
INT_P5	0.346	0.051	- -	0.296	0.214	0.378
INT_P6	-0.159	-0.076	- -	-0.174	-0.138	-0.195
IPR_P1	-0.081	0.370	-0.170	- -	3.980	- -
IPR_P2	-0.103	0.055	-0.164	- -	-0.191	-0.063
IPR_P3	-0.115	0.237	0.017	- -	-0.037	-0.063
IPR_P4	0.367	-0.511	0.262	- -	-0.092	11.339
SOC_P1	-0.252	0.181	-0.040	0.020	- -	-0.123
SOC_P2	0.333	-0.185	0.043	-0.028	- -	0.168
WAR_P1	-0.073	-0.072	0.081	-0.107	-0.127	- -
WAR_P2	0.103	-0.134	-0.044	-0.063	0.075	- -
WAR_P3	0.471	-0.221	-0.077	-0.317	-0.065	- -
WAR_P4	-0.376	0.325	0.039	0.594	0.216	- -
WAR_P5	-0.215	0.149	0.021	0.110	-0.113	- -
ARR_P1	0.056	0.080	0.058	0.097	0.081	0.089
ARR_P2	-0.056	-0.039	-0.024	-0.039	-0.051	-0.052
ARR_P3	0.007	-0.053	-0.043	-0.077	-0.037	-0.045
CON_P1	0.109	-0.081	0.011	-0.005	0.039	0.027
CON_P2	-0.093	-0.057	-0.075	-0.089	-0.098	-0.086
CON_P3	-0.004	0.137	0.082	0.104	0.066	0.069
HOS_P1	0.146	0.065	0.155	0.103	0.105	0.134
HOS_P2	0.040	0.139	0.100	0.123	0.100	0.092
HOS_P3	-0.085	-0.072	-0.043	-0.115	-0.103	-0.089
HOS_P4	-0.193	-0.066	-0.105	-0.127	-0.121	-0.163
HOS_P5	-0.064	0.034	0.001	0.017	0.007	-0.026
HOS_P6	0.055	-0.086	0.020	-0.050	-0.027	-0.017
HOS_P7	0.160	-0.009	-0.117	0.074	0.064	0.110
DEC_P1	0.027	0.015	-0.075	0.040	0.017	0.040
DEC_P2	0.075	0.103	0.065	0.147	0.155	0.109
DEC_P3	-0.082	-0.093	0.044	-0.147	-0.133	-0.120
EMO_P1	0.082	0.191	0.241	0.132	0.075	0.133
EMO_P2	0.009	-0.108	-0.076	-0.007	0.006	-0.011
EMO_P3	-0.007	-0.056	-0.072	-0.024	-0.002	-0.026
EMO_P4	-0.065	-0.008	-0.058	-0.078	-0.062	-0.070
NEG_P1	0.025	0.080	0.051	0.029	0.034	0.037
NEG_P2	-0.091	-0.114	-0.166	-0.088	-0.070	-0.097
NEG_P3	0.109	-0.003	0.139	0.070	0.022	0.089
NEG_P4	0.325	0.211	0.297	0.286	0.266	0.283
NEG_P5	-0.336	-0.163	-0.325	-0.295	-0.237	-0.297
PLA_P1	-0.110	0.025	-0.089	-0.078	-0.137	-0.097
PLA_P2	0.217	-0.050	0.145	0.163	0.284	0.207
SOB_P1	-0.113	-0.090	-0.165	-0.211	-0.178	-0.162
SOB_P2	0.195	0.143	0.206	0.272	0.301	0.227
SOB_P3	-0.084	-0.059	-0.046	-0.078	-0.155	-0.073
ACH_P1	-0.003	0.011	-0.014	-0.024	-0.016	-0.022
ACH_P2	-0.003	0.050	-0.062	-0.004	0.016	-0.009
ACH_P3	-0.018	-0.073	0.024	-0.006	-0.047	-0.005
ACH_P4	0.083	-0.116	0.242	-0.004	-0.018	0.048
ACH_P5	-0.044	0.116	-0.142	0.031	0.055	-0.008
ORD_P1	0.027	-0.058	0.006	-0.010	-0.031	0.016
ORD_P2	-0.064	-0.076	-0.052	-0.093	-0.050	-0.093
ORD_P3	0.051	0.164	0.130	0.123	0.096	0.098
ORD_P4	0.041	0.038	0.145	0.048	0.053	0.041
ORD_P5	0.049	0.026	-0.057	0.032	0.018	0.049
ORD_P6	-0.062	-0.055	-0.099	-0.054	-0.055	-0.060
TRA_P1	-0.117	-0.010	-0.070	-0.140	-0.067	-0.163
TRA_P2	0.218	0.015	0.078	0.181	0.123	0.212
BRO_P1	0.110	-0.072	-0.028	-0.020	0.021	0.032
BRO_P2	-0.096	0.151	-0.033	0.022	-0.017	-0.014
BRO_P3	-0.003	-0.085	0.056	-0.004	-0.003	-0.014
EPI_P1	0.066	0.130	0.200	0.140	0.070	0.125
EPI_P2	0.029	-0.118	-0.155	-0.097	-0.027	-0.066
EPI_P3	-0.085	0.018	0.004	-0.015	-0.031	-0.035
ITL_P1	0.045	-0.194	-0.015	-0.015	0.039	-0.009
ITL_P2	-0.009	-0.189	0.047	-0.131	-0.115	-0.065
ITL_P3	-0.058	0.068	-0.121	-0.026	-0.107	-0.037
ITL_P4	0.026	0.028	0.022	0.033	0.056	0.030
ITL_P5	0.004	0.216	0.100	0.116	0.132	0.072

Completely Standardized Expected Change for LAMBDA-X

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
EMP_P1	0.042	0.078	0.062	0.083	-0.066	0.038
EMP_P2	-0.092	-0.166	-0.166	-0.245	0.276	-0.229
EMP_P3	0.039	0.071	0.084	0.134	-0.169	0.169
FAC_P1	-0.094	-0.063	-0.076	-0.042	-0.001	0.000

FAC_P2	0.152	0.152	0.155	0.129	-0.090	0.056
FAC_P3	0.036	-0.051	-0.019	-0.133	0.121	-0.127
FAC_P4	-0.092	-0.047	-0.070	-0.004	-0.049	0.043
FAC_P5	-0.008	-0.006	-0.002	0.032	0.055	0.012
INT_P1	0.035	-0.057	-0.024	-0.220	0.000	-0.140
INT_P2	0.105	0.056	0.116	-0.013	0.009	-0.050
INT_P3	-0.006	0.097	0.023	0.105	-0.077	0.153
INT_P4	-0.186	-0.180	-0.219	-0.083	0.111	-0.101
INT_P5	-0.083	0.065	-0.020	0.176	-0.080	0.151
INT_P6	0.079	-0.012	0.066	0.000	0.043	-0.020
IPR_P1	0.025	0.039	0.016	-0.046	-0.008	-0.021
IPR_P2	0.019	0.012	0.007	0.036	-0.001	-0.040
IPR_P3	0.141	0.092	0.132	0.080	-0.028	0.051
IPR_P4	-0.186	-0.136	-0.159	-0.085	0.036	0.005
SOC_P1	0.109	0.041	0.058	-0.019	0.097	-0.109
SOC_P2	-0.107	-0.041	-0.058	0.020	-0.100	0.108
WAR_P1	-0.029	-0.046	-0.046	-0.054	0.010	-0.028
WAR_P2	-0.054	-0.001	-0.028	0.000	-0.049	0.031
WAR_P3	-0.117	-0.034	-0.056	0.053	-0.148	0.104
WAR_P4	0.115	0.020	0.051	-0.035	0.147	-0.101
WAR_P5	0.086	0.064	0.082	0.031	0.052	-0.007
ARR_P1	- -	0.004	-0.053	-0.056	0.071	-0.031
ARR_P2	- -	-0.046	-0.015	-0.001	-0.009	-0.037
ARR_P3	- -	0.104	0.196	0.085	-0.083	0.096
CON_P1	-0.202	- -	-0.075	0.188	-0.043	0.167
CON_P2	0.026	- -	0.049	0.054	-0.063	0.001
CON_P3	0.180	- -	-0.040	-0.264	0.110	-0.153
HOS_P1	-0.190	0.430	- -	-0.039	0.007	0.083
HOS_P2	0.112	0.191	- -	-0.221	0.126	-0.106
HOS_P3	0.001	-0.051	- -	-0.048	-0.122	0.037
HOS_P4	0.365	-0.446	- -	-0.090	0.018	-0.110
HOS_P5	0.197	-0.023	- -	-0.141	0.101	-0.157
HOS_P6	-0.307	-0.312	- -	0.243	-0.068	0.151
HOS_P7	-0.297	0.230	- -	0.431	-0.079	0.173
DEC_P1	-0.085	0.087	-0.042	- -	-0.051	0.022
DEC_P2	0.029	0.107	-0.004	- -	0.145	-0.038
DEC_P3	0.073	-0.167	0.055	- -	-0.051	0.002
EMO_P1	-0.105	-0.156	-0.167	-0.338	- -	-0.066
EMO_P2	-0.013	0.023	0.010	0.103	- -	0.010
EMO_P3	0.030	0.072	0.060	0.103	- -	0.049
EMO_P4	0.059	0.027	0.059	0.075	- -	-0.002
NEG_P1	-0.032	-0.047	-0.059	-0.175	-0.081	- -
NEG_P2	0.087	0.135	0.135	0.317	-0.027	- -
NEG_P3	-0.212	-0.276	-0.244	-0.238	0.023	- -
NEG_P4	-0.190	-0.239	-0.251	-0.283	0.334	- -
NEG_P5	0.349	0.458	0.448	0.447	-0.297	- -
PLA_P1	0.116	0.108	0.112	0.094	-0.032	0.018
PLA_P2	-0.158	-0.145	-0.158	-0.132	0.065	-0.031
SOB_P1	0.109	0.137	0.141	0.141	-0.171	0.124
SOB_P2	-0.141	-0.158	-0.162	-0.141	0.179	-0.095
SOB_P3	0.030	0.019	0.020	0.001	-0.014	-0.028
ACH_P1	-0.008	-0.003	0.000	-0.006	-0.034	0.010
ACH_P2	-0.029	-0.017	-0.032	-0.053	0.036	-0.069
ACH_P3	-0.051	-0.072	-0.063	-0.055	0.010	-0.045
ACH_P4	-0.114	-0.106	-0.084	-0.051	-0.051	0.090
ACH_P5	0.167	0.165	0.152	0.144	0.030	0.029
ORD_P1	-0.091	-0.092	-0.091	-0.052	-0.085	0.041
ORD_P2	0.038	0.034	0.048	0.027	-0.017	-0.003
ORD_P3	0.048	0.047	0.037	-0.002	0.129	-0.032
ORD_P4	-0.059	-0.073	-0.074	-0.145	0.107	-0.087
ORD_P5	-0.015	0.016	0.000	0.062	-0.061	0.073
ORD_P6	0.043	0.034	0.041	0.064	-0.049	0.008
TRA_P1	0.051	0.044	0.059	0.033	-0.035	0.015
TRA_P2	-0.080	-0.063	-0.082	-0.040	0.050	-0.023
BRO_P1	-0.056	0.006	-0.006	0.061	-0.138	0.131
BRO_P2	0.098	0.059	0.058	-0.009	0.053	-0.066
BRO_P3	-0.050	-0.066	-0.054	-0.045	0.066	-0.050
EPI_P1	-0.147	-0.173	-0.174	-0.214	0.148	-0.121
EPI_P2	0.049	0.124	0.107	0.168	-0.184	0.157
EPI_P3	0.063	0.007	0.025	-0.005	0.077	-0.065
ITL_P1	-0.047	-0.015	-0.016	0.047	0.131	0.013
ITL_P2	0.014	0.027	0.048	0.072	-0.135	0.100
ITL_P3	0.065	0.060	0.064	0.079	-0.052	-0.005
ITL_P4	-0.024	-0.023	-0.022	0.003	-0.063	0.033
ITL_P5	-0.012	-0.047	-0.069	-0.189	0.136	-0.118

Completely Standardized Expected Change for LAMBDA-X

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
EMP_P1	-0.074	-0.057	-0.103	-0.085	-0.082	-0.131
EMP_P2	0.155	0.221	0.284	0.191	0.115	0.246
EMP_P3	-0.059	-0.132	-0.138	-0.081	-0.019	-0.077
FAC_P1	-0.032	-0.021	0.009	-0.008	0.004	0.040
FAC_P2	0.030	0.025	-0.092	-0.100	-0.056	-0.031
FAC_P3	-0.067	-0.002	0.253	0.176	0.046	-0.070
FAC_P4	0.017	-0.009	-0.103	-0.033	0.064	-0.044
FAC_P5	0.056	0.004	-0.024	-0.007	-0.061	0.133
INT_P1	-0.100	-0.072	0.011	0.083	-0.077	-0.094
INT_P2	-0.100	-0.087	0.125	0.163	-0.108	-0.040
INT_P3	0.174	0.161	-0.032	-0.127	0.095	0.079
INT_P4	0.004	0.046	-0.087	-0.138	0.045	0.023
INT_P5	0.149	0.119	-0.173	-0.222	0.041	0.085
INT_P6	-0.084	-0.114	0.124	0.193	0.021	-0.035
IPR_P1	0.178	0.409	0.052	-0.024	-0.024	0.105
IPR_P2	-0.090	-0.102	-0.075	-0.063	0.070	-0.134
IPR_P3	-0.013	-0.073	0.052	0.068	-0.090	0.056
IPR_P4	-0.045	-0.106	-0.015	0.010	0.043	-0.001
SOC_P1	0.007	0.149	0.078	0.027	-0.033	0.010
SOC_P2	-0.007	-0.182	-0.081	-0.027	0.035	-0.010
WAR_P1	-0.041	-0.012	0.039	0.035	0.036	-0.038
WAR_P2	0.020	0.042	-0.078	-0.041	0.003	-0.047
WAR_P3	-0.137	-0.205	-0.169	-0.093	-0.075	-0.156
WAR_P4	0.125	0.193	0.117	0.022	-0.040	0.159
WAR_P5	0.041	0.001	0.109	0.085	0.094	0.088
ARR_P1	0.080	0.099	0.084	0.052	0.071	0.062
ARR_P2	-0.046	-0.053	-0.040	-0.048	-0.056	-0.020
ARR_P3	-0.045	-0.059	-0.056	-0.002	-0.020	-0.056
CON_P1	0.150	0.029	-0.067	-0.078	0.010	0.038
CON_P2	-0.136	-0.098	-0.044	0.003	-0.014	-0.087
CON_P3	0.004	0.075	0.111	0.068	0.005	0.056
HOS_P1	0.081	0.078	0.075	0.061	0.007	0.062
HOS_P2	0.084	0.118	0.134	0.054	0.074	0.098
HOS_P3	-0.093	-0.074	-0.052	0.023	-0.035	-0.101
HOS_P4	-0.111	-0.106	-0.023	0.018	-0.018	-0.069
HOS_P5	0.015	0.028	0.020	-0.007	-0.028	0.012
HOS_P6	0.004	-0.044	-0.041	-0.013	-0.023	0.016
HOS_P7	0.038	0.006	-0.115	-0.151	0.059	0.004
DEC_P1	0.046	0.093	0.004	-0.053	0.110	-0.006
DEC_P2	0.106	0.159	0.097	0.039	0.042	0.055
DEC_P3	-0.129	-0.211	-0.072	0.029	-0.148	-0.036
EMO_P1	-0.007	0.110	0.462	0.243	0.250	0.069
EMO_P2	0.121	0.053	-0.248	-0.153	-0.059	0.062
EMO_P3	0.017	-0.023	-0.143	-0.074	-0.046	-0.054
EMO_P4	-0.108	-0.104	-0.012	0.018	-0.090	-0.053
NEG_P1	0.003	0.070	0.095	0.083	0.078	0.014
NEG_P2	-0.009	-0.049	-0.169	-0.182	-0.106	-0.053
NEG_P3	-0.058	-0.053	0.066	0.105	0.035	-0.028
NEG_P4	0.145	0.146	0.197	0.171	0.185	0.201
NEG_P5	-0.067	-0.101	-0.189	-0.171	-0.177	-0.120
PLA_P1	- -	-0.136	-0.032	-0.042	-0.104	0.069
PLA_P2	- -	0.084	0.052	0.062	0.162	-0.071
SOB_P1	0.032	- -	-0.069	-0.073	-0.059	-0.033
SOB_P2	-0.034	- -	0.093	0.089	0.030	0.068
SOB_P3	0.011	- -	-0.027	-0.016	0.027	-0.038
ACH_P1	-0.057	-0.062	- -	-0.012	-0.034	0.026
ACH_P2	-0.021	-0.001	- -	-0.153	-0.006	-0.096
ACH_P3	-0.061	-0.042	- -	0.066	-0.002	-0.106
ACH_P4	-0.048	-0.085	- -	0.344	-0.027	-0.005
ACH_P5	0.160	0.158	- -	-0.186	0.055	0.168
ORD_P1	-0.033	-0.030	-0.208	- -	0.125	-0.106
ORD_P2	-0.048	-0.056	-0.003	- -	-0.114	-0.025
ORD_P3	0.084	0.076	0.331	- -	0.027	0.143
ORD_P4	-0.003	0.042	0.280	- -	0.028	0.030
ORD_P5	0.032	0.024	-0.133	- -	0.064	0.017
ORD_P6	-0.018	-0.034	-0.161	- -	-0.061	-0.043
TRA_P1	-0.009	0.013	0.015	0.037	- -	-0.066
TRA_P2	0.015	-0.023	-0.018	-0.057	- -	0.105
BRO_P1	-0.012	-0.051	-0.126	-0.070	-0.010	- -
BRO_P2	0.000	0.055	0.107	0.048	0.004	- -
BRO_P3	0.010	-0.008	-0.003	0.013	0.005	- -
EPI_P1	-0.062	0.070	0.317	0.206	0.150	-0.111
EPI_P2	0.068	-0.027	-0.283	-0.198	-0.123	0.179
EPI_P3	-0.020	-0.030	0.060	0.042	0.004	-0.101

ITL_P1	0.050	0.026	-0.085	-0.066	-0.002	0.085
ITL_P2	-0.057	-0.150	-0.108	0.019	-0.079	-0.016
ITL_P3	-0.030	-0.090	-0.031	-0.152	-0.007	0.274
ITL_P4	-0.023	-0.027	-0.101	0.021	-0.031	-0.161
ITL_P5	0.058	0.233	0.342	0.204	0.105	-0.230

Completely Standardized Expected Change for LAMBDA-X

	EPISTEM	INTELLEC
EMP_P1	-0.133	-0.086
EMP_P2	0.266	0.295
EMP_P3	-0.084	-0.163
FAC_P1	0.081	0.002
FAC_P2	-0.103	-0.047
FAC_P3	-0.063	0.070
FAC_P4	-0.044	-0.148
FAC_P5	0.172	0.197
INT_P1	-0.092	-0.022
INT_P2	0.033	0.071
INT_P3	0.002	-0.042
INT_P4	-0.007	-0.005
INT_P5	0.040	-0.059
INT_P6	0.016	0.041
IPR_P1	0.006	0.128
IPR_P2	-0.182	-0.159
IPR_P3	0.094	0.183
IPR_P4	0.083	-0.107
SOC_P1	-0.032	0.132
SOC_P2	0.031	-0.135
WAR_P1	-0.017	-0.032
WAR_P2	-0.066	-0.097
WAR_P3	-0.079	-0.193
WAR_P4	0.099	0.235
WAR_P5	0.063	0.102
ARR_P1	0.029	0.064
ARR_P2	0.002	-0.018
ARR_P3	-0.042	-0.061
CON_P1	0.062	-0.040
CON_P2	-0.095	-0.070
CON_P3	0.045	0.113
HOS_P1	0.100	0.072
HOS_P2	0.073	0.121
HOS_P3	-0.104	-0.086
HOS_P4	-0.088	-0.047
HOS_P5	-0.007	0.054
HOS_P6	0.059	-0.037
HOS_P7	-0.006	-0.090
DEC_P1	-0.055	-0.080
DEC_P2	0.021	0.101
DEC_P3	0.041	0.008
EMO_P1	0.089	0.106
EMO_P2	-0.005	-0.088
EMO_P3	-0.053	-0.074
EMO_P4	-0.014	0.052
NEG_P1	-0.013	0.029
NEG_P2	-0.069	-0.092
NEG_P3	0.057	-0.025
NEG_P4	0.232	0.232
NEG_P5	-0.196	-0.138
PLA_P1	0.017	0.072
PLA_P2	-0.023	-0.117
SOB_P1	-0.063	-0.096
SOB_P2	0.136	0.163
SOB_P3	-0.073	-0.075
ACH_P1	0.057	0.054
ACH_P2	-0.115	-0.134
ACH_P3	-0.073	-0.127
ACH_P4	0.163	0.057
ACH_P5	-0.003	0.127
ORD_P1	-0.130	-0.183
ORD_P2	0.009	0.017
ORD_P3	0.163	0.217
ORD_P4	0.065	0.063
ORD_P5	-0.031	-0.051
ORD_P6	-0.057	-0.046
TRA_P1	-0.075	-0.035

TRA_P2	0.112	0.054
BRO_P1	0.018	-0.190
BRO_P2	-0.195	0.136
BRO_P3	0.170	0.011
EPI_P1	- -	0.101
EPI_P2	- -	-0.134
EPI_P3	- -	0.072
ITL_P1	0.156	- -
ITL_P2	0.204	- -
ITL_P3	0.105	- -
ITL_P4	-0.085	- -
ITL_P5	-0.307	- -

No Non-Zero Modification Indices for PHI

Modification Indices for THETA-DELTA

	EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
EMP_P1	- -					
EMP_P2	20.624	- -				
EMP_P3	182.845	80.330	- -			
FAC_P1	5.550	0.808	0.607	- -		
FAC_P2	0.004	5.248	5.534	19.399	- -	
FAC_P3	5.102	12.646	1.918	121.536	945.393	- -
FAC_P4	0.501	0.122	3.705	18.853	48.910	42.494
FAC_P5	2.963	7.496	3.518	36.134	79.274	159.479
INT_P1	5.155	0.629	22.510	10.007	0.024	20.588
INT_P2	10.350	19.866	3.206	0.871	0.249	10.186
INT_P3	0.043	16.479	18.093	0.500	0.852	1.446
INT_P4	9.570	24.698	9.264	12.707	6.975	8.675
INT_P5	3.565	1.173	4.506	0.028	2.316	39.391
INT_P6	0.477	3.256	3.373	19.495	0.724	3.779
IPR_P1	1.070	0.820	0.128	0.378	1.543	1.509
IPR_P2	1.191	3.110	0.211	0.158	1.815	1.220
IPR_P3	0.692	1.959	11.488	1.543	13.308	18.175
IPR_P4	2.644	56.053	0.007	0.087	77.756	52.282
SOC_P1	1.356	3.012	51.217	6.128	67.254	5.451
SOC_P2	44.054	21.280	52.946	0.232	11.372	11.262
WAR_P1	4.699	0.500	0.204	5.414	30.027	0.793
WAR_P2	0.170	26.392	1.988	0.116	0.178	3.451
WAR_P3	74.591	23.418	131.799	17.876	37.067	29.962
WAR_P4	20.464	4.978	33.700	2.787	12.401	0.011
WAR_P5	7.961	6.861	5.515	0.289	1.519	1.178
ARR_P1	3.043	1.951	2.544	11.003	3.734	18.516
ARR_P2	0.161	0.052	0.033	1.981	3.535	1.482
ARR_P3	0.832	17.967	24.120	0.764	18.645	6.661
CON_P1	29.614	3.220	1.367	3.361	4.431	6.853
CON_P2	0.011	3.710	0.727	0.097	0.077	3.232
CON_P3	0.465	1.950	6.216	2.273	4.677	0.297
HOS_P1	6.085	0.055	0.823	0.095	2.088	1.857
HOS_P2	0.891	21.192	7.216	3.642	1.273	1.347
HOS_P3	0.761	12.498	0.001	2.189	3.807	0.002
HOS_P4	24.795	4.667	2.199	12.499	7.750	22.376
HOS_P5	2.041	0.065	0.264	0.779	0.165	0.783
HOS_P6	1.148	5.248	4.200	1.125	6.539	18.015
HOS_P7	1.623	4.946	5.192	6.881	3.606	33.909
DEC_P1	0.231	7.582	0.696	6.005	2.439	23.838
DEC_P2	2.685	6.213	10.293	5.880	0.096	2.778
DEC_P3	0.812	1.238	0.251	0.259	1.924	3.499
EMO_P1	9.632	42.327	5.713	3.123	0.048	141.713
EMO_P2	1.688	3.498	1.880	1.317	0.188	3.736
EMO_P3	0.259	6.011	4.497	0.317	0.563	4.514
EMO_P4	0.000	0.000	1.810	4.000	0.656	3.802
NEG_P1	2.348	0.003	5.559	0.077	17.412	44.962
NEG_P2	0.910	0.613	0.676	16.190	1.409	8.069
NEG_P3	9.175	0.056	0.277	0.372	8.946	4.440
NEG_P4	17.204	0.823	42.532	0.437	0.414	10.353
NEG_P5	4.329	6.983	15.995	1.956	25.169	1.368
PLA_P1	7.567	0.718	0.118	0.014	24.824	0.689
PLA_P2	26.012	4.584	0.941	15.062	5.807	0.053
SOB_P1	2.100	0.024	0.124	0.161	5.556	0.555
SOB_P2	4.394	5.662	0.133	4.313	7.161	0.685
SOB_P3	3.170	10.543	6.672	1.978	4.233	9.329
ACH_P1	4.341	1.419	0.267	49.980	0.029	3.222
ACH_P2	0.045	23.254	0.170	4.997	3.139	18.462
ACH_P3	2.331	1.682	0.055	5.291	16.357	0.054

ACH_P4	1.426	1.166	0.119	1.563	24.913	0.730
ACH_P5	6.779	14.230	5.928	5.462	22.636	24.972
ORD_P1	3.997	8.683	0.839	0.300	1.028	7.923
ORD_P2	1.687	6.212	0.374	10.049	2.568	0.532
ORD_P3	2.147	0.962	0.037	3.200	0.997	2.553
ORD_P4	2.712	16.622	1.744	6.871	3.399	32.278
ORD_P5	0.424	0.565	1.405	0.147	0.055	0.187
ORD_P6	0.069	2.537	0.423	1.139	0.142	0.014
TRA_P1	0.619	0.810	16.380	1.315	14.532	18.592
TRA_P2	4.875	0.311	21.248	0.190	6.186	3.244
BRO_P1	1.195	0.021	15.068	3.493	0.024	9.604
BRO_P2	1.913	0.518	2.107	2.049	3.163	11.305
BRO_P3	8.641	0.245	1.552	3.152	3.277	0.283
EPI_P1	0.306	15.709	10.770	2.819	3.516	12.987
EPI_P2	4.787	2.375	41.891	8.117	0.197	68.709
EPI_P3	23.159	4.482	8.815	0.546	0.427	3.064
ITL_P1	12.860	0.793	0.049	0.787	22.285	25.207
ITL_P2	2.265	0.773	1.497	1.277	9.060	7.644
ITL_P3	2.829	0.324	0.156	15.914	0.971	21.590
ITL_P4	1.073	0.753	2.398	3.391	0.060	0.008
ITL_P5	7.026	2.204	5.265	1.996	4.968	37.399

Modification Indices for THETA-DELTA

	FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
FAC_P4	- -					
FAC_P5	70.675	- -				
INT_P1	17.808	2.942	- -			
INT_P2	12.224	1.463	137.136	- -		
INT_P3	0.158	7.846	32.754	5.042	- -	
INT_P4	23.650	11.902	8.943	4.261	157.670	- -
INT_P5	4.249	7.971	90.526	47.866	88.625	12.020
INT_P6	1.098	0.420	28.970	16.098	7.399	33.291
IPR_P1	0.484	0.688	0.908	1.518	0.488	2.844
IPR_P2	16.028	3.749	0.002	17.938	8.483	33.112
IPR_P3	0.029	25.558	0.690	0.362	38.264	0.153
IPR_P4	10.770	25.233	9.380	15.885	4.430	80.669
SOC_P1	6.411	4.910	4.019	0.284	0.002	0.729
SOC_P2	4.536	0.028	3.539	0.766	7.612	1.124
WAR_P1	1.463	3.519	24.802	1.168	33.568	5.640
WAR_P2	6.533	11.843	1.496	0.385	48.359	9.863
WAR_P3	14.084	3.525	5.857	8.657	23.204	0.453
WAR_P4	2.003	12.419	5.313	2.724	25.001	20.221
WAR_P5	6.170	11.424	8.035	1.279	0.036	1.037
ARR_P1	3.337	1.483	6.210	3.418	3.508	3.638
ARR_P2	0.667	5.876	2.600	2.526	0.460	0.000
ARR_P3	6.187	0.777	3.081	0.001	7.770	27.392
CON_P1	2.947	0.277	36.911	0.001	28.819	47.972
CON_P2	0.526	9.711	46.370	11.651	14.527	0.994
CON_P3	0.631	3.367	10.391	4.143	0.573	0.368
HOS_P1	3.887	0.173	0.429	6.107	14.449	26.682
HOS_P2	0.158	0.785	0.433	0.977	7.452	6.683
HOS_P3	0.225	1.941	37.143	3.827	21.709	0.067
HOS_P4	0.093	6.704	2.804	1.847	26.316	9.520
HOS_P5	0.561	2.077	26.948	0.770	2.762	1.310
HOS_P6	0.515	13.819	7.617	0.682	1.470	0.003
HOS_P7	10.193	1.502	115.939	33.631	33.104	2.398
DEC_P1	5.546	1.249	66.282	11.675	0.835	36.934
DEC_P2	2.210	0.765	51.242	2.076	0.095	8.511
DEC_P3	0.033	13.105	8.493	35.370	1.054	1.100
EMO_P1	0.068	36.327	16.802	2.226	8.888	4.739
EMO_P2	2.637	2.434	1.430	2.275	0.247	7.494
EMO_P3	0.091	0.079	17.204	1.326	0.000	8.230
EMO_P4	0.567	4.356	4.965	0.192	1.559	0.008
NEG_P1	3.763	21.880	3.574	0.005	3.593	4.269
NEG_P2	0.778	8.191	31.157	7.312	4.544	0.001
NEG_P3	0.387	1.512	5.445	5.049	0.981	3.847
NEG_P4	5.072	5.180	10.903	5.978	14.582	0.005
NEG_P5	3.787	0.035	32.018	11.063	5.054	11.067
PLA_P1	10.203	11.572	1.344	2.479	0.189	3.480
PLA_P2	18.898	0.656	0.052	17.509	12.201	0.062
SOB_P1	1.004	1.060	0.434	0.027	1.513	2.520
SOB_P2	4.920	2.397	5.917	22.535	6.925	0.430
SOB_P3	0.299	15.478	0.158	8.778	0.805	14.439
ACH_P1	0.606	17.683	4.023	1.355	3.837	9.034
ACH_P2	0.042	8.412	0.304	16.047	9.565	9.879

ACH_P3	0.080	0.005	0.145	0.790	18.682	18.385
ACH_P4	10.045	9.697	1.888	18.715	0.015	1.233
ACH_P5	0.008	8.279	18.662	15.716	18.246	11.480
ORD_P1	1.140	7.853	25.204	2.999	12.250	4.940
ORD_P2	5.675	0.014	21.573	24.411	2.178	26.426
ORD_P3	1.509	8.860	0.040	5.254	9.881	3.946
ORD_P4	2.772	20.397	0.001	39.426	9.605	0.258
ORD_P5	13.295	5.608	20.366	30.792	2.134	2.082
ORD_P6	0.539	0.824	1.429	7.729	6.648	1.058
TRA_P1	4.156	2.222	0.618	4.454	0.019	2.291
TRA_P2	11.505	2.026	3.246	18.300	0.498	2.336
BRO_P1	1.898	0.050	3.574	2.300	11.526	2.022
BRO_P2	1.610	11.188	5.532	0.530	2.337	3.516
BRO_P3	7.405	0.935	0.033	0.000	0.166	0.876
EPI_P1	0.533	3.281	3.859	7.982	0.607	0.369
EPI_P2	0.201	33.817	6.347	2.310	1.833	6.636
EPI_P3	3.071	22.594	0.161	5.481	3.638	1.952
ITL_P1	2.929	1.638	9.159	13.721	0.147	0.947
ITL_P2	13.753	9.761	8.844	51.566	2.301	3.749
ITL_P3	7.100	2.239	0.098	5.027	29.054	12.556
ITL_P4	0.317	8.885	0.225	0.088	2.896	1.195
ITL_P5	10.052	1.211	0.462	0.309	0.345	38.033

Modification Indices for THETA-DELTA

	INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
INT_P5	- -					
INT_P6	0.404	- -				
IPR_P1	0.017	6.730	- -			
IPR_P2	3.732	2.786	12.077	- -		
IPR_P3	0.376	27.884	21.063	75.525	- -	
IPR_P4	56.551	2.785	32.163	2.775	3.711	- -
SOC_P1	6.493	0.140	11.010	1.311	6.601	9.663
SOC_P2	1.134	0.151	0.004	3.069	3.686	5.595
WAR_P1	1.994	10.541	1.451	0.206	32.865	1.448
WAR_P2	2.339	24.350	3.087	0.089	3.572	5.181
WAR_P3	6.145	4.271	18.868	0.623	3.948	4.232
WAR_P4	74.490	0.193	4.523	12.199	64.613	13.587
WAR_P5	3.644	0.008	3.577	3.679	3.189	1.641
ARR_P1	0.878	0.480	3.016	9.928	0.271	1.499
ARR_P2	5.575	2.488	12.601	0.536	20.456	0.079
ARR_P3	0.891	2.922	0.146	4.579	1.597	12.304
CON_P1	48.623	1.475	1.572	24.719	1.307	0.468
CON_P2	7.542	7.347	3.418	1.142	0.006	1.488
CON_P3	1.477	18.486	0.036	16.864	0.268	0.003
HOS_P1	1.696	3.841	0.003	19.759	3.096	4.219
HOS_P2	2.781	0.078	2.051	16.502	1.172	0.367
HOS_P3	5.329	4.798	0.709	6.879	6.357	3.701
HOS_P4	10.034	8.358	1.106	19.531	2.242	2.605
HOS_P5	13.957	1.011	1.416	0.673	0.257	4.007
HOS_P6	8.095	6.816	0.228	2.714	0.632	11.952
HOS_P7	15.917	14.022	0.010	14.455	0.881	12.252
DEC_P1	1.809	9.376	0.001	15.001	1.930	29.697
DEC_P2	2.398	0.144	6.005	0.446	0.507	0.291
DEC_P3	11.992	19.490	15.982	6.203	0.074	11.379
EMO_P1	10.817	0.002	3.806	0.430	20.546	0.216
EMO_P2	6.005	2.220	0.200	1.390	13.934	0.000
EMO_P3	4.070	0.330	3.780	28.867	2.490	14.411
EMO_P4	0.408	12.709	9.128	0.309	9.086	1.663
NEG_P1	7.979	0.521	0.001	4.291	0.812	11.580
NEG_P2	12.391	0.818	0.096	1.222	3.945	3.810
NEG_P3	7.549	0.293	0.001	3.196	0.276	9.118
NEG_P4	10.354	0.055	1.116	9.400	1.403	3.901
NEG_P5	14.706	12.332	0.500	0.268	18.735	15.007
PLA_P1	0.035	0.245	0.012	0.143	20.975	1.954
PLA_P2	3.030	1.809	0.327	0.000	6.457	0.005
SOB_P1	0.656	6.067	36.653	7.870	0.352	0.742
SOB_P2	2.450	0.938	33.919	7.283	1.139	0.942
SOB_P3	1.449	2.546	0.749	1.367	6.264	0.644
ACH_P1	3.387	6.774	14.348	3.584	1.055	0.623
ACH_P2	27.566	0.189	0.067	2.435	32.575	2.111
ACH_P3	0.371	0.000	1.967	11.152	4.409	4.709
ACH_P4	2.217	27.507	7.828	21.433	0.154	2.499
ACH_P5	10.202	2.760	0.531	0.640	0.134	0.620
ORD_P1	0.668	0.766	1.251	49.692	0.624	4.996
ORD_P2	23.596	0.806	0.340	39.015	6.319	0.478

ORD_P3	1.336	6.266	0.146	6.182	29.300	0.155
ORD_P4	0.411	6.068	0.030	28.848	0.574	0.764
ORD_P5	3.317	6.967	0.444	3.911	0.404	0.004
ORD_P6	0.020	2.099	0.284	18.936	3.307	1.301
TRA_P1	0.833	0.421	0.501	3.447	14.351	1.848
TRA_P2	2.447	9.215	0.987	2.663	0.816	2.146
BRO_P1	4.300	0.081	0.609	0.337	2.179	4.347
BRO_P2	4.604	11.562	1.619	16.760	1.850	6.902
BRO_P3	1.759	3.411	0.270	8.225	1.123	7.937
EPI_P1	3.812	0.388	8.772	1.537	0.264	2.912
EPI_P2	30.881	1.607	0.000	24.156	8.084	1.343
EPI_P3	5.536	1.399	2.246	4.898	0.743	1.848
ITL_P1	3.654	0.093	0.252	26.306	4.093	0.488
ITL_P2	0.198	10.455	0.004	5.466	3.071	1.362
ITL_P3	3.111	7.894	0.287	16.134	9.860	9.997
ITL_P4	3.453	9.858	0.070	3.201	29.135	0.707
ITL_P5	0.197	4.782	1.537	0.620	0.017	0.003

Modification Indices for THETA-DELTA

	SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
SOC_P1	- -					
SOC_P2	- -	- -				
WAR_P1	0.701	0.941	- -			
WAR_P2	6.701	13.816	130.623	- -		
WAR_P3	5.176	19.330	4.012	12.685	- -	
WAR_P4	7.149	14.107	14.910	31.897	31.624	- -
WAR_P5	3.012	12.480	12.259	7.864	1.031	0.033
ARR_P1	0.484	2.065	4.853	0.006	10.285	12.836
ARR_P2	0.001	0.600	0.558	4.211	0.525	0.317
ARR_P3	0.325	2.327	0.146	0.750	1.169	2.789
CON_P1	7.751	7.341	0.138	1.271	0.337	7.118
CON_P2	0.424	0.278	2.986	7.380	1.676	9.137
CON_P3	3.578	9.838	2.282	4.224	1.011	0.380
HOS_P1	0.005	0.018	0.010	0.032	1.100	1.888
HOS_P2	0.693	0.343	0.085	8.396	7.150	0.139
HOS_P3	0.456	0.063	0.978	3.863	0.216	0.544
HOS_P4	4.300	0.926	4.887	0.337	14.883	6.481
HOS_P5	6.014	15.551	3.173	0.000	0.748	0.003
HOS_P6	9.324	8.847	2.211	0.361	0.016	0.218
HOS_P7	2.443	7.199	0.921	11.713	15.531	13.256
DEC_P1	3.868	0.129	1.723	0.135	1.976	1.348
DEC_P2	24.331	7.408	1.098	7.174	3.239	5.102
DEC_P3	0.721	2.634	0.061	17.521	8.772	0.779
EMO_P1	0.100	0.896	13.663	0.022	6.765	6.994
EMO_P2	3.153	0.269	2.563	4.342	1.244	5.011
EMO_P3	3.167	8.632	4.478	6.561	3.161	0.454
EMO_P4	7.198	2.042	8.083	2.551	1.706	0.006
NEG_P1	0.009	0.322	4.488	2.101	10.404	7.954
NEG_P2	0.306	0.000	0.868	4.016	0.219	13.024
NEG_P3	2.363	1.210	0.000	0.441	13.211	3.987
NEG_P4	3.073	9.257	1.066	0.849	0.323	2.532
NEG_P5	9.629	6.733	7.111	0.063	1.744	0.384
PLA_P1	0.001	57.193	7.203	7.998	0.055	0.763
PLA_P2	5.096	64.267	0.487	0.028	3.118	6.213
SOB_P1	0.215	0.314	0.940	0.212	7.803	2.915
SOB_P2	6.502	4.646	1.360	2.171	2.133	3.470
SOB_P3	3.631	41.786	0.689	1.043	2.817	6.205
ACH_P1	5.371	0.455	8.039	0.037	1.860	19.273
ACH_P2	2.143	6.798	6.746	1.884	3.085	13.739
ACH_P3	5.702	1.122	2.559	0.000	1.318	10.621
ACH_P4	1.791	0.694	0.004	1.029	3.233	2.179
ACH_P5	6.169	10.941	1.718	11.033	39.013	11.205
ORD_P1	1.113	3.384	0.593	11.989	1.476	2.134
ORD_P2	0.010	11.229	7.303	6.102	0.844	19.905
ORD_P3	0.806	0.186	3.695	3.734	0.249	9.588
ORD_P4	1.992	0.336	0.098	2.670	2.354	0.821
ORD_P5	0.482	2.903	6.760	4.482	0.588	5.482
ORD_P6	0.638	0.017	1.048	0.928	0.772	0.135
TRA_P1	2.332	9.918	3.488	0.248	10.065	1.473
TRA_P2	3.194	9.296	0.219	0.000	0.007	9.600
BRO_P1	8.067	16.161	2.366	5.303	1.933	11.915
BRO_P2	0.333	8.548	0.114	0.167	17.903	12.712
BRO_P3	0.839	3.145	1.107	0.149	1.246	0.001
EPI_P1	1.970	0.971	3.129	4.535	0.110	0.470
EPI_P2	1.455	1.636	9.894	0.516	0.010	2.435

EPI_P3	0.538	5.629	0.051	2.352	0.638	9.764
ITL_P1	0.069	1.896	3.449	0.168	0.377	0.320
ITL_P2	0.133	3.680	1.052	25.729	1.220	0.200
ITL_P3	0.930	23.987	4.273	0.019	0.468	12.640
ITL_P4	7.203	0.281	0.402	4.301	5.758	1.353
ITL_P5	9.777	7.643	0.573	0.322	4.598	4.721

Modification Indices for THETA-DELTA

	WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
WAR_P5	- -					
ARR_P1	0.050	- -				
ARR_P2	1.285	0.999	- -			
ARR_P3	6.478	0.048	0.102	- -		
CON_P1	0.440	3.066	37.890	7.350	- -	
CON_P2	4.535	1.721	0.669	4.257	31.079	- -
CON_P3	0.933	4.943	0.073	16.111	0.501	25.587
HOS_P1	4.799	0.228	2.153	20.403	132.131	8.101
HOS_P2	5.792	13.489	7.016	22.403	3.514	3.398
HOS_P3	7.712	3.605	5.585	0.377	57.168	77.313
HOS_P4	7.429	12.916	37.464	17.717	35.855	4.729
HOS_P5	0.903	0.908	38.664	0.791	33.184	12.199
HOS_P6	13.465	9.156	8.106	4.217	3.792	23.513
HOS_P7	7.974	11.046	24.445	0.056	27.690	0.863
DEC_P1	3.172	6.314	0.163	15.144	0.026	3.692
DEC_P2	0.026	12.114	7.284	0.936	28.900	1.610
DEC_P3	0.068	1.274	4.097	5.224	0.078	0.708
EMO_P1	0.002	13.779	10.851	0.015	0.002	3.125
EMO_P2	1.752	0.112	0.529	0.147	1.569	2.175
EMO_P3	0.319	0.833	1.024	1.496	6.341	0.001
EMO_P4	1.158	0.005	0.024	2.976	2.922	0.085
NEG_P1	9.123	1.231	1.251	2.406	8.984	0.826
NEG_P2	4.752	4.185	3.709	7.909	31.967	13.625
NEG_P3	2.117	0.015	1.989	2.754	12.095	7.420
NEG_P4	1.072	1.480	0.001	3.986	13.148	18.028
NEG_P5	1.249	0.778	0.913	1.721	4.316	46.514
PLA_P1	5.801	0.001	0.997	0.643	10.115	0.972
PLA_P2	1.772	1.224	0.772	0.433	82.490	20.846
SOB_P1	10.632	0.638	0.103	7.466	2.635	0.074
SOB_P2	3.244	0.585	4.774	1.913	13.645	15.256
SOB_P3	2.906	3.574	0.184	0.600	15.161	6.162
ACH_P1	9.713	3.614	2.431	2.867	0.287	3.056
ACH_P2	12.622	3.035	2.428	7.459	0.119	0.869
ACH_P3	0.943	4.365	0.041	2.622	8.372	0.714
ACH_P4	9.591	3.171	2.842	0.493	8.270	0.225
ACH_P5	11.087	56.025	0.025	1.647	2.300	6.081
ORD_P1	7.048	9.608	2.189	3.064	0.895	2.466
ORD_P2	2.801	2.508	0.313	0.920	1.082	18.455
ORD_P3	0.002	0.655	0.442	3.892	0.000	15.872
ORD_P4	0.117	1.364	0.049	0.174	0.830	1.385
ORD_P5	10.337	1.491	4.730	0.894	1.444	0.196
ORD_P6	4.205	0.787	0.020	20.313	0.119	0.122
TRA_P1	0.290	0.395	1.387	1.253	0.166	1.268
TRA_P2	14.802	0.009	0.201	0.809	0.698	4.804
BRO_P1	2.463	2.477	5.971	2.138	15.304	5.332
BRO_P2	23.330	3.964	1.274	0.413	104.409	33.559
BRO_P3	3.077	1.799	1.492	2.543	3.665	0.161
EPI_P1	6.277	0.187	9.729	3.370	0.102	2.508
EPI_P2	0.533	16.902	0.609	10.126	55.947	6.569
EPI_P3	4.432	0.009	26.242	0.594	0.016	3.181
ITL_P1	0.010	11.260	0.081	1.002	2.000	0.323
ITL_P2	0.023	0.003	0.305	1.708	24.396	1.265
ITL_P3	12.823	6.072	0.404	12.748	18.608	9.210
ITL_P4	0.039	6.290	3.972	0.399	0.378	1.353
ITL_P5	0.372	0.973	1.530	1.653	9.294	0.589

Modification Indices for THETA-DELTA

	CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
CON_P3	- -					
HOS_P1	4.125	- -				
HOS_P2	7.928	49.229	- -			
HOS_P3	2.268	9.612	7.677	- -		
HOS_P4	4.262	80.817	59.344	20.293	- -	
HOS_P5	2.265	0.004	7.941	5.386	4.146	- -

HOS_P6	22.148	19.819	0.146	0.952	14.168	13.275
HOS_P7	0.244	19.334	1.850	37.870	50.343	15.305
DEC_P1	0.974	0.083	1.438	5.606	3.516	10.575
DEC_P2	10.422	0.037	2.268	26.695	1.079	8.385
DEC_P3	18.547	2.673	10.598	0.011	12.618	0.367
EMO_P1	2.197	0.309	7.821	14.707	1.273	0.736
EMO_P2	9.024	17.026	1.854	9.125	8.570	5.398
EMO_P3	3.613	1.807	2.452	6.097	0.230	0.012
EMO_P4	3.716	2.418	0.589	0.000	4.090	0.070
NEG_P1	0.024	5.029	14.148	13.727	2.454	1.534
NEG_P2	6.371	0.106	0.030	41.141	2.169	0.010
NEG_P3	13.508	3.550	35.669	2.831	4.559	12.542
NEG_P4	2.545	0.029	7.616	5.761	0.478	9.280
NEG_P5	15.206	3.481	0.067	49.260	14.674	1.141
PLA_P1	0.253	1.218	0.164	0.202	6.203	8.239
PLA_P2	24.963	0.020	0.037	3.209	0.699	1.538
SOB_P1	0.491	25.267	3.413	2.594	12.103	1.207
SOB_P2	2.863	1.499	0.119	4.270	11.080	13.276
SOB_P3	14.223	16.509	0.840	0.004	6.364	6.428
ACH_P1	7.776	2.007	0.369	0.167	2.239	0.918
ACH_P2	5.199	4.007	3.885	2.138	9.569	0.004
ACH_P3	2.115	7.595	2.659	0.056	3.527	1.273
ACH_P4	9.787	3.828	17.836	5.915	5.164	13.062
ACH_P5	0.598	1.744	25.952	5.818	3.581	2.507
ORD_P1	2.956	8.016	31.862	0.004	32.850	25.003
ORD_P2	0.002	3.581	0.459	0.077	8.141	5.159
ORD_P3	5.325	14.520	21.370	0.918	2.955	7.973
ORD_P4	1.555	0.834	1.097	2.068	0.007	0.670
ORD_P5	2.719	6.394	2.352	0.004	0.692	1.275
ORD_P6	0.009	6.049	4.370	1.046	11.677	0.213
TRA_P1	1.648	0.103	0.492	0.088	0.012	1.517
TRA_P2	8.427	3.971	0.543	0.156	2.112	2.770
BRO_P1	0.348	0.556	0.060	5.647	1.635	14.956
BRO_P2	15.853	24.159	2.678	14.672	20.076	5.705
BRO_P3	8.165	0.250	1.815	0.395	3.060	0.002
EPI_P1	0.003	6.342	0.228	11.792	0.005	2.578
EPI_P2	4.069	12.536	0.394	5.294	24.040	0.241
EPI_P3	2.653	0.053	2.277	1.062	0.121	0.263
ITL_P1	27.438	0.615	0.012	3.570	1.137	0.578
ITL_P2	1.325	4.271	0.251	0.275	27.698	0.450
ITL_P3	2.765	1.312	0.406	6.167	0.098	17.355
ITL_P4	3.063	0.656	0.162	0.096	0.388	0.151
ITL_P5	28.534	3.580	6.791	2.280	3.521	1.817

Modification Indices for THETA-DELTA

	HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
HOS_P6	- -					
HOS_P7	71.567	- -				
DEC_P1	4.992	226.232	- -			
DEC_P2	0.001	38.025	2.647	- -		
DEC_P3	0.724	11.985	36.457	15.312	- -	
EMO_P1	5.203	2.314	1.655	0.672	135.519	- -
EMO_P2	0.675	0.422	3.952	18.823	30.049	55.537
EMO_P3	6.071	5.745	0.923	0.704	0.877	22.573
EMO_P4	0.801	2.443	1.908	3.702	16.871	29.952
NEG_P1	6.827	0.018	0.029	7.451	61.977	132.333
NEG_P2	1.182	4.385	3.459	33.470	60.074	112.788
NEG_P3	2.620	7.794	17.550	1.097	2.145	8.124
NEG_P4	6.681	0.160	8.882	5.778	1.486	0.315
NEG_P5	2.814	1.606	0.450	12.806	0.229	25.009
PLA_P1	2.196	4.221	1.673	1.811	12.483	29.699
PLA_P2	4.484	1.289	3.332	0.328	2.403	6.079
SOB_P1	7.667	1.244	5.216	2.345	9.633	2.124
SOB_P2	5.192	6.518	0.012	24.306	0.247	0.011
SOB_P3	19.871	4.605	4.848	3.641	19.891	0.684
ACH_P1	0.458	1.170	8.126	1.373	2.030	19.790
ACH_P2	2.084	1.784	7.940	0.398	14.644	72.388
ACH_P3	5.611	2.785	9.480	0.554	1.921	0.109
ACH_P4	19.952	0.393	3.449	0.002	22.952	9.395
ACH_P5	0.095	7.527	9.195	7.476	13.918	46.305
ORD_P1	0.025	5.781	0.138	0.059	1.075	16.494
ORD_P2	0.303	7.211	27.266	0.054	6.712	2.892
ORD_P3	0.587	0.108	1.529	0.012	1.526	0.637
ORD_P4	0.001	0.091	1.916	1.570	2.628	15.722
ORD_P5	2.855	4.347	20.765	0.159	5.872	0.103

ORD_P6	0.037	0.157	0.781	0.052	4.555	17.789
TRA_P1	3.218	1.245	14.508	0.265	0.264	4.318
TRA_P2	0.299	8.745	0.000	1.608	3.847	27.858
BRO_P1	12.198	12.001	3.160	1.120	0.084	5.222
BRO_P2	6.647	2.821	1.600	1.156	0.136	1.550
BRO_P3	0.337	2.463	3.216	0.059	0.031	0.738
EPI_P1	2.461	3.837	4.156	1.631	6.387	146.454
EPI_P2	34.033	8.025	8.592	0.260	4.907	31.255
EPI_P3	0.346	0.027	2.298	0.675	0.750	3.287
ITL_P1	16.677	6.474	2.331	3.460	16.568	5.174
ITL_P2	0.707	3.353	14.664	0.805	44.113	9.776
ITL_P3	17.963	6.191	1.077	5.549	1.648	22.831
ITL_P4	3.674	0.098	18.009	0.340	26.698	22.610
ITL_P5	2.402	20.553	9.126	0.019	28.214	14.297

Modification Indices for THETA-DELTA

	EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
EMO_P2	- -					
EMO_P3	56.721	- -				
EMO_P4	5.241	28.534	- -			
NEG_P1	67.530	12.619	111.867	- -		
NEG_P2	27.045	43.972	27.422	100.245	- -	
NEG_P3	3.438	2.429	21.685	8.122	38.094	- -
NEG_P4	9.754	0.052	10.591	8.849	4.587	320.925
NEG_P5	7.625	0.572	0.196	72.492	8.049	64.600
PLA_P1	0.184	0.270	3.020	2.038	0.052	15.229
PLA_P2	29.942	0.252	7.806	0.872	0.380	10.867
SOB_P1	13.623	0.123	17.324	23.039	0.050	7.431
SOB_P2	16.506	2.574	6.780	4.136	0.356	0.531
SOB_P3	1.910	0.211	0.068	1.220	4.021	5.993
ACH_P1	22.225	5.035	0.001	0.034	8.139	9.886
ACH_P2	10.824	0.153	3.541	15.054	1.268	2.550
ACH_P3	10.474	0.214	4.835	1.276	1.493	4.390
ACH_P4	1.624	0.023	7.909	3.073	0.015	35.172
ACH_P5	2.995	10.745	0.260	0.502	2.476	9.428
ORD_P1	1.515	0.074	0.260	0.023	0.410	51.845
ORD_P2	0.006	0.893	1.061	2.362	3.593	1.197
ORD_P3	3.554	2.011	0.938	0.946	0.000	1.737
ORD_P4	7.529	0.708	0.046	5.627	3.183	1.245
ORD_P5	1.474	0.681	1.054	0.001	0.206	2.434
ORD_P6	0.035	0.427	0.427	1.837	1.805	3.515
TRA_P1	0.678	1.213	0.056	0.050	0.009	0.445
TRA_P2	1.268	0.014	8.595	5.951	3.538	3.473
BRO_P1	0.423	3.759	1.392	7.963	0.497	4.784
BRO_P2	0.009	1.900	1.172	0.524	1.433	28.206
BRO_P3	21.144	0.094	0.975	0.748	0.700	1.332
EPI_P1	13.154	12.600	3.192	0.264	3.116	29.118
EPI_P2	3.621	2.868	0.097	17.474	3.437	0.779
EPI_P3	0.408	4.772	0.170	1.566	0.266	0.524
ITL_P1	50.736	25.684	3.320	2.862	2.317	0.631
ITL_P2	0.020	0.203	2.178	0.102	1.670	1.525
ITL_P3	0.459	0.096	0.247	1.311	0.007	12.357
ITL_P4	0.050	4.265	2.506	1.166	5.002	0.257
ITL_P5	15.376	4.616	3.076	22.731	14.741	21.834

Modification Indices for THETA-DELTA

	NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
NEG_P4	- -					
NEG_P5	187.988	- -				
PLA_P1	1.319	11.217	- -			
PLA_P2	3.692	8.145	- -	- -		
SOB_P1	16.845	50.229	18.508	6.746	- -	
SOB_P2	41.427	29.443	0.235	3.723	5.878	- -
SOB_P3	19.378	0.002	4.476	10.465	71.065	56.117
ACH_P1	2.121	0.742	4.625	21.235	8.638	6.522
ACH_P2	8.484	9.053	0.167	1.826	0.005	0.000
ACH_P3	12.572	2.705	10.436	1.792	0.770	3.204
ACH_P4	14.203	19.266	1.940	0.045	1.456	13.942
ACH_P5	4.337	12.903	0.513	15.181	6.206	15.817
ORD_P1	5.555	4.880	0.360	3.212	1.069	0.246
ORD_P2	0.164	1.527	0.158	3.452	1.129	0.044
ORD_P3	1.685	0.644	7.517	0.030	0.537	1.809
ORD_P4	1.248	1.273	13.250	0.016	3.927	0.498

ORD_P5	10.104	0.487	0.026	0.118	0.001	0.881
ORD_P6	10.989	7.324	0.154	0.288	1.781	0.044
TRA_P1	2.067	0.235	0.226	0.063	1.295	3.965
TRA_P2	2.512	0.885	5.877	2.193	0.822	10.108
BRO_P1	22.384	2.000	28.331	26.319	2.575	0.001
BRO_P2	13.186	24.729	1.213	0.320	0.001	19.402
BRO_P3	0.013	1.755	18.615	21.252	1.532	0.864
EPI_P1	2.745	22.932	9.760	2.285	2.000	12.273
EPI_P2	10.724	3.598	12.051	3.536	2.252	1.095
EPI_P3	0.905	1.922	5.059	14.101	2.590	0.125
ITL_P1	0.925	0.304	19.524	7.851	1.806	10.981
ITL_P2	14.083	1.497	25.011	8.861	6.615	19.776
ITL_P3	9.586	0.298	18.725	21.025	4.530	48.581
ITL_P4	2.360	2.349	28.040	5.936	0.008	6.178
ITL_P5	1.053	0.369	52.063	26.785	44.486	31.179

Modification Indices for THETA-DELTA

	SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
SOB_P3	- -					
ACH_P1	16.111	- -				
ACH_P2	0.367	61.072	- -			
ACH_P3	0.463	36.068	47.723	- -		
ACH_P4	10.324	34.289	43.911	13.653	- -	
ACH_P5	34.396	3.316	1.740	0.130	16.093	- -
ORD_P1	0.000	3.527	1.100	6.902	13.684	0.148
ORD_P2	0.610	4.330	0.111	0.076	65.372	14.512
ORD_P3	1.339	0.003	0.744	12.204	10.030	6.541
ORD_P4	1.571	8.616	32.116	25.380	83.087	3.410
ORD_P5	7.784	10.809	37.394	0.242	13.349	0.086
ORD_P6	3.849	1.400	32.983	10.794	1.460	2.553
TRA_P1	0.313	2.955	1.627	4.197	9.737	17.292
TRA_P2	1.595	2.810	3.493	0.472	0.720	0.009
BRO_P1	4.886	1.244	0.472	17.098	3.290	2.627
BRO_P2	17.664	4.153	4.988	0.430	8.815	56.504
BRO_P3	7.043	1.080	7.587	0.525	0.228	0.000
EPI_P1	0.241	36.996	10.711	6.426	22.235	0.575
EPI_P2	5.437	0.057	16.916	24.366	0.115	4.655
EPI_P3	2.570	9.075	0.982	2.991	17.783	1.054
ITL_P1	1.274	10.445	13.672	1.237	46.274	0.755
ITL_P2	21.174	3.991	6.182	5.530	39.982	39.165
ITL_P3	1.712	22.591	0.937	5.431	7.589	4.691
ITL_P4	22.023	4.484	10.409	0.222	10.920	10.403
ITL_P5	3.859	31.829	25.346	22.955	5.690	1.241

Modification Indices for THETA-DELTA

	ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
ORD_P1	- -					
ORD_P2	75.946	- -				
ORD_P3	62.305	4.343	- -			
ORD_P4	96.182	203.932	1.553	- -		
ORD_P5	277.756	89.355	7.098	233.046	- -	
ORD_P6	165.726	3.504	37.292	124.518	505.209	- -
TRA_P1	66.561	19.756	2.117	0.155	0.228	2.540
TRA_P2	0.046	0.592	0.924	0.781	3.527	7.186
BRO_P1	0.168	0.732	0.034	4.733	3.392	1.246
BRO_P2	4.419	0.370	4.865	0.056	13.392	4.045
BRO_P3	0.835	0.362	0.677	1.629	2.685	0.021
EPI_P1	20.257	0.872	0.033	10.069	4.096	9.764
EPI_P2	5.543	0.589	0.047	9.202	7.001	5.654
EPI_P3	4.550	0.000	12.255	0.066	1.383	0.125
ITL_P1	9.365	62.982	1.169	0.557	9.572	9.970
ITL_P2	3.793	18.470	6.067	1.174	10.683	0.367
ITL_P3	19.681	12.116	19.189	0.906	3.219	8.848
ITL_P4	5.114	33.876	6.707	10.475	20.072	2.504
ITL_P5	0.232	0.013	2.676	6.092	0.419	29.716

Modification Indices for THETA-DELTA

	TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
TRA_P1	- -					
TRA_P2	- -	- -				
BRO_P1	1.032	0.108	- -			

BRO_P2	0.922	1.943	63.488	- -		
BRO_P3	6.583	8.986	25.878	15.458	- -	
EPI_P1	6.121	0.635	1.749	22.067	6.784	- -
EPI_P2	11.734	0.794	66.713	0.777	23.456	28.255
EPI_P3	3.870	7.887	49.899	35.175	48.869	4.342
ITL_P1	2.852	3.451	8.640	8.447	11.192	8.405
ITL_P2	0.062	1.780	2.482	50.384	12.845	0.139
ITL_P3	2.649	1.714	17.210	354.392	4.733	53.814
ITL_P4	0.022	0.039	0.785	38.785	5.893	1.271
ITL_P5	2.291	0.051	0.141	1.135	19.516	2.757

Modification Indices for THETA-DELTA

	EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
EPI_P2	- -					
EPI_P3	74.690	- -				
ITL_P1	9.499	0.394	- -			
ITL_P2	37.008	5.535	3.963	- -		
ITL_P3	1.905	2.145	15.001	2.746	- -	
ITL_P4	1.056	0.692	109.997	23.661	0.766	- -
ITL_P5	9.119	15.150	36.678	6.563	48.731	7.094

Modification Indices for THETA-DELTA

	ITL_P5
ITL_P5	- -

Expected Change for THETA-DELTA

	EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
EMP_P1	- -					
EMP_P2	-0.015	- -				
EMP_P3	0.057	-0.027	- -			
FAC_P1	0.006	0.002	0.002	- -		
FAC_P2	0.000	-0.006	-0.007	-0.015	- -	
FAC_P3	-0.007	0.010	-0.004	-0.038	0.116	- -
FAC_P4	0.002	-0.001	0.005	0.013	-0.023	-0.023
FAC_P5	-0.005	0.007	-0.005	0.017	-0.028	-0.042
INT_P1	-0.007	-0.002	-0.015	0.010	0.001	0.017
INT_P2	-0.008	0.010	-0.005	0.002	-0.001	0.009
INT_P3	-0.001	0.011	0.013	0.002	0.003	-0.004
INT_P4	-0.011	0.015	-0.010	0.012	-0.009	-0.011
INT_P5	0.005	0.003	0.005	0.000	-0.004	-0.018
INT_P6	-0.002	0.004	-0.004	-0.010	-0.002	0.005
IPR_P1	-0.003	0.003	-0.001	0.002	0.004	0.004
IPR_P2	-0.004	-0.005	0.002	0.001	0.005	-0.004
IPR_P3	-0.002	-0.003	-0.009	-0.003	0.010	-0.013
IPR_P4	0.004	0.017	0.000	-0.001	-0.023	-0.021
SOC_P1	-0.003	-0.004	-0.020	-0.006	0.022	0.007
SOC_P2	0.018	-0.011	0.020	0.001	-0.009	-0.010
WAR_P1	-0.006	-0.002	-0.001	0.006	-0.014	0.003
WAR_P2	0.001	-0.013	0.004	0.001	0.001	-0.006
WAR_P3	0.021	-0.010	0.027	0.010	-0.015	-0.015
WAR_P4	-0.011	0.005	-0.014	0.004	0.009	0.000
WAR_P5	-0.007	0.006	-0.006	-0.001	-0.003	-0.003
ARR_P1	-0.007	0.005	-0.006	-0.012	0.007	0.018
ARR_P2	0.001	-0.001	0.001	-0.005	-0.006	-0.005
ARR_P3	0.004	-0.015	0.019	-0.003	0.018	0.012
CON_P1	0.025	-0.007	0.005	-0.008	0.010	-0.013
CON_P2	0.000	-0.005	-0.003	-0.001	-0.001	0.006
CON_P3	-0.002	0.004	-0.008	0.005	0.007	-0.002
HOS_P1	0.010	0.001	-0.003	0.001	0.006	-0.006
HOS_P2	0.004	0.016	-0.010	0.007	0.005	0.005
HOS_P3	-0.003	-0.010	0.000	0.004	-0.006	0.000
HOS_P4	-0.018	-0.007	0.005	-0.012	0.010	0.019
HOS_P5	0.004	0.001	-0.001	0.002	0.001	0.003
HOS_P6	-0.004	0.007	0.007	0.004	-0.010	-0.017
HOS_P7	0.006	-0.009	0.010	0.012	-0.009	-0.030
DEC_P1	-0.002	0.009	-0.003	0.008	-0.006	-0.019
DEC_P2	0.007	0.009	-0.013	-0.010	-0.001	0.008
DEC_P3	-0.004	-0.004	0.002	0.002	-0.006	-0.008
EMO_P1	-0.012	0.023	-0.009	-0.007	0.001	0.053
EMO_P2	0.005	-0.006	0.005	-0.004	-0.002	-0.008
EMO_P3	0.002	-0.008	0.007	-0.002	0.003	-0.008

EMO_P4	0.000	0.000	-0.004	-0.006	0.003	0.007
NEG_P1	-0.007	0.000	0.011	-0.001	0.021	0.036
NEG_P2	-0.004	-0.003	0.004	-0.017	0.005	-0.014
NEG_P3	-0.015	0.001	0.003	-0.003	-0.015	0.012
NEG_P4	0.018	0.004	0.028	0.003	-0.003	-0.016
NEG_P5	-0.009	-0.010	-0.017	-0.006	0.022	-0.006
PLA_P1	0.012	0.003	-0.001	0.000	0.022	-0.004
PLA_P2	-0.018	0.006	0.003	-0.012	-0.008	-0.001
SOB_P1	-0.005	-0.001	-0.001	-0.001	0.009	-0.003
SOB_P2	0.007	0.007	-0.001	0.006	-0.009	0.003
SOB_P3	-0.007	0.011	-0.009	-0.005	0.008	0.013
ACH_P1	0.006	-0.003	-0.002	0.021	-0.001	-0.006
ACH_P2	-0.001	0.013	0.001	0.006	0.005	0.015
ACH_P3	-0.005	-0.004	-0.001	-0.007	-0.014	0.001
ACH_P4	0.003	-0.003	-0.001	-0.003	-0.014	0.003
ACH_P5	-0.008	0.010	-0.007	-0.007	0.014	0.017
ORD_P1	-0.007	-0.009	0.003	0.002	0.004	0.011
ORD_P2	0.004	-0.006	0.002	-0.008	-0.005	0.002
ORD_P3	-0.004	0.003	0.001	0.005	0.003	-0.005
ORD_P4	0.005	0.012	-0.004	-0.008	-0.006	0.021
ORD_P5	0.002	-0.002	0.004	0.001	0.001	0.002
ORD_P6	-0.001	-0.004	0.002	-0.003	-0.001	0.000
TRA_P1	0.003	0.004	-0.017	-0.005	0.017	0.022
TRA_P2	-0.009	-0.002	0.018	-0.002	-0.010	-0.008
BRO_P1	0.004	0.000	0.012	0.006	-0.001	-0.011
BRO_P2	-0.005	0.002	-0.005	0.005	0.006	0.013
BRO_P3	-0.009	-0.001	0.004	-0.005	-0.006	0.002
EPI_P1	-0.002	0.011	-0.010	0.005	-0.006	0.012
EPI_P2	0.006	-0.004	0.017	0.007	-0.001	-0.026
EPI_P3	-0.012	0.005	-0.007	-0.002	-0.002	-0.005
ITL_P1	0.011	-0.002	0.001	0.003	-0.015	-0.017
ITL_P2	0.004	0.002	-0.003	-0.003	0.009	-0.009
ITL_P3	-0.006	-0.002	0.001	0.013	0.003	-0.017
ITL_P4	-0.003	-0.002	-0.004	-0.005	0.001	0.000
ITL_P5	0.008	0.004	-0.006	-0.004	0.007	0.020

Expected Change for THETA-DELTA

	FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
FAC_P4	- -					
FAC_P5	0.024	- -				
INT_P1	-0.013	-0.005	- -			
INT_P2	-0.009	0.003	0.036	- -		
INT_P3	0.001	-0.008	-0.021	0.006	- -	
INT_P4	0.016	0.011	0.012	0.007	-0.047	- -
INT_P5	0.005	0.007	-0.029	-0.017	0.027	0.011
INT_P6	0.002	-0.001	0.015	0.009	-0.007	-0.017
IPR_P1	0.002	-0.002	0.003	-0.003	0.002	-0.006
IPR_P2	0.013	-0.006	0.000	-0.013	-0.011	0.023
IPR_P3	0.000	0.013	0.003	0.001	-0.018	-0.001
IPR_P4	0.008	0.012	-0.009	-0.009	-0.006	0.027
SOC_P1	-0.006	-0.006	0.006	0.001	0.000	-0.003
SOC_P2	0.005	0.000	-0.006	-0.002	0.008	-0.003
WAR_P1	-0.003	-0.005	0.014	0.002	0.016	-0.007
WAR_P2	-0.007	-0.009	0.004	-0.002	0.021	-0.011
WAR_P3	0.009	0.004	-0.007	-0.006	0.012	-0.002
WAR_P4	0.003	0.008	-0.006	-0.004	-0.013	0.013
WAR_P5	0.006	0.008	-0.008	-0.003	0.000	-0.003
ARR_P1	-0.007	-0.004	-0.011	-0.006	0.007	-0.008
ARR_P2	0.003	0.008	0.006	0.005	-0.002	0.000
ARR_P3	-0.010	-0.003	0.008	0.000	0.012	-0.025
CON_P1	-0.007	0.002	-0.031	0.000	0.026	-0.037
CON_P2	0.002	-0.009	0.023	0.009	-0.012	-0.004
CON_P3	-0.002	0.006	0.012	0.006	-0.003	0.002
HOS_P1	-0.007	0.002	-0.003	0.009	0.016	-0.024
HOS_P2	0.001	0.003	0.003	0.004	0.012	-0.012
HOS_P3	0.001	-0.004	0.021	0.005	-0.015	0.001
HOS_P4	-0.001	-0.009	0.007	-0.004	-0.020	0.013
HOS_P5	-0.002	-0.004	0.017	0.002	-0.005	-0.004
HOS_P6	-0.002	0.013	-0.011	-0.003	0.005	0.000
HOS_P7	0.014	0.005	-0.057	-0.024	0.028	0.009
DEC_P1	0.008	0.004	-0.032	-0.011	-0.003	0.025
DEC_P2	0.006	-0.003	-0.034	-0.005	-0.001	0.014
DEC_P3	0.001	0.013	-0.013	0.021	-0.004	0.005
EMO_P1	-0.001	-0.023	0.018	-0.005	0.013	-0.010
EMO_P2	-0.006	0.005	-0.005	-0.005	0.002	0.012

EMO_P3	0.001	-0.001	-0.016	-0.004	0.000	0.012
EMO_P4	-0.002	0.006	-0.008	0.001	-0.004	0.000
NEG_P1	-0.009	-0.021	0.010	0.000	0.010	-0.012
NEG_P2	-0.004	0.012	-0.028	-0.011	0.010	0.000
NEG_P3	0.003	-0.006	-0.013	-0.010	-0.005	0.011
NEG_P4	0.009	0.010	-0.017	-0.010	0.018	0.000
NEG_P5	-0.008	0.001	0.027	0.013	-0.010	-0.017
PLA_P1	-0.013	0.014	-0.006	0.006	-0.002	-0.010
PLA_P2	0.014	-0.002	-0.001	-0.012	0.012	-0.001
SOB_P1	-0.004	0.004	0.003	-0.001	-0.005	-0.007
SOB_P2	-0.007	0.005	-0.009	0.013	0.009	-0.002
SOB_P3	-0.002	-0.014	0.002	-0.010	0.004	0.017
ACH_P1	-0.002	-0.012	0.007	0.003	0.006	-0.011
ACH_P2	-0.001	-0.008	-0.002	0.011	0.010	-0.011
ACH_P3	0.001	0.000	-0.001	-0.003	-0.015	0.017
ACH_P4	-0.008	0.008	-0.004	0.011	0.000	-0.004
ACH_P5	0.000	-0.008	-0.014	-0.010	0.013	-0.012
ORD_P1	0.003	-0.009	0.019	-0.005	-0.013	0.009
ORD_P2	-0.006	0.000	0.015	0.012	0.004	-0.017
ORD_P3	-0.004	0.009	-0.001	0.006	-0.010	0.007
ORD_P4	-0.005	-0.014	0.000	0.018	0.011	-0.002
ORD_P5	0.011	0.007	-0.017	-0.016	-0.005	0.006
ORD_P6	0.002	0.002	-0.004	-0.007	-0.007	-0.003
TRA_P1	-0.009	-0.006	0.004	0.008	-0.001	-0.008
TRA_P2	0.012	-0.005	-0.008	-0.015	0.003	0.007
BRO_P1	0.004	-0.001	-0.007	-0.004	0.012	-0.005
BRO_P2	0.004	-0.011	0.009	-0.002	-0.006	0.008
BRO_P3	-0.008	0.003	-0.001	0.000	0.001	0.003
EPI_P1	-0.002	-0.005	0.007	-0.008	-0.003	0.002
EPI_P2	0.001	0.015	-0.008	0.004	0.004	-0.008
EPI_P3	-0.004	0.011	-0.001	0.005	-0.005	0.004
ITL_P1	-0.005	0.004	-0.010	-0.010	0.001	-0.003
ITL_P2	-0.010	0.009	0.010	0.019	-0.005	0.007
ITL_P3	0.008	0.005	0.001	0.007	-0.019	0.014
ITL_P4	-0.002	0.008	0.002	0.001	-0.005	-0.004
ITL_P5	-0.009	0.003	0.002	-0.001	0.002	-0.021

Expected Change for THETA-DELTA

	INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
INT_P5	- -					
INT_P6	-0.001	- -				
IPR_P1	0.000	-0.007	- -			
IPR_P2	-0.006	-0.005	-0.014	- -		
IPR_P3	-0.002	0.012	-0.015	0.031	- -	
IPR_P4	0.018	0.004	-0.017	0.006	0.005	- -
SOC_P1	-0.006	0.001	0.010	-0.004	0.007	-0.007
SOC_P2	0.003	0.001	0.000	-0.006	-0.005	0.006
WAR_P1	-0.003	-0.007	0.003	-0.001	-0.014	-0.003
WAR_P2	-0.004	-0.011	0.005	0.001	-0.005	-0.006
WAR_P3	0.005	-0.004	-0.011	-0.002	-0.005	0.004
WAR_P4	0.019	-0.001	0.006	0.010	0.018	-0.008
WAR_P5	0.004	0.000	-0.005	0.006	0.004	0.003
ARR_P1	0.003	-0.002	0.007	0.014	-0.002	-0.004
ARR_P2	-0.007	0.004	-0.013	0.003	0.015	0.001
ARR_P3	0.003	0.006	-0.002	-0.010	-0.005	-0.013
CON_P1	0.029	0.005	0.006	-0.027	-0.005	-0.003
CON_P2	-0.007	-0.007	-0.006	0.004	0.000	0.003
CON_P3	-0.004	-0.011	-0.001	0.016	0.002	0.000
HOS_P1	0.005	0.006	0.000	-0.021	0.007	-0.007
HOS_P2	-0.006	-0.001	0.006	-0.019	-0.004	0.002
HOS_P3	-0.006	0.006	-0.003	-0.010	0.007	-0.005
HOS_P4	-0.010	0.008	-0.004	0.019	0.005	-0.005
HOS_P5	-0.010	-0.002	0.004	0.003	0.001	-0.005
HOS_P6	0.009	0.008	0.002	-0.007	-0.003	0.011
HOS_P7	0.017	-0.014	0.000	0.021	-0.004	0.014
DEC_P1	0.004	-0.009	0.000	0.016	-0.005	0.017
DEC_P2	0.006	-0.001	0.011	0.003	-0.003	0.002
DEC_P3	0.012	0.014	-0.017	-0.012	-0.001	-0.012
EMO_P1	-0.012	0.000	0.008	-0.003	-0.017	-0.002
EMO_P2	0.008	-0.004	0.002	-0.005	-0.013	0.000
EMO_P3	0.006	-0.002	-0.007	0.022	-0.005	0.012
EMO_P4	-0.002	0.009	-0.010	-0.002	0.009	0.004
NEG_P1	-0.012	-0.003	0.000	-0.012	0.004	-0.014
NEG_P2	0.014	0.003	0.001	0.006	-0.008	0.008
NEG_P3	0.012	-0.002	0.000	0.010	-0.002	0.013

NEG_P4	0.013	0.001	-0.005	-0.016	0.005	0.008
NEG_P5	-0.015	0.012	-0.003	-0.003	0.017	-0.015
PLA_P1	-0.001	-0.002	-0.001	-0.002	0.019	-0.005
PLA_P2	0.005	0.004	0.002	0.000	-0.008	0.000
SOB_P1	-0.003	-0.008	0.025	-0.013	-0.002	-0.003
SOB_P2	0.004	-0.002	0.020	-0.010	-0.003	-0.003
SOB_P3	0.004	-0.005	-0.003	0.005	-0.009	0.003
ACH_P1	-0.005	-0.007	0.013	-0.007	-0.003	0.002
ACH_P2	-0.014	-0.001	0.001	0.006	-0.016	-0.004
ACH_P3	-0.002	0.000	-0.005	0.013	0.006	0.006
ACH_P4	0.004	0.012	-0.008	-0.015	0.001	0.004
ACH_P5	0.009	0.004	0.002	0.003	0.001	0.002
ORD_P1	-0.003	0.002	-0.004	0.028	-0.003	-0.007
ORD_P2	-0.012	0.002	-0.002	-0.020	-0.007	-0.002
ORD_P3	-0.003	0.006	0.001	-0.009	0.015	0.001
ORD_P4	-0.002	0.007	-0.001	-0.021	-0.002	0.003
ORD_P5	0.005	-0.007	0.002	0.008	0.002	0.000
ORD_P6	0.000	0.003	0.001	0.013	0.004	-0.003
TRA_P1	0.004	0.002	-0.003	0.010	-0.016	-0.005
TRA_P2	-0.005	0.010	-0.004	0.008	0.003	0.005
BRO_P1	0.006	-0.001	-0.003	-0.002	-0.005	0.006
BRO_P2	-0.007	-0.010	0.005	0.017	-0.004	-0.008
BRO_P3	0.004	0.005	0.002	-0.010	-0.003	0.008
EPI_P1	-0.005	-0.002	0.010	0.005	0.001	-0.005
EPI_P2	0.014	-0.003	0.000	-0.016	0.007	0.003
EPI_P3	-0.005	0.002	-0.004	-0.006	0.002	0.003
ITL_P1	0.005	0.001	0.002	-0.018	-0.006	0.002
ITL_P2	-0.001	0.008	0.000	-0.008	0.005	-0.003
ITL_P3	-0.005	-0.008	-0.002	0.016	0.010	-0.009
ITL_P4	-0.005	0.008	-0.001	-0.006	0.015	-0.002
ITL_P5	-0.001	0.005	0.004	-0.003	0.000	0.000

Expected Change for THETA-DELTA

	SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
SOC_P1	- -					
SOC_P2	- -	- -				
WAR_P1	-0.002	-0.002	- -			
WAR_P2	0.007	0.010	0.030	- -		
WAR_P3	-0.005	0.010	0.005	0.009	- -	
WAR_P4	0.006	-0.008	-0.009	-0.014	-0.012	- -
WAR_P5	-0.004	-0.008	0.008	-0.007	-0.002	0.000
ARR_P1	0.002	-0.005	0.007	0.000	-0.010	0.011
ARR_P2	0.000	-0.002	-0.002	-0.007	0.002	0.002
ARR_P3	0.002	0.006	0.001	-0.003	0.004	-0.006
CON_P1	-0.012	0.011	-0.001	-0.005	0.002	-0.010
CON_P2	0.002	0.001	-0.005	0.008	0.003	-0.008
CON_P3	0.006	-0.009	0.004	0.006	-0.003	-0.002
HOS_P1	0.000	0.000	0.000	-0.001	0.003	0.004
HOS_P2	-0.003	-0.002	0.001	-0.011	-0.009	0.001
HOS_P3	-0.002	0.001	0.003	0.006	-0.001	-0.002
HOS_P4	0.007	0.003	-0.007	-0.002	-0.012	0.008
HOS_P5	0.007	-0.011	0.005	0.000	-0.002	0.000
HOS_P6	-0.010	0.010	-0.005	-0.002	0.000	-0.001
HOS_P7	-0.007	0.011	-0.004	0.016	0.015	-0.014
DEC_P1	-0.006	-0.001	-0.004	0.001	-0.004	0.003
DEC_P2	0.019	-0.010	0.004	-0.011	-0.006	0.008
DEC_P3	-0.003	0.006	0.001	-0.016	0.010	0.003
EMO_P1	0.001	-0.003	0.013	0.001	-0.009	-0.009
EMO_P2	-0.006	-0.002	0.005	0.007	0.003	0.007
EMO_P3	-0.006	0.009	-0.007	0.009	-0.005	0.002
EMO_P4	0.008	-0.004	-0.008	-0.005	0.003	0.000
NEG_P1	0.000	-0.002	0.009	0.007	-0.013	-0.011
NEG_P2	-0.002	0.000	-0.004	0.009	-0.002	0.013
NEG_P3	-0.007	0.005	0.000	-0.003	0.015	0.008
NEG_P4	-0.007	0.012	-0.004	-0.004	0.002	-0.006
NEG_P5	0.012	-0.010	-0.010	-0.001	-0.005	0.002
PLA_P1	0.000	-0.030	-0.010	-0.012	-0.001	-0.003
PLA_P2	-0.008	0.026	0.002	0.001	-0.005	0.007
SOB_P1	0.002	-0.002	0.003	-0.002	-0.009	0.005
SOB_P2	0.007	0.006	0.003	0.004	-0.004	0.005
SOB_P3	0.007	-0.023	-0.003	0.004	-0.005	0.008
ACH_P1	0.006	-0.002	0.008	0.001	0.003	-0.011
ACH_P2	-0.004	0.007	0.007	0.004	0.004	-0.009
ACH_P3	-0.007	0.003	0.005	0.000	0.003	0.009
ACH_P4	-0.003	0.002	0.000	-0.003	0.004	-0.003

ACH_P5	0.007	-0.009	-0.003	-0.010	-0.015	0.008
ORD_P1	0.003	-0.006	0.002	0.011	-0.003	-0.004
ORD_P2	0.000	0.008	0.007	0.007	0.002	-0.010
ORD_P3	-0.002	-0.001	-0.005	-0.006	0.001	0.008
ORD_P4	0.004	0.002	-0.001	0.005	-0.004	-0.002
ORD_P5	-0.002	-0.005	-0.008	-0.007	-0.002	0.006
ORD_P6	-0.002	0.000	-0.002	-0.002	-0.002	0.001
TRA_P1	0.006	-0.013	0.007	-0.002	-0.012	0.004
TRA_P2	-0.007	0.011	-0.002	0.000	0.000	-0.010
BRO_P1	-0.009	0.012	-0.004	0.007	0.004	-0.009
BRO_P2	-0.002	-0.009	-0.001	0.001	-0.012	0.010
BRO_P3	0.003	0.005	0.003	0.001	-0.003	0.000
EPI_P1	-0.004	-0.003	0.005	0.006	-0.001	-0.002
EPI_P2	-0.003	0.003	-0.008	-0.002	0.000	-0.004
EPI_P3	-0.002	0.005	0.000	-0.004	0.002	0.006
ITL_P1	0.001	0.004	0.005	0.001	0.002	0.001
ITL_P2	0.001	-0.005	-0.003	-0.014	0.003	-0.001
ITL_P3	0.003	-0.015	-0.006	0.000	-0.002	0.010
ITL_P4	0.007	0.001	-0.002	-0.006	0.006	0.003
ITL_P5	0.008	-0.007	0.002	-0.002	-0.005	-0.005

Expected Change for THETA-DELTA

	WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
WAR_P5	- -					
ARR_P1	0.001	- -				
ARR_P2	0.003	0.014	- -			
ARR_P3	-0.009	-0.001	-0.002	- -		
CON_P1	-0.003	0.010	-0.033	0.017	- -	
CON_P2	0.005	-0.005	0.003	-0.009	-0.033	- -
CON_P3	0.003	0.009	-0.001	0.018	0.004	0.024
HOS_P1	0.007	-0.002	-0.007	-0.025	0.072	-0.012
HOS_P2	0.008	0.019	-0.012	-0.027	0.012	-0.008
HOS_P3	0.007	-0.008	0.009	-0.003	-0.037	0.029
HOS_P4	-0.008	0.017	0.026	0.021	-0.034	-0.008
HOS_P5	-0.002	-0.004	0.022	-0.004	-0.027	0.011
HOS_P6	-0.011	-0.015	-0.012	0.011	0.011	-0.019
HOS_P7	0.011	-0.020	-0.027	0.002	0.039	-0.005
DEC_P1	0.005	-0.012	-0.002	-0.019	-0.001	0.007
DEC_P2	-0.001	0.019	-0.013	0.006	0.035	-0.005
DEC_P3	-0.001	0.006	0.010	0.013	0.002	0.004
EMO_P1	0.000	0.019	-0.015	0.001	0.000	-0.007
EMO_P2	-0.004	0.002	-0.003	-0.002	0.007	-0.006
EMO_P3	-0.002	-0.004	-0.004	0.006	0.014	0.000
EMO_P4	0.003	0.000	0.001	0.008	0.008	-0.001
NEG_P1	0.012	-0.007	-0.006	-0.010	-0.023	0.005
NEG_P2	-0.008	0.012	-0.010	0.018	0.039	-0.017
NEG_P3	-0.006	0.001	-0.008	0.011	0.027	-0.014
NEG_P4	-0.004	0.007	0.000	0.012	0.025	-0.019
NEG_P5	0.004	-0.005	-0.005	0.008	-0.014	0.030
PLA_P1	0.009	0.000	0.005	-0.005	0.022	-0.004
PLA_P2	0.004	0.005	-0.004	-0.003	0.048	-0.017
SOB_P1	-0.011	-0.004	0.001	-0.014	-0.010	0.001
SOB_P2	-0.005	0.003	-0.008	0.006	0.018	-0.013
SOB_P3	0.005	0.009	0.002	0.004	-0.023	0.010
ACH_P1	-0.008	-0.008	-0.006	0.007	-0.003	0.006
ACH_P2	-0.009	-0.007	0.005	-0.012	0.002	-0.003
ACH_P3	0.003	0.009	0.001	-0.007	-0.015	0.003
ACH_P4	0.007	-0.006	-0.005	-0.003	0.012	0.001
ACH_P5	0.008	0.029	-0.001	-0.005	0.007	-0.008
ORD_P1	-0.008	0.014	-0.006	0.008	-0.005	0.005
ORD_P2	0.004	-0.006	0.002	-0.004	-0.005	0.012
ORD_P3	0.000	0.003	-0.002	-0.008	0.000	-0.012
ORD_P4	-0.001	-0.005	-0.001	-0.002	-0.005	0.004
ORD_P5	0.009	0.005	-0.008	0.004	-0.006	0.001
ORD_P6	0.005	-0.003	0.000	0.016	-0.001	-0.001
TRA_P1	0.002	0.004	-0.006	0.007	-0.003	-0.005
TRA_P2	0.013	0.000	0.002	-0.005	0.005	0.009
BRO_P1	-0.004	-0.007	-0.009	0.007	0.020	-0.008
BRO_P2	0.014	0.009	-0.005	0.003	-0.056	0.021
BRO_P3	-0.005	0.005	0.004	-0.007	0.009	-0.001
EPI_P1	-0.007	0.002	-0.011	-0.008	-0.002	-0.005
EPI_P2	-0.002	-0.015	-0.003	0.012	0.032	-0.007
EPI_P3	0.004	0.000	0.015	-0.003	0.000	-0.005
ITL_P1	0.000	-0.013	0.001	-0.004	0.007	-0.002
ITL_P2	0.000	0.000	-0.002	0.005	0.022	0.003

ITL_P3	0.010	0.011	0.002	-0.017	-0.023	0.011
ITL_P4	-0.001	-0.010	0.007	-0.003	0.003	-0.004
ITL_P5	-0.002	0.004	0.004	0.005	-0.014	-0.002

Expected Change for THETA-DELTA

	CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
CON_P3	- -					
HOS_P1	0.009	- -				
HOS_P2	0.013	0.038	- -			
HOS_P3	-0.005	-0.013	0.012	- -		
HOS_P4	-0.008	-0.045	-0.038	0.018	- -	
HOS_P5	0.005	0.000	0.012	0.008	0.008	- -
HOS_P6	-0.019	0.023	0.002	-0.004	0.017	-0.014
HOS_P7	0.003	0.028	-0.009	-0.031	-0.042	-0.019
DEC_P1	0.004	-0.001	0.006	-0.009	-0.008	-0.012
DEC_P2	-0.015	-0.001	0.009	-0.023	-0.005	-0.012
DEC_P3	-0.019	-0.009	-0.018	0.000	0.017	0.002
EMO_P1	0.007	0.003	0.015	-0.016	0.006	-0.003
EMO_P2	-0.012	-0.020	-0.007	-0.012	0.013	0.009
EMO_P3	0.007	0.006	-0.007	-0.009	0.002	0.000
EMO_P4	-0.007	-0.007	-0.003	0.000	0.008	0.001
NEG_P1	0.001	0.015	0.025	0.019	-0.009	-0.006
NEG_P2	-0.012	0.002	-0.001	-0.030	-0.008	0.000
NEG_P3	-0.020	-0.013	-0.040	-0.009	0.013	-0.018
NEG_P4	-0.008	-0.001	-0.017	-0.011	-0.004	-0.014
NEG_P5	0.018	0.011	-0.002	0.032	0.020	0.005
PLA_P1	0.002	0.007	0.002	-0.002	-0.014	0.013
PLA_P2	-0.019	0.001	0.001	-0.006	0.003	-0.004
SOB_P1	0.003	0.026	0.010	0.006	-0.016	0.004
SOB_P2	-0.006	0.005	0.001	-0.007	-0.013	-0.012
SOB_P3	0.016	-0.021	0.005	0.000	0.012	0.010
ACH_P1	0.009	0.006	-0.003	-0.001	-0.006	0.003
ACH_P2	0.008	0.008	0.008	-0.005	-0.012	0.000
ACH_P3	-0.005	-0.012	0.007	0.001	0.008	0.004
ACH_P4	-0.009	0.007	-0.016	0.007	-0.008	-0.010
ACH_P5	-0.003	0.005	0.021	-0.008	0.007	-0.005
ORD_P1	-0.006	-0.013	-0.026	0.000	0.024	-0.017
ORD_P2	0.000	0.007	0.003	0.001	-0.010	0.006
ORD_P3	0.008	0.016	0.019	0.003	-0.006	0.009
ORD_P4	0.004	0.004	0.005	0.005	0.000	-0.003
ORD_P5	-0.006	-0.011	-0.007	0.000	0.003	-0.004
ORD_P6	0.000	-0.009	-0.007	0.003	0.011	-0.001
TRA_P1	0.006	-0.002	0.004	0.001	-0.001	0.006
TRA_P2	-0.013	-0.010	0.004	-0.002	0.007	-0.007
BRO_P1	-0.002	0.003	0.001	-0.008	-0.005	-0.013
BRO_P2	0.015	-0.023	0.008	0.014	0.019	0.008
BRO_P3	-0.010	-0.002	-0.006	-0.002	0.007	0.000
EPI_P1	0.000	0.011	0.002	-0.011	0.000	-0.005
EPI_P2	-0.006	0.013	0.002	-0.007	-0.017	-0.001
EPI_P3	0.004	-0.001	-0.005	-0.003	0.001	-0.001
ITL_P1	-0.018	0.003	0.000	-0.006	-0.004	0.002
ITL_P2	-0.004	0.008	-0.002	0.002	-0.019	-0.002
ITL_P3	0.006	-0.005	-0.003	0.009	0.001	0.014
ITL_P4	-0.006	0.003	-0.002	0.001	-0.002	-0.001
ITL_P5	0.017	0.007	0.010	0.005	-0.007	0.004

Expected Change for THETA-DELTA

	HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
HOS_P6	- -					
HOS_P7	0.050	- -				
DEC_P1	0.010	0.085	- -			
DEC_P2	0.000	0.041	0.009	- -		
DEC_P3	-0.004	-0.022	-0.053	0.025	- -	
EMO_P1	0.011	0.010	0.006	-0.005	-0.063	- -
EMO_P2	0.004	0.004	-0.009	0.023	0.027	-0.039
EMO_P3	0.011	0.013	-0.004	0.004	-0.005	-0.025
EMO_P4	-0.004	-0.008	-0.005	0.009	0.018	-0.026
NEG_P1	0.016	0.001	0.001	-0.019	-0.052	0.076
NEG_P2	0.006	0.015	0.010	0.037	0.047	-0.065
NEG_P3	0.010	-0.022	-0.025	0.007	0.010	0.019
NEG_P4	0.014	-0.003	-0.016	0.015	0.007	0.003
NEG_P5	0.009	0.009	0.003	-0.022	-0.003	-0.030
PLA_P1	-0.008	-0.014	0.007	-0.008	0.021	-0.033

PLA_P2	0.009	0.006	-0.008	0.003	-0.007	0.011
SOB_P1	0.013	-0.007	0.010	-0.008	-0.016	0.008
SOB_P2	0.009	0.013	0.000	0.022	-0.002	0.000
SOB_P3	-0.021	-0.013	0.010	0.010	-0.023	0.004
ACH_P1	-0.003	-0.005	-0.011	-0.005	-0.006	0.019
ACH_P2	-0.006	0.006	0.010	-0.003	-0.016	0.035
ACH_P3	-0.010	-0.009	0.012	0.003	-0.006	0.001
ACH_P4	0.015	-0.003	-0.006	0.000	0.018	-0.011
ACH_P5	0.001	0.013	0.011	0.012	-0.015	0.028
ORD_P1	-0.001	-0.013	0.002	-0.001	-0.005	0.019
ORD_P2	-0.002	-0.012	-0.017	0.001	0.010	-0.006
ORD_P3	-0.003	0.002	0.004	0.000	-0.005	-0.003
ORD_P4	0.000	-0.002	-0.005	0.006	-0.007	0.018
ORD_P5	0.007	0.011	0.018	-0.002	-0.011	-0.001
ORD_P6	-0.001	-0.002	0.003	-0.001	0.008	-0.015
TRA_P1	-0.010	-0.008	0.020	0.003	-0.003	0.013
TRA_P2	0.003	0.018	0.000	-0.007	-0.011	0.028
BRO_P1	0.014	0.018	0.007	-0.005	-0.001	0.010
BRO_P2	-0.011	-0.009	-0.005	-0.005	-0.002	-0.006
BRO_P3	-0.002	-0.008	0.007	0.001	-0.001	0.004
EPI_P1	0.006	0.010	0.008	-0.006	-0.011	0.051
EPI_P2	0.020	0.013	-0.010	-0.002	0.008	-0.021
EPI_P3	-0.002	-0.001	0.005	-0.003	0.003	-0.006
ITL_P1	0.016	0.012	-0.006	0.008	0.017	-0.009
ITL_P2	0.003	-0.009	-0.013	0.004	0.026	-0.012
ITL_P3	-0.018	-0.013	0.004	-0.011	0.006	-0.022
ITL_P4	-0.007	-0.001	-0.015	0.002	0.021	-0.019
ITL_P5	-0.006	-0.021	-0.011	0.001	-0.021	0.015

Expected Change for THETA-DELTA

	EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
EMO_P2	- -					
EMO_P3	0.037	- -				
EMO_P4	0.010	0.025	- -			
NEG_P1	-0.050	-0.021	-0.056	- -		
NEG_P2	0.029	0.036	0.026	-0.080	- -	
NEG_P3	-0.011	-0.009	0.025	-0.025	0.051	- -
NEG_P4	0.017	-0.001	0.016	0.023	0.016	0.144
NEG_P5	-0.015	0.004	-0.002	0.066	-0.020	-0.064
PLA_P1	-0.002	0.003	-0.008	-0.010	0.002	-0.029
PLA_P2	0.023	0.002	-0.010	-0.005	0.003	0.018
SOB_P1	-0.017	-0.002	-0.017	0.030	-0.001	-0.017
SOB_P2	0.016	-0.006	0.009	-0.011	-0.003	0.004
SOB_P3	0.006	0.002	-0.001	0.007	0.012	-0.016
ACH_P1	-0.018	-0.008	0.000	-0.001	-0.014	0.016
ACH_P2	-0.012	-0.001	-0.006	0.019	-0.005	-0.008
ACH_P3	0.013	-0.002	-0.008	-0.006	0.006	0.012
ACH_P4	-0.004	0.001	0.008	0.008	-0.001	0.027
ACH_P5	-0.006	-0.012	0.002	-0.003	0.007	-0.015
ORD_P1	0.005	-0.001	-0.002	0.001	-0.003	0.041
ORD_P2	0.000	-0.003	0.003	0.007	-0.008	-0.005
ORD_P3	-0.007	0.005	-0.003	-0.005	0.000	-0.007
ORD_P4	-0.011	-0.003	0.001	0.013	-0.009	-0.006
ORD_P5	0.005	0.003	0.004	0.000	-0.002	0.009
ORD_P6	-0.001	0.002	0.002	-0.006	-0.005	-0.008
TRA_P1	-0.005	-0.006	0.001	0.002	-0.001	-0.005
TRA_P2	-0.005	-0.001	-0.013	0.016	-0.011	-0.012
BRO_P1	-0.003	-0.008	0.004	0.015	-0.004	0.012
BRO_P2	0.000	-0.006	-0.004	0.004	-0.006	-0.031
BRO_P3	0.017	-0.001	-0.003	-0.004	-0.004	0.006
EPI_P1	-0.014	-0.013	-0.006	0.003	-0.008	0.028
EPI_P2	0.007	0.006	-0.001	-0.019	0.008	-0.004
EPI_P3	-0.002	0.006	0.001	-0.005	0.002	0.003
ITL_P1	0.027	0.019	0.006	0.008	0.007	-0.004
ITL_P2	0.001	0.002	0.005	-0.002	0.006	0.006
ITL_P3	-0.003	-0.001	-0.002	-0.006	0.000	-0.020
ITL_P4	0.001	-0.007	0.005	-0.005	0.010	-0.003
ITL_P5	-0.014	-0.008	0.006	0.023	-0.017	-0.023

Expected Change for THETA-DELTA

	NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
NEG_P4	- -					
NEG_P5	-0.096	- -				

PLA_P1	-0.008	0.022	- -			
PLA_P2	0.010	-0.014	- -	- -		
SOB_P1	-0.024	0.039	0.025	-0.012	- -	
SOB_P2	0.030	-0.025	-0.002	-0.007	-0.014	- -
SOB_P3	-0.025	0.000	-0.012	0.015	0.063	-0.057
ACH_P1	0.007	0.004	0.010	-0.016	0.012	-0.008
ACH_P2	-0.013	-0.013	-0.002	0.005	0.000	0.000
ACH_P3	-0.018	-0.008	-0.016	0.005	0.004	-0.006
ACH_P4	0.016	-0.018	-0.006	-0.001	-0.004	0.011
ACH_P5	-0.009	0.016	-0.003	0.013	0.010	-0.013
ORD_P1	0.012	-0.011	-0.003	0.007	-0.005	0.002
ORD_P2	0.002	0.005	0.002	-0.006	-0.004	0.001
ORD_P3	0.006	0.004	0.013	-0.001	0.003	-0.004
ORD_P4	-0.006	-0.005	-0.018	0.000	0.008	0.002
ORD_P5	0.016	-0.003	-0.001	0.001	0.000	-0.003
ORD_P6	-0.013	0.010	0.002	0.002	-0.005	-0.001
TRA_P1	0.010	0.003	0.003	0.001	0.007	0.010
TRA_P2	0.009	-0.005	-0.014	0.007	-0.005	-0.013
BRO_P1	0.024	-0.007	0.026	-0.020	0.007	0.000
BRO_P2	-0.019	0.025	-0.006	0.002	0.000	-0.016
BRO_P3	0.001	-0.006	-0.020	0.017	-0.005	-0.003
EPI_P1	0.008	-0.022	-0.015	-0.005	0.006	0.012
EPI_P2	0.014	0.008	0.014	-0.006	0.005	0.003
EPI_P3	-0.003	-0.005	-0.008	0.011	-0.005	0.001
ITL_P1	0.004	-0.002	-0.020	0.010	-0.005	0.011
ITL_P2	0.017	-0.005	0.022	-0.010	-0.010	0.014
ITL_P3	-0.016	0.003	0.022	-0.018	-0.009	-0.025
ITL_P4	0.007	0.007	0.024	-0.008	0.000	0.008
ITL_P5	0.005	0.003	0.032	-0.017	0.025	0.017

Expected Change for THETA-DELTA

	SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
SOB_P3	- -					
ACH_P1	-0.016	- -				
ACH_P2	-0.002	0.028	- -			
ACH_P3	0.003	-0.022	0.026	- -		
ACH_P4	-0.011	-0.018	-0.020	0.012	- -	
ACH_P5	0.022	0.006	0.005	-0.001	-0.012	- -
ORD_P1	0.000	-0.007	-0.004	-0.010	-0.012	-0.001
ORD_P2	-0.003	0.006	-0.001	0.001	0.021	-0.011
ORD_P3	-0.005	0.000	0.003	0.012	0.009	0.008
ORD_P4	-0.005	0.010	0.019	0.018	0.028	0.006
ORD_P5	0.012	-0.011	-0.021	-0.002	-0.011	-0.001
ORD_P6	0.007	-0.003	-0.016	-0.010	-0.003	-0.004
TRA_P1	0.003	0.008	0.006	-0.010	-0.013	0.019
TRA_P2	0.006	-0.007	-0.008	0.003	0.003	0.000
BRO_P1	-0.009	0.004	0.002	-0.015	-0.006	0.005
BRO_P2	0.019	0.007	-0.008	-0.003	-0.010	0.027
BRO_P3	0.010	-0.003	-0.009	0.002	0.001	0.000
EPI_P1	-0.002	0.020	0.011	0.009	0.014	-0.002
EPI_P2	-0.008	-0.001	-0.012	-0.015	-0.001	-0.006
EPI_P3	-0.005	-0.008	-0.002	0.005	0.010	-0.003
ITL_P1	0.004	-0.010	-0.012	0.004	0.019	-0.003
ITL_P2	-0.017	0.006	-0.008	-0.008	0.017	-0.018
ITL_P3	0.006	0.017	-0.003	0.009	-0.009	0.007
ITL_P4	-0.018	-0.007	-0.010	-0.002	0.009	-0.010
ITL_P5	-0.007	0.017	0.015	-0.016	-0.007	0.003

Expected Change for THETA-DELTA

	ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
ORD_P1	- -					
ORD_P2	-0.030	- -				
ORD_P3	-0.029	0.007	- -			
ORD_P4	-0.039	0.049	0.004	- -		
ORD_P5	0.067	-0.033	-0.010	-0.060	- -	
ORD_P6	0.043	-0.006	-0.019	-0.038	0.077	- -
TRA_P1	0.043	-0.019	-0.007	-0.002	0.002	0.006
TRA_P2	0.001	-0.003	0.004	-0.004	0.008	-0.009
BRO_P1	0.002	-0.003	0.001	-0.008	0.007	-0.003
BRO_P2	-0.008	-0.002	-0.008	0.001	0.014	0.006
BRO_P3	0.003	-0.002	-0.003	-0.004	0.006	0.000
EPI_P1	0.016	-0.003	-0.001	0.011	-0.007	-0.009
EPI_P2	-0.008	-0.002	-0.001	-0.009	0.008	0.006

EPI_P3	-0.006	0.000	0.009	-0.001	-0.003	0.001
ITL_P1	-0.011	0.023	-0.003	-0.003	-0.011	-0.009
ITL_P2	-0.007	0.012	0.007	-0.004	-0.011	-0.002
ITL_P3	-0.017	-0.011	0.015	-0.004	0.007	-0.009
ITL_P4	-0.008	0.017	0.008	-0.011	-0.015	0.004
ITL_P5	0.002	0.000	-0.005	0.008	-0.002	0.014

Expected Change for THETA-DELTA

	TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
TRA_P1	- -					
TRA_P2	- -	- -				
BRO_P1	-0.005	0.001	- -			
BRO_P2	0.005	-0.007	0.042	- -		
BRO_P3	-0.012	0.012	-0.023	-0.028	- -	
EPI_P1	0.012	0.003	0.005	-0.018	-0.009	- -
EPI_P2	-0.014	-0.003	0.026	-0.003	0.014	-0.018
EPI_P3	-0.007	0.010	-0.020	-0.019	0.019	0.007
ITL_P1	-0.008	0.008	-0.010	-0.011	0.011	0.009
ITL_P2	-0.001	-0.005	-0.005	-0.025	0.011	0.001
ITL_P3	-0.008	0.006	0.016	0.076	-0.008	-0.026
ITL_P4	-0.001	-0.001	-0.003	-0.022	-0.008	-0.004
ITL_P5	0.007	-0.001	-0.001	-0.004	-0.014	0.005

Expected Change for THETA-DELTA

	EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
EPI_P2	- -					
EPI_P3	0.097	- -				
ITL_P1	0.009	0.002	- -			
ITL_P2	0.017	0.006	0.006	- -		
ITL_P3	-0.004	0.004	-0.014	0.006	- -	
ITL_P4	-0.003	0.002	0.034	0.015	-0.003	- -
ITL_P5	-0.008	-0.010	-0.019	-0.008	-0.025	0.008

Expected Change for THETA-DELTA

	ITL_P5
ITL_P5	- -

Completely Standardized Expected Change for THETA-DELTA

	EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
EMP_P1	- -					
EMP_P2	-0.048	- -				
EMP_P3	0.154	-0.091	- -			
FAC_P1	0.016	0.007	0.005	- -		
FAC_P2	0.000	-0.017	-0.016	-0.031	- -	
FAC_P3	-0.016	0.028	-0.010	-0.081	0.224	- -
FAC_P4	0.005	-0.003	0.013	0.032	-0.050	-0.048
FAC_P5	-0.013	0.022	-0.014	0.045	-0.066	-0.098
INT_P1	-0.020	-0.008	-0.041	0.025	0.001	0.038
INT_P2	-0.027	0.040	-0.015	0.007	-0.004	0.025
INT_P3	-0.002	0.039	0.038	0.006	0.007	-0.010
INT_P4	-0.028	0.048	-0.027	0.029	-0.021	-0.025
INT_P5	0.016	0.010	0.018	-0.001	-0.012	-0.051
INT_P6	-0.006	0.016	-0.015	-0.032	-0.006	0.015
IPR_P1	-0.009	0.009	-0.003	0.005	0.010	0.010
IPR_P2	-0.009	-0.016	0.004	0.003	0.010	-0.009
IPR_P3	-0.007	-0.013	-0.028	-0.009	0.027	-0.033
IPR_P4	0.013	0.067	-0.001	-0.002	-0.064	-0.056
SOC_P1	-0.009	-0.014	-0.054	-0.016	0.051	0.016
SOC_P2	0.050	-0.037	0.055	0.003	-0.022	-0.023
WAR_P1	-0.017	-0.006	-0.004	0.016	-0.038	0.007
WAR_P2	0.003	-0.045	0.011	0.002	0.003	-0.014
WAR_P3	0.065	-0.039	0.086	0.028	-0.040	-0.038
WAR_P4	-0.034	0.018	-0.044	0.011	0.023	0.001
WAR_P5	-0.022	0.022	-0.018	-0.004	-0.008	-0.008
ARR_P1	-0.014	0.012	-0.013	-0.023	0.013	0.032
ARR_P2	0.003	-0.002	0.001	-0.009	-0.012	-0.009
ARR_P3	0.008	-0.041	0.043	-0.007	0.034	0.022
CON_P1	0.047	-0.017	0.010	-0.014	0.016	-0.021
CON_P2	0.001	-0.017	-0.007	-0.002	-0.002	0.013

CON_P3	-0.006	0.013	-0.021	0.011	0.016	-0.004
HOS_P1	0.021	0.002	-0.008	0.002	0.011	-0.011
HOS_P2	0.009	0.046	-0.024	0.016	0.009	0.010
HOS_P3	-0.007	-0.031	0.000	0.011	-0.014	0.000
HOS_P4	-0.043	-0.021	0.013	-0.028	0.022	0.039
HOS_P5	0.011	0.002	-0.004	0.006	0.003	0.006
HOS_P6	-0.009	0.022	0.018	0.008	-0.020	-0.036
HOS_P7	0.011	-0.022	0.020	0.021	-0.015	-0.050
DEC_P1	-0.004	0.025	-0.007	0.018	-0.011	-0.038
DEC_P2	0.015	0.025	-0.030	-0.021	-0.003	0.015
DEC_P3	-0.007	-0.010	0.004	0.004	-0.010	-0.015
EMO_P1	-0.028	0.063	-0.021	-0.014	0.002	0.102
EMO_P2	0.011	-0.018	0.012	-0.009	-0.003	-0.016
EMO_P3	0.004	-0.022	0.017	-0.004	0.005	-0.016
EMO_P4	0.000	0.000	-0.011	-0.014	0.006	0.015
NEG_P1	-0.013	0.001	0.020	-0.002	0.032	0.055
NEG_P2	-0.008	-0.007	0.007	-0.031	0.009	-0.023
NEG_P3	-0.026	0.002	0.004	-0.005	-0.022	0.017
NEG_P4	0.036	0.009	0.057	0.005	-0.005	-0.027
NEG_P5	-0.018	-0.025	-0.034	-0.011	0.038	-0.009
PLA_P1	0.023	0.008	-0.003	0.001	0.038	-0.007
PLA_P2	-0.040	0.018	0.008	-0.026	-0.016	-0.002
SOB_P1	-0.010	-0.001	-0.003	-0.003	0.015	-0.005
SOB_P2	0.015	0.019	-0.003	0.014	-0.017	0.006
SOB_P3	-0.013	0.025	-0.018	-0.009	0.013	0.020
ACH_P1	0.017	-0.011	-0.004	0.052	-0.001	-0.014
ACH_P2	-0.002	0.039	0.003	0.015	0.012	0.031
ACH_P3	-0.012	-0.011	-0.002	-0.016	-0.028	0.002
ACH_P4	0.010	-0.010	-0.003	-0.009	-0.036	0.007
ACH_P5	-0.019	0.030	-0.018	-0.016	0.031	0.035
ORD_P1	-0.017	-0.027	0.008	0.004	0.008	0.023
ORD_P2	0.010	-0.020	0.005	-0.022	-0.011	0.005
ORD_P3	-0.012	0.009	0.002	0.013	0.007	-0.012
ORD_P4	0.013	0.035	-0.010	-0.019	-0.013	0.043
ORD_P5	0.005	-0.006	0.009	0.003	0.002	0.003
ORD_P6	-0.002	-0.012	0.004	-0.007	-0.002	0.001
TRA_P1	0.006	0.008	-0.031	-0.008	0.026	0.032
TRA_P2	-0.017	-0.004	0.035	-0.003	-0.016	-0.012
BRO_P1	0.009	0.001	0.033	0.014	-0.001	-0.025
BRO_P2	-0.011	0.006	-0.011	0.010	0.012	0.025
BRO_P3	-0.024	-0.004	0.010	-0.013	-0.013	0.004
EPI_P1	-0.005	0.039	-0.030	0.014	-0.015	0.031
EPI_P2	0.018	-0.014	0.054	0.021	-0.003	-0.066
EPI_P3	-0.038	0.018	-0.024	-0.005	-0.005	-0.013
ITL_P1	0.031	-0.008	0.002	0.007	-0.036	-0.041
ITL_P2	0.013	0.009	-0.011	-0.009	0.024	-0.024
ITL_P3	-0.014	-0.005	0.003	0.029	0.007	-0.036
ITL_P4	-0.008	-0.008	-0.013	-0.014	0.002	-0.001
ITL_P5	0.022	0.013	-0.019	-0.011	0.016	0.048

Completely Standardized Expected Change for THETA-DELTA

	FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
FAC_P4	- -					
FAC_P5	0.064	- -				
INT_P1	-0.034	-0.015	- -			
INT_P2	-0.026	0.010	0.117	- -		
INT_P3	0.003	-0.025	-0.060	0.023	- -	
INT_P4	0.040	0.031	0.032	0.021	-0.135	- -
INT_P5	0.016	0.024	-0.097	-0.068	0.098	0.036
INT_P6	0.008	-0.005	0.053	0.038	-0.027	-0.057
IPR_P1	0.006	-0.007	0.010	-0.012	0.007	-0.017
IPR_P2	0.031	-0.016	0.000	-0.039	-0.029	0.057
IPR_P3	0.001	0.041	0.008	0.005	-0.059	-0.004
IPR_P4	0.024	0.041	-0.029	-0.036	-0.020	0.086
SOC_P1	-0.016	-0.015	0.016	0.004	0.000	-0.007
SOC_P2	0.014	0.001	-0.016	-0.007	0.023	-0.009
WAR_P1	-0.008	-0.014	0.044	0.009	0.052	-0.022
WAR_P2	-0.018	-0.027	0.011	-0.005	0.065	-0.030
WAR_P3	0.025	0.014	-0.020	-0.024	0.041	-0.006
WAR_P4	0.010	0.026	-0.020	-0.013	-0.043	0.039
WAR_P5	0.017	0.026	-0.025	-0.009	0.002	-0.009
ARR_P1	-0.013	-0.009	-0.022	-0.016	0.017	-0.018
ARR_P2	0.006	0.018	0.014	0.013	-0.006	0.000
ARR_P3	-0.020	-0.008	0.018	0.000	0.029	-0.054
CON_P1	-0.013	0.004	-0.060	0.000	0.054	-0.071

CON_P2	0.005	-0.024	0.062	0.029	-0.035	-0.009
CON_P3	-0.006	0.015	0.031	0.018	-0.007	0.006
HOS_P1	-0.015	0.003	-0.006	0.023	0.037	-0.051
HOS_P2	0.003	0.008	0.007	0.010	0.029	-0.028
HOS_P3	0.004	-0.011	0.057	0.017	-0.044	0.002
HOS_P4	-0.002	-0.022	0.017	-0.013	-0.053	0.032
HOS_P5	-0.005	-0.011	0.044	0.007	-0.014	-0.010
HOS_P6	-0.006	0.032	-0.028	-0.008	0.013	-0.001
HOS_P7	0.026	0.011	-0.112	-0.057	0.061	0.017
DEC_P1	0.017	0.009	-0.077	-0.031	-0.009	0.059
DEC_P2	0.013	-0.008	-0.078	-0.015	-0.003	0.032
DEC_P3	0.001	0.029	-0.028	0.053	-0.010	0.010
EMO_P1	-0.002	-0.054	0.042	-0.015	0.031	-0.023
EMO_P2	-0.013	0.013	-0.012	-0.014	0.005	0.028
EMO_P3	0.002	-0.002	-0.039	-0.010	0.000	0.028
EMO_P4	-0.005	0.016	-0.020	0.004	-0.011	-0.001
NEG_P1	-0.015	-0.040	0.019	-0.001	0.019	-0.021
NEG_P2	-0.007	0.024	-0.054	-0.025	0.021	0.000
NEG_P3	0.005	-0.010	-0.023	-0.021	-0.010	0.020
NEG_P4	0.018	0.020	-0.033	-0.023	0.039	0.001
NEG_P5	-0.015	0.002	0.056	0.031	-0.022	-0.033
PLA_P1	-0.025	0.029	-0.011	0.015	-0.004	-0.019
PLA_P2	0.030	-0.006	-0.002	-0.035	0.031	-0.002
SOB_P1	-0.007	0.007	0.006	-0.001	-0.010	-0.014
SOB_P2	-0.015	0.011	-0.020	0.038	0.022	-0.006
SOB_P3	-0.003	-0.027	0.003	-0.023	0.007	0.032
ACH_P1	-0.006	-0.034	0.019	0.010	0.019	-0.029
ACH_P2	-0.001	-0.022	-0.005	0.033	0.027	-0.028
ACH_P3	0.002	-0.001	-0.003	-0.008	-0.039	0.039
ACH_P4	-0.023	0.025	-0.013	0.038	-0.001	-0.011
ACH_P5	-0.001	-0.021	-0.037	-0.032	0.037	-0.029
ORD_P1	0.008	-0.023	0.049	-0.016	-0.034	0.022
ORD_P2	-0.016	0.001	0.040	0.041	0.013	-0.046
ORD_P3	-0.009	0.024	-0.002	0.020	-0.030	0.019
ORD_P4	-0.012	-0.036	0.000	0.054	0.029	-0.005
ORD_P5	0.026	0.019	-0.041	-0.048	-0.014	0.013
ORD_P6	0.005	0.006	-0.010	-0.021	-0.021	-0.008
TRA_P1	-0.014	-0.011	0.007	0.018	-0.001	-0.014
TRA_P2	0.022	-0.010	-0.015	-0.034	0.006	0.013
BRO_P1	0.011	-0.002	-0.019	-0.014	0.034	-0.014
BRO_P2	0.009	-0.026	0.021	-0.006	-0.014	0.017
BRO_P3	-0.020	0.008	-0.002	0.000	0.004	0.009
EPI_P1	-0.006	-0.016	0.021	-0.028	-0.008	0.007
EPI_P2	0.003	0.048	-0.024	0.014	0.013	-0.025
EPI_P3	-0.012	0.037	-0.004	0.020	-0.017	0.013
ITL_P1	-0.013	0.011	-0.030	-0.035	0.004	-0.010
ITL_P2	-0.030	0.028	0.031	0.070	-0.016	0.021
ITL_P3	0.020	0.012	0.003	0.020	-0.051	0.034
ITL_P4	-0.004	0.024	0.004	0.003	-0.016	-0.011
ITL_P5	-0.024	0.009	0.006	-0.005	0.006	-0.060

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	INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
INT_P5	- -					
INT_P6	-0.006	- -				
IPR_P1	-0.001	-0.024	- -			
IPR_P2	-0.018	-0.015	-0.036	- -		
IPR_P3	-0.006	0.046	-0.047	0.086	- -	
IPR_P4	0.069	0.014	-0.058	0.017	0.019	- -
SOC_P1	-0.020	0.003	0.027	-0.009	0.020	-0.024
SOC_P2	0.009	0.003	-0.001	-0.014	-0.015	0.019
WAR_P1	-0.012	-0.026	0.011	-0.004	-0.048	-0.010
WAR_P2	-0.014	-0.041	0.016	0.003	-0.016	-0.020
WAR_P3	0.020	-0.016	-0.037	-0.006	-0.016	0.016
WAR_P4	0.072	-0.003	0.018	0.029	0.065	-0.030
WAR_P5	0.017	-0.001	-0.017	0.017	0.015	0.011
ARR_P1	0.008	-0.006	0.016	0.027	-0.004	-0.010
ARR_P2	-0.020	0.012	-0.031	0.006	0.037	0.002
ARR_P3	0.009	0.016	-0.004	-0.021	-0.012	-0.033
CON_P1	0.068	0.011	0.012	-0.048	-0.011	-0.006
CON_P2	-0.024	-0.023	-0.017	0.009	-0.001	0.010
CON_P3	-0.011	-0.038	-0.002	0.038	0.005	0.001
HOS_P1	0.012	0.017	0.000	-0.041	0.016	-0.019
HOS_P2	-0.017	-0.003	0.015	-0.041	-0.011	0.006
HOS_P3	-0.021	0.019	-0.008	-0.024	0.022	-0.017

HOS_P4	-0.031	0.027	-0.011	0.043	0.014	-0.015
HOS_P5	-0.031	-0.008	0.010	0.007	0.004	-0.016
HOS_P6	0.028	0.024	0.005	-0.016	-0.008	0.033
HOS_P7	0.041	-0.036	0.001	0.038	-0.009	0.034
DEC_P1	0.012	-0.027	0.000	0.036	-0.013	0.049
DEC_P2	0.016	-0.004	0.027	0.007	-0.007	0.005
DEC_P3	0.032	0.038	-0.038	-0.023	-0.002	-0.030
EMO_P1	-0.033	0.000	0.020	-0.007	-0.044	-0.004
EMO_P2	0.024	-0.014	0.004	-0.011	-0.035	0.000
EMO_P3	0.019	-0.005	-0.018	0.049	-0.014	0.034
EMO_P4	-0.006	0.030	-0.028	-0.005	0.026	0.011
NEG_P1	-0.027	-0.007	0.000	-0.020	0.008	-0.031
NEG_P2	0.034	0.008	0.003	0.010	-0.018	0.018
NEG_P3	0.026	-0.005	0.000	0.017	-0.005	0.027
NEG_P4	0.032	0.002	-0.011	-0.030	0.011	0.019
NEG_P5	-0.037	0.032	-0.007	-0.005	0.040	-0.035
PLA_P1	-0.002	-0.004	-0.001	-0.004	0.042	-0.013
PLA_P2	0.015	0.011	0.005	0.000	-0.022	0.001
SOB_P1	-0.007	-0.019	0.051	-0.023	-0.005	-0.007
SOB_P2	0.013	-0.007	0.049	-0.022	-0.008	-0.008
SOB_P3	0.010	-0.012	-0.007	0.009	-0.019	0.006
ACH_P1	-0.017	-0.022	0.036	-0.017	-0.009	0.007
ACH_P2	-0.044	-0.003	0.002	0.013	-0.046	-0.012
ACH_P3	-0.005	0.000	-0.013	0.029	0.018	0.018
ACH_P4	0.014	0.045	-0.026	-0.042	0.003	0.014
ACH_P5	0.026	0.013	0.006	0.007	0.003	0.006
ORD_P1	-0.008	0.008	-0.011	0.065	-0.007	-0.020
ORD_P2	-0.041	0.007	-0.005	-0.052	-0.020	-0.006
ORD_P3	-0.011	0.021	0.004	-0.022	0.047	0.003
ORD_P4	-0.006	0.021	-0.002	-0.047	-0.006	0.007
ORD_P5	0.016	-0.022	0.006	0.017	0.005	-0.001
ORD_P6	0.001	0.011	0.004	0.033	0.014	-0.008
TRA_P1	0.008	0.005	-0.006	0.016	-0.031	-0.011
TRA_P2	-0.013	0.024	-0.009	0.014	0.007	0.012
BRO_P1	0.020	-0.003	-0.008	-0.005	-0.014	0.019
BRO_P2	-0.019	-0.028	0.012	0.036	-0.012	-0.022
BRO_P3	0.012	0.016	0.005	-0.026	-0.009	0.024
EPI_P1	-0.020	-0.006	0.031	0.013	0.005	-0.017
EPI_P2	0.052	-0.011	0.000	-0.046	0.026	0.010
EPI_P3	-0.021	0.010	-0.014	-0.020	0.007	0.012
ITL_P1	0.019	0.003	0.005	-0.049	-0.019	0.006
ITL_P2	-0.004	0.031	-0.001	-0.023	0.017	-0.011
ITL_P3	-0.016	-0.024	-0.005	0.036	0.028	-0.028
ITL_P4	-0.017	0.027	-0.003	-0.016	0.048	-0.007
ITL_P5	-0.004	0.019	0.012	-0.007	0.001	0.000

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	SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
SOC_P1	- -					
SOC_P2	- -	- -				
WAR_P1	-0.006	-0.007	- -			
WAR_P2	0.019	0.028	0.096	- -		
WAR_P3	-0.016	0.031	0.016	0.029	- -	
WAR_P4	0.018	-0.026	-0.031	-0.046	-0.044	- -
WAR_P5	-0.012	-0.026	0.029	-0.024	-0.008	-0.001
ARR_P1	0.005	-0.011	0.017	0.001	-0.024	0.027
ARR_P2	0.000	-0.006	-0.006	-0.016	0.005	0.004
ARR_P3	0.005	0.013	0.003	-0.008	0.009	-0.014
CON_P1	-0.022	0.022	-0.003	-0.010	0.005	-0.022
CON_P2	0.005	0.004	-0.014	0.022	0.010	-0.023
CON_P3	0.015	-0.025	0.013	0.018	-0.008	-0.005
HOS_P1	0.001	-0.001	0.001	-0.002	0.008	0.011
HOS_P2	-0.007	-0.005	0.003	-0.028	-0.023	0.003
HOS_P3	-0.005	0.002	0.008	0.017	-0.004	-0.006
HOS_P4	0.017	0.008	-0.020	-0.005	-0.033	0.022
HOS_P5	0.017	-0.028	0.013	0.000	-0.006	0.000
HOS_P6	-0.025	0.025	-0.013	-0.006	0.001	-0.004
HOS_P7	-0.013	0.023	-0.009	0.032	0.034	-0.032
DEC_P1	-0.015	-0.003	-0.011	0.003	-0.011	0.009
DEC_P2	0.043	-0.024	0.010	-0.026	-0.016	0.021
DEC_P3	-0.007	0.013	0.002	-0.036	0.024	0.007
EMO_P1	0.003	-0.008	0.034	0.001	-0.022	-0.023
EMO_P2	-0.014	-0.004	0.014	0.019	0.009	0.019
EMO_P3	-0.014	0.023	-0.017	0.022	-0.014	0.005
EMO_P4	0.020	-0.011	-0.023	-0.013	0.010	-0.001

NEG_P1	-0.001	-0.005	0.018	0.013	-0.027	-0.024
NEG_P2	-0.004	0.000	-0.008	0.018	-0.004	0.030
NEG_P3	-0.012	0.009	0.000	-0.006	0.029	0.016
NEG_P4	-0.014	0.025	-0.009	-0.008	0.005	-0.014
NEG_P5	0.025	-0.021	-0.023	-0.002	-0.011	0.005
PLA_P1	0.000	-0.061	-0.023	-0.025	-0.002	-0.007
PLA_P2	-0.018	0.062	0.005	0.001	-0.013	0.019
SOB_P1	0.003	-0.004	0.007	-0.003	-0.020	0.012
SOB_P2	0.018	0.015	0.009	0.011	-0.010	0.013
SOB_P3	0.013	-0.044	-0.006	0.008	-0.011	0.017
ACH_P1	0.017	-0.005	0.023	0.002	0.011	-0.035
ACH_P2	-0.010	0.018	0.020	0.011	0.013	-0.027
ACH_P3	-0.017	0.008	0.013	0.000	0.009	0.025
ACH_P4	-0.010	0.006	0.001	-0.009	0.014	-0.012
ACH_P5	0.017	-0.023	-0.010	-0.026	-0.044	0.024
ORD_P1	0.008	-0.014	0.007	0.030	-0.010	-0.012
ORD_P2	-0.001	0.024	0.021	0.019	0.007	-0.033
ORD_P3	-0.007	-0.003	-0.016	-0.016	0.004	0.024
ORD_P4	0.010	0.004	-0.003	0.014	-0.012	-0.007
ORD_P5	-0.005	-0.013	-0.021	-0.018	-0.006	0.018
ORD_P6	-0.005	-0.001	-0.007	-0.007	-0.006	0.002
TRA_P1	0.011	-0.023	0.015	-0.004	-0.024	0.009
TRA_P2	-0.013	0.022	-0.003	0.000	0.001	-0.022
BRO_P1	-0.023	0.032	-0.013	0.020	0.011	-0.029
BRO_P2	-0.004	-0.022	-0.003	0.003	-0.032	0.027
BRO_P3	0.007	0.014	0.009	0.003	-0.009	0.000
EPI_P1	-0.012	-0.009	0.016	0.020	-0.003	-0.006
EPI_P2	-0.010	0.010	-0.027	-0.006	0.001	-0.013
EPI_P3	-0.006	0.018	0.002	-0.013	0.006	0.024
ITL_P1	0.002	0.011	0.016	0.004	0.005	0.005
ITL_P2	0.003	-0.016	-0.009	-0.048	0.010	-0.004
ITL_P3	0.007	-0.038	-0.017	0.001	-0.005	0.028
ITL_P4	0.021	0.004	-0.005	-0.018	0.019	0.009
ITL_P5	0.024	-0.022	0.006	-0.005	-0.017	-0.017

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	WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
WAR_P5	- -					
ARR_P1	0.002	- -				
ARR_P2	0.009	0.025	- -			
ARR_P3	-0.023	-0.002	-0.004	- -		
CON_P1	-0.006	0.016	-0.053	0.027	- -	
CON_P2	0.017	-0.011	0.007	-0.019	-0.063	- -
CON_P3	0.008	0.019	-0.002	0.038	0.008	0.062
HOS_P1	0.019	-0.004	-0.012	-0.044	0.111	-0.025
HOS_P2	0.022	0.035	-0.024	-0.050	0.020	-0.018
HOS_P3	0.023	-0.016	0.019	-0.006	-0.071	0.077
HOS_P4	-0.024	0.033	0.053	0.043	-0.060	-0.020
HOS_P5	-0.007	-0.008	0.048	-0.008	-0.050	0.029
HOS_P6	-0.033	-0.028	-0.025	0.021	0.020	-0.045
HOS_P7	0.026	-0.031	-0.044	0.002	0.054	-0.009
DEC_P1	0.015	-0.021	-0.003	-0.037	-0.002	0.017
DEC_P2	-0.002	0.034	-0.025	0.011	0.058	-0.012
DEC_P3	-0.002	0.010	0.017	0.022	0.003	0.007
EMO_P1	0.000	0.034	-0.029	0.001	0.000	-0.016
EMO_P2	-0.012	0.003	-0.006	-0.004	0.012	-0.013
EMO_P3	-0.005	-0.008	-0.008	0.012	0.023	0.000
EMO_P4	0.009	0.001	0.001	0.016	0.015	-0.002
NEG_P1	0.026	-0.010	-0.009	-0.015	-0.029	0.008
NEG_P2	-0.019	0.018	-0.016	0.028	0.054	-0.032
NEG_P3	-0.012	0.001	-0.012	0.016	0.033	-0.024
NEG_P4	-0.009	0.011	0.000	0.020	0.036	-0.038
NEG_P5	0.010	-0.008	-0.008	0.013	-0.020	0.060
PLA_P1	0.021	0.000	0.008	-0.008	0.031	-0.009
PLA_P2	0.010	0.009	-0.007	-0.006	0.080	-0.038
SOB_P1	-0.024	-0.006	0.002	-0.023	-0.013	0.002
SOB_P2	-0.013	0.006	-0.016	0.012	0.031	-0.029
SOB_P3	0.012	0.014	0.003	0.006	-0.031	0.018
ACH_P1	-0.026	-0.016	-0.012	0.016	-0.005	0.015
ACH_P2	-0.027	-0.013	0.011	-0.024	0.003	-0.007
ACH_P3	0.008	0.017	0.002	-0.015	-0.025	0.007
ACH_P4	0.025	-0.015	-0.013	-0.007	0.026	0.004
ACH_P5	0.025	0.057	-0.001	-0.011	0.013	-0.019
ORD_P1	-0.023	0.027	-0.012	0.017	-0.009	0.013
ORD_P2	0.013	-0.012	0.004	-0.008	-0.009	0.033

ORD_P3	0.000	0.007	-0.005	-0.018	0.000	-0.033
ORD_P4	-0.003	-0.010	-0.002	-0.004	-0.008	0.010
ORD_P5	0.026	0.010	-0.017	0.009	-0.011	0.004
ORD_P6	0.014	-0.006	-0.001	0.036	-0.003	-0.003
TRA_P1	0.004	0.005	-0.009	0.010	-0.004	-0.009
TRA_P2	0.029	0.001	0.003	-0.008	0.007	0.018
BRO_P1	-0.013	-0.014	-0.020	0.014	0.038	-0.020
BRO_P2	0.038	0.016	-0.009	0.006	-0.092	0.048
BRO_P3	-0.014	0.011	0.010	-0.015	0.017	-0.003
EPI_P1	-0.023	0.004	-0.028	-0.019	-0.003	-0.015
EPI_P2	-0.006	-0.035	-0.006	0.031	0.071	-0.022
EPI_P3	0.017	0.001	0.040	-0.007	0.001	-0.015
ITL_P1	0.001	-0.030	0.002	-0.010	0.014	-0.005
ITL_P2	-0.001	0.000	-0.005	0.014	0.050	0.010
ITL_P3	0.029	0.021	0.005	-0.034	-0.040	0.026
ITL_P4	-0.002	-0.021	0.016	-0.006	0.006	-0.010
ITL_P5	-0.005	0.008	0.010	0.012	-0.029	-0.007

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	CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
CON_P3	- -					
HOS_P1	0.019	- -				
HOS_P2	0.028	0.072	- -			
HOS_P3	-0.014	-0.029	0.028	- -		
HOS_P4	-0.020	-0.089	-0.082	0.043	- -	
HOS_P5	0.013	0.001	0.026	0.020	0.018	- -
HOS_P6	-0.046	0.044	0.004	-0.009	0.039	-0.032
HOS_P7	0.005	0.045	-0.015	-0.061	-0.075	-0.035
DEC_P1	0.009	-0.003	0.012	-0.021	-0.018	-0.027
DEC_P2	-0.033	-0.002	0.017	-0.052	-0.011	-0.027
DEC_P3	-0.039	-0.015	-0.032	-0.001	0.034	0.005
EMO_P1	0.014	0.006	0.030	-0.037	0.012	-0.008
EMO_P2	-0.028	-0.039	-0.014	-0.028	0.029	0.020
EMO_P3	0.017	0.012	-0.015	-0.022	0.005	0.001
EMO_P4	-0.017	-0.014	-0.007	0.000	0.018	0.002
NEG_P1	0.001	0.021	0.039	0.034	-0.016	-0.010
NEG_P2	-0.023	0.003	-0.002	-0.058	-0.014	-0.001
NEG_P3	-0.034	-0.018	-0.060	-0.015	0.021	-0.029
NEG_P4	-0.015	-0.002	-0.029	-0.023	-0.007	-0.026
NEG_P5	0.036	0.018	-0.003	0.064	0.038	0.009
PLA_P1	0.005	0.010	0.004	-0.004	-0.024	0.024
PLA_P2	-0.043	0.001	0.002	-0.015	0.007	-0.009
SOB_P1	0.006	0.040	0.016	0.013	-0.029	0.008
SOB_P2	-0.013	0.010	0.003	-0.016	-0.028	-0.026
SOB_P3	0.029	-0.032	0.008	-0.001	0.020	0.017
ACH_P1	0.025	0.013	-0.006	-0.004	-0.014	0.008
ACH_P2	0.019	0.017	0.018	-0.012	-0.027	0.000
ACH_P3	-0.012	-0.024	0.015	0.002	0.017	0.009
ACH_P4	-0.028	0.018	-0.041	0.021	-0.021	-0.029
ACH_P5	-0.006	0.011	0.045	-0.019	0.016	-0.011
ORD_P1	-0.016	-0.026	-0.057	0.001	0.056	-0.041
ORD_P2	0.000	0.016	0.006	0.002	-0.025	0.017
ORD_P3	0.020	0.034	0.045	0.008	-0.016	0.022
ORD_P4	0.011	0.008	0.010	0.012	-0.001	-0.006
ORD_P5	-0.014	-0.022	-0.015	-0.001	0.008	-0.009
ORD_P6	-0.001	-0.019	-0.017	0.008	0.027	-0.003
TRA_P1	0.011	-0.003	0.007	0.002	-0.001	0.009
TRA_P2	-0.024	-0.016	0.006	-0.003	0.012	-0.012
BRO_P1	-0.005	0.007	0.002	-0.022	-0.013	-0.032
BRO_P2	0.034	-0.043	0.015	0.032	0.040	0.018
BRO_P3	-0.025	-0.004	-0.013	-0.005	0.016	0.000
EPI_P1	0.001	0.026	0.005	-0.034	0.001	-0.014
EPI_P2	-0.018	0.033	0.006	-0.021	-0.047	-0.004
EPI_P3	0.014	-0.002	-0.014	-0.009	0.003	-0.004
ITL_P1	-0.049	0.007	0.001	-0.018	-0.011	0.006
ITL_P2	-0.011	0.020	-0.005	0.005	-0.054	-0.006
ITL_P3	0.015	-0.010	-0.006	0.022	0.003	0.033
ITL_P4	-0.016	0.007	-0.004	0.003	-0.006	-0.003
ITL_P5	0.048	0.017	0.026	0.013	-0.018	0.011

Completely Standardized Expected Change for THETA-DELTA

	HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
HOS_P6	- -					

HOS_P7	0.090	- -				
DEC_P1	0.021	0.147	- -			
DEC_P2	0.000	0.069	0.018	- -		
DEC_P3	-0.008	-0.034	-0.098	0.045	- -	
EMO_P1	0.024	0.016	0.012	-0.009	-0.112	- -
EMO_P2	0.008	0.007	-0.019	0.046	0.051	-0.081
EMO_P3	0.023	0.023	-0.009	0.008	-0.008	-0.050
EMO_P4	-0.008	-0.015	-0.012	0.019	0.035	-0.057
NEG_P1	0.026	0.001	0.002	-0.029	-0.073	0.118
NEG_P2	0.011	0.021	0.017	0.061	0.071	-0.107
NEG_P3	0.016	-0.028	-0.038	0.011	0.013	0.029
NEG_P4	0.026	-0.004	-0.028	0.026	0.012	0.006
NEG_P5	0.017	0.013	0.006	-0.038	-0.004	-0.051
PLA_P1	-0.015	-0.021	0.012	-0.014	0.032	-0.055
PLA_P2	0.019	0.010	-0.016	0.005	-0.014	0.022
SOB_P1	0.023	-0.010	0.018	-0.014	-0.024	0.012
SOB_P2	0.019	0.022	0.001	0.044	-0.004	0.001
SOB_P3	-0.036	-0.018	0.017	0.017	-0.034	0.007
ACH_P1	-0.006	-0.010	-0.025	-0.012	-0.012	0.043
ACH_P2	-0.013	0.012	0.023	-0.006	-0.031	0.076
ACH_P3	-0.021	-0.015	0.026	0.007	-0.012	0.003
ACH_P4	0.042	-0.006	-0.016	0.000	0.042	-0.029
ACH_P5	0.003	0.024	0.024	0.025	-0.030	0.059
ORD_P1	-0.002	-0.024	0.003	-0.003	-0.009	0.040
ORD_P2	-0.005	-0.024	-0.042	0.002	0.021	-0.015
ORD_P3	-0.007	0.003	0.011	0.001	-0.011	-0.008
ORD_P4	0.000	-0.003	-0.012	0.012	-0.014	0.037
ORD_P5	0.016	0.020	0.039	-0.004	-0.020	-0.003
ORD_P6	-0.002	-0.003	0.007	-0.002	0.016	-0.034
TRA_P1	-0.016	-0.010	0.031	0.005	-0.004	0.019
TRA_P2	0.005	0.025	0.000	-0.012	-0.016	0.046
BRO_P1	0.034	0.035	0.016	-0.011	-0.003	0.023
BRO_P2	-0.023	-0.016	-0.011	-0.010	-0.003	-0.012
BRO_P3	-0.005	-0.015	0.016	0.002	-0.002	0.008
EPI_P1	0.017	0.021	0.020	-0.014	-0.025	0.131
EPI_P2	0.057	0.028	-0.027	-0.005	0.020	-0.055
EPI_P3	-0.005	-0.002	0.013	-0.008	0.008	-0.017
ITL_P1	0.041	0.026	-0.014	0.020	0.038	-0.023
ITL_P2	0.009	-0.020	-0.037	0.010	0.064	-0.033
ITL_P3	-0.040	-0.024	0.009	-0.024	0.011	-0.046
ITL_P4	-0.018	-0.003	-0.038	0.006	0.046	-0.046
ITL_P5	-0.015	-0.044	-0.027	0.001	-0.048	0.037

Completely Standardized Expected Change for THETA-DELTA

	EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
EMO_P2	- -					
EMO_P3	0.079	- -				
EMO_P4	0.024	0.057	- -			
NEG_P1	-0.081	-0.033	-0.096	- -		
NEG_P2	0.051	0.061	0.047	-0.104	- -	
NEG_P3	-0.018	-0.014	0.042	-0.029	0.064	- -
NEG_P4	0.031	-0.002	0.030	0.031	0.022	0.188
NEG_P5	-0.027	0.007	-0.004	0.089	-0.030	-0.084
PLA_P1	-0.004	0.005	-0.015	-0.014	0.002	-0.037
PLA_P2	0.048	0.004	-0.023	-0.008	0.005	0.028
SOB_P1	-0.030	-0.003	-0.031	0.039	-0.002	-0.022
SOB_P2	0.034	-0.013	0.020	-0.017	-0.005	0.006
SOB_P3	0.011	0.003	-0.002	0.009	0.016	-0.019
ACH_P1	-0.044	-0.020	0.000	-0.002	-0.026	0.028
ACH_P2	-0.028	-0.003	-0.015	0.033	-0.009	-0.013
ACH_P3	0.029	-0.004	-0.018	-0.010	0.011	0.018
ACH_P4	-0.012	0.001	0.024	0.016	-0.001	0.053
ACH_P5	-0.015	-0.026	0.004	-0.006	0.013	-0.025
ORD_P1	0.012	-0.002	-0.004	0.001	-0.006	0.067
ORD_P2	-0.001	-0.008	0.008	0.013	-0.016	-0.009
ORD_P3	-0.017	0.012	-0.008	-0.009	0.000	-0.012
ORD_P4	-0.025	-0.007	0.002	0.021	-0.016	-0.010
ORD_P5	0.011	0.007	0.008	0.000	-0.004	0.014
ORD_P6	-0.001	0.005	0.005	-0.011	-0.010	-0.014
TRA_P1	-0.007	-0.009	0.002	0.002	-0.001	-0.006
TRA_P2	-0.009	-0.001	-0.023	0.020	-0.015	-0.015
BRO_P1	-0.006	-0.018	0.010	0.027	-0.007	0.021
BRO_P2	-0.001	-0.012	-0.009	0.006	-0.010	-0.046
BRO_P3	0.042	-0.003	-0.008	-0.008	-0.007	0.010
EPI_P1	-0.038	-0.035	-0.017	0.005	-0.018	0.055

EPI_P2	0.018	0.015	-0.003	-0.040	0.017	-0.008
EPI_P3	-0.006	0.019	0.003	-0.011	0.005	0.006
ITL_P1	0.070	0.047	0.016	0.017	0.015	-0.008
ITL_P2	0.001	0.004	0.014	-0.003	0.013	0.012
ITL_P3	-0.006	-0.003	-0.004	-0.011	0.001	-0.032
ITL_P4	0.002	-0.018	0.014	-0.010	0.020	-0.005
ITL_P5	-0.037	-0.019	0.015	0.045	-0.035	-0.043

Completely Standardized Expected Change for THETA-DELTA

	NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
NEG_P4	- -					
NEG_P5	-0.144	- -				
PLA_P1	-0.011	0.032	- -			
PLA_P2	0.017	-0.024	- -	- -		
SOB_P1	-0.034	0.058	0.036	-0.020	- -	
SOB_P2	0.054	-0.044	-0.004	-0.015	-0.025	- -
SOB_P3	-0.036	0.000	-0.017	0.025	0.087	-0.095
ACH_P1	0.014	0.008	0.020	-0.037	0.023	-0.020
ACH_P2	-0.025	-0.025	-0.003	0.010	-0.001	0.000
ACH_P3	-0.032	-0.014	-0.028	0.010	0.007	-0.013
ACH_P4	0.035	-0.040	-0.013	-0.002	-0.009	0.029
ACH_P5	-0.018	0.030	-0.006	0.029	0.018	-0.028
ORD_P1	0.023	-0.021	-0.006	0.015	-0.008	0.004
ORD_P2	0.004	0.010	0.003	-0.014	-0.008	0.002
ORD_P3	0.012	0.007	0.025	-0.001	0.006	-0.010
ORD_P4	-0.010	-0.010	-0.032	0.001	0.015	0.005
ORD_P5	0.029	-0.006	-0.001	0.003	0.000	-0.007
ORD_P6	-0.026	0.021	0.003	0.004	-0.009	-0.001
TRA_P1	0.013	0.004	0.004	0.002	0.008	0.015
TRA_P2	0.013	-0.008	-0.020	0.012	-0.006	-0.023
BRO_P1	0.046	-0.013	0.051	-0.045	0.013	0.000
BRO_P2	-0.033	0.044	-0.010	0.005	0.000	-0.033
BRO_P3	0.001	-0.012	-0.039	0.039	-0.010	-0.007
EPI_P1	0.018	-0.049	-0.032	-0.014	0.012	0.031
EPI_P2	0.032	0.018	0.032	-0.016	0.012	0.008
EPI_P3	-0.009	-0.012	-0.020	0.032	-0.012	0.003
ITL_P1	0.010	-0.005	-0.043	0.024	-0.011	0.027
ITL_P2	0.039	-0.012	0.050	-0.027	-0.022	0.038
ITL_P3	-0.029	0.005	0.039	-0.038	-0.017	-0.054
ITL_P4	0.015	0.014	0.048	-0.020	-0.001	0.020
ITL_P5	0.010	0.006	0.066	-0.043	0.053	0.044

Completely Standardized Expected Change for THETA-DELTA

	SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
SOB_P3	- -					
ACH_P1	-0.030	- -				
ACH_P2	-0.004	0.069	- -			
ACH_P3	0.005	-0.054	0.060	- -		
ACH_P4	-0.024	-0.054	-0.058	0.033	- -	
ACH_P5	0.040	0.016	0.011	-0.003	-0.034	- -
ORD_P1	0.000	-0.017	-0.009	-0.023	-0.033	-0.003
ORD_P2	-0.005	0.017	-0.002	0.002	0.065	-0.028
ORD_P3	-0.009	0.000	0.007	0.029	0.027	0.020
ORD_P4	-0.009	0.025	0.045	0.041	0.078	0.014
ORD_P5	0.020	-0.028	-0.048	-0.004	-0.031	-0.002
ORD_P6	0.013	-0.009	-0.040	-0.023	-0.009	-0.011
TRA_P1	0.004	0.014	0.010	-0.016	-0.026	0.031
TRA_P2	0.009	-0.013	-0.014	0.005	0.007	0.001
BRO_P1	-0.017	0.010	0.006	-0.036	-0.016	0.013
BRO_P2	0.031	0.017	-0.017	-0.005	-0.025	0.057
BRO_P3	0.020	-0.009	-0.022	0.006	0.004	0.000
EPI_P1	-0.004	0.060	0.030	0.024	0.046	-0.007
EPI_P2	-0.018	-0.002	-0.034	-0.042	-0.003	-0.018
EPI_P3	-0.012	-0.025	-0.008	0.014	0.035	-0.008
ITL_P1	0.009	-0.030	-0.032	0.010	0.063	-0.007
ITL_P2	-0.038	0.019	-0.022	-0.022	0.061	-0.054
ITL_P3	0.010	0.041	-0.008	0.019	-0.024	0.017
ITL_P4	-0.036	-0.019	-0.026	-0.004	0.029	-0.026
ITL_P5	-0.015	0.050	0.041	-0.040	-0.021	0.009

Completely Standardized Expected Change for THETA-DELTA

	ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6

ORD_P1	- -					
ORD_P2	-0.078	- -				
ORD_P3	-0.074	0.018	- -			
ORD_P4	-0.090	0.124	0.011	- -		
ORD_P5	0.154	-0.082	-0.024	-0.135	- -	
ORD_P6	0.109	-0.016	-0.051	-0.094	0.187	- -
TRA_P1	0.070	-0.034	-0.012	-0.003	0.004	0.011
TRA_P2	0.002	-0.006	0.007	-0.007	0.014	-0.018
BRO_P1	0.004	-0.007	0.002	-0.019	0.016	-0.009
BRO_P2	-0.018	-0.005	-0.018	0.002	0.030	0.014
BRO_P3	0.008	-0.005	-0.007	-0.011	0.014	0.001
EPI_P1	0.046	-0.008	-0.002	0.030	-0.019	-0.026
EPI_P2	-0.022	-0.006	-0.002	-0.026	0.023	0.018
EPI_P3	-0.018	0.000	0.029	-0.002	-0.010	0.003
ITL_P1	-0.029	0.068	-0.010	-0.007	-0.028	-0.025
ITL_P2	-0.019	0.038	0.024	-0.010	-0.031	-0.005
ITL_P3	-0.040	-0.028	0.038	-0.008	0.015	-0.022
ITL_P4	-0.020	0.047	0.023	-0.028	-0.038	0.012
ITL_P5	0.004	0.001	-0.014	0.021	-0.006	0.041

Completely Standardized Expected Change for THETA-DELTA

	TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
TRA_P1	- -					
TRA_P2	- -	- -				
BRO_P1	-0.009	0.003	- -			
BRO_P2	0.008	-0.011	0.094	- -		
BRO_P3	-0.021	0.024	-0.061	-0.065	- -	
EPI_P1	0.023	0.007	0.014	-0.046	-0.026	- -
EPI_P2	-0.029	-0.007	0.078	-0.008	0.044	-0.062
EPI_P3	-0.016	0.023	-0.065	-0.053	0.062	0.025
ITL_P1	-0.015	0.016	-0.029	-0.026	0.031	0.030
ITL_P2	-0.002	-0.012	-0.016	-0.066	0.034	0.004
ITL_P3	-0.014	0.011	0.038	0.160	-0.019	-0.072
ITL_P4	-0.001	-0.002	-0.008	-0.054	-0.021	-0.011
ITL_P5	0.013	-0.002	-0.003	-0.009	-0.039	0.017

Completely Standardized Expected Change for THETA-DELTA

	EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
EPI_P2	- -					
EPI_P3	0.365	- -				
ITL_P1	0.030	0.006	- -			
ITL_P2	0.060	0.022	0.021	- -		
ITL_P3	-0.012	0.013	-0.038	0.017	- -	
ITL_P4	-0.009	0.007	0.103	0.049	-0.008	- -
ITL_P5	-0.028	-0.034	-0.060	-0.026	-0.067	0.025

Completely Standardized Expected Change for THETA-DELTA

	ITL_P5
ITL_P5	- -

Maximum Modification Index is 1220.42 for Element (18, 6) of LAMBDA-X

SAPI FIRST-ORDER MEASUREMENT MODEL WITH ITEM PAQRCELS AS INDICATORS

Standardized Solution

LAMBDA-X

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMP_P1	0.489	- -	- -	- -	- -	- -
EMP_P2	0.359	- -	- -	- -	- -	- -
EMP_P3	0.472	- -	- -	- -	- -	- -
FAC_P1	- -	0.536	- -	- -	- -	- -
FAC_P2	- -	0.591	- -	- -	- -	- -
FAC_P3	- -	0.573	- -	- -	- -	- -
FAC_P4	- -	0.530	- -	- -	- -	- -
FAC_P5	- -	0.452	- -	- -	- -	- -
INT_P1	- -	- -	0.391	- -	- -	- -
INT_P2	- -	- -	0.358	- -	- -	- -

INT_P3	- -	- -	0.353	- -	- -	- -
INT_P4	- -	- -	0.381	- -	- -	- -
INT_P5	- -	- -	0.335	- -	- -	- -
INT_P6	- -	- -	0.351	- -	- -	- -
IPR_P1	- -	- -	- -	0.367	- -	- -
IPR_P2	- -	- -	- -	0.448	- -	- -
IPR_P3	- -	- -	- -	0.380	- -	- -
IPR_P4	- -	- -	- -	0.363	- -	- -
SOC_P1	- -	- -	- -	- -	0.513	- -
SOC_P2	- -	- -	- -	- -	0.496	- -
WAR_P1	- -	- -	- -	- -	- -	0.401
WAR_P2	- -	- -	- -	- -	- -	0.414
WAR_P3	- -	- -	- -	- -	- -	0.414
WAR_P4	- -	- -	- -	- -	- -	0.404
WAR_P5	- -	- -	- -	- -	- -	0.388
ARR_P1	- -	- -	- -	- -	- -	- -
ARR_P2	- -	- -	- -	- -	- -	- -
ARR_P3	- -	- -	- -	- -	- -	- -
CON_P1	- -	- -	- -	- -	- -	- -
CON_P2	- -	- -	- -	- -	- -	- -
CON_P3	- -	- -	- -	- -	- -	- -
HOS_P1	- -	- -	- -	- -	- -	- -
HOS_P2	- -	- -	- -	- -	- -	- -
HOS_P3	- -	- -	- -	- -	- -	- -
HOS_P4	- -	- -	- -	- -	- -	- -
HOS_P5	- -	- -	- -	- -	- -	- -
HOS_P6	- -	- -	- -	- -	- -	- -
HOS_P7	- -	- -	- -	- -	- -	- -
DEC_P1	- -	- -	- -	- -	- -	- -
DEC_P2	- -	- -	- -	- -	- -	- -
DEC_P3	- -	- -	- -	- -	- -	- -
EMO_P1	- -	- -	- -	- -	- -	- -
EMO_P2	- -	- -	- -	- -	- -	- -
EMO_P3	- -	- -	- -	- -	- -	- -
EMO_P4	- -	- -	- -	- -	- -	- -
NEG_P1	- -	- -	- -	- -	- -	- -
NEG_P2	- -	- -	- -	- -	- -	- -
NEG_P3	- -	- -	- -	- -	- -	- -
NEG_P4	- -	- -	- -	- -	- -	- -
NEG_P5	- -	- -	- -	- -	- -	- -
PLA_P1	- -	- -	- -	- -	- -	- -
PLA_P2	- -	- -	- -	- -	- -	- -
SOB_P1	- -	- -	- -	- -	- -	- -
SOB_P2	- -	- -	- -	- -	- -	- -
SOB_P3	- -	- -	- -	- -	- -	- -
ACH_P1	- -	- -	- -	- -	- -	- -
ACH_P2	- -	- -	- -	- -	- -	- -
ACH_P3	- -	- -	- -	- -	- -	- -
ACH_P4	- -	- -	- -	- -	- -	- -
ACH_P5	- -	- -	- -	- -	- -	- -
ORD_P1	- -	- -	- -	- -	- -	- -
ORD_P2	- -	- -	- -	- -	- -	- -
ORD_P3	- -	- -	- -	- -	- -	- -
ORD_P4	- -	- -	- -	- -	- -	- -
ORD_P5	- -	- -	- -	- -	- -	- -
ORD_P6	- -	- -	- -	- -	- -	- -
TRA_P1	- -	- -	- -	- -	- -	- -
TRA_P2	- -	- -	- -	- -	- -	- -
BRO_P1	- -	- -	- -	- -	- -	- -
BRO_P2	- -	- -	- -	- -	- -	- -
BRO_P3	- -	- -	- -	- -	- -	- -
EPI_P1	- -	- -	- -	- -	- -	- -
EPI_P2	- -	- -	- -	- -	- -	- -
EPI_P3	- -	- -	- -	- -	- -	- -
ITL_P1	- -	- -	- -	- -	- -	- -
ITL_P2	- -	- -	- -	- -	- -	- -
ITL_P3	- -	- -	- -	- -	- -	- -
ITL_P4	- -	- -	- -	- -	- -	- -
ITL_P5	- -	- -	- -	- -	- -	- -

LAMBDA-X

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
EMP_P1	- -	- -	- -	- -	- -	- -
EMP_P2	- -	- -	- -	- -	- -	- -
EMP_P3	- -	- -	- -	- -	- -	- -

FAC_P1	- -	- -	- -	- -	- -	- -
FAC_P2	- -	- -	- -	- -	- -	- -
FAC_P3	- -	- -	- -	- -	- -	- -
FAC_P4	- -	- -	- -	- -	- -	- -
FAC_P5	- -	- -	- -	- -	- -	- -
INT_P1	- -	- -	- -	- -	- -	- -
INT_P2	- -	- -	- -	- -	- -	- -
INT_P3	- -	- -	- -	- -	- -	- -
INT_P4	- -	- -	- -	- -	- -	- -
INT_P5	- -	- -	- -	- -	- -	- -
INT_P6	- -	- -	- -	- -	- -	- -
IPR_P1	- -	- -	- -	- -	- -	- -
IPR_P2	- -	- -	- -	- -	- -	- -
IPR_P3	- -	- -	- -	- -	- -	- -
IPR_P4	- -	- -	- -	- -	- -	- -
SOC_P1	- -	- -	- -	- -	- -	- -
SOC_P2	- -	- -	- -	- -	- -	- -
WAR_P1	- -	- -	- -	- -	- -	- -
WAR_P2	- -	- -	- -	- -	- -	- -
WAR_P3	- -	- -	- -	- -	- -	- -
WAR_P4	- -	- -	- -	- -	- -	- -
WAR_P5	- -	- -	- -	- -	- -	- -
ARR_P1	0.608	- -	- -	- -	- -	- -
ARR_P2	0.603	- -	- -	- -	- -	- -
ARR_P3	0.491	- -	- -	- -	- -	- -
CON_P1	- -	0.575	- -	- -	- -	- -
CON_P2	- -	0.476	- -	- -	- -	- -
CON_P3	- -	0.451	- -	- -	- -	- -
HOS_P1	- -	- -	0.512	- -	- -	- -
HOS_P2	- -	- -	0.411	- -	- -	- -
HOS_P3	- -	- -	0.430	- -	- -	- -
HOS_P4	- -	- -	0.420	- -	- -	- -
HOS_P5	- -	- -	0.496	- -	- -	- -
HOS_P6	- -	- -	0.418	- -	- -	- -
HOS_P7	- -	- -	0.498	- -	- -	- -
DEC_P1	- -	- -	- -	0.511	- -	- -
DEC_P2	- -	- -	- -	0.405	- -	- -
DEC_P3	- -	- -	- -	0.577	- -	- -
EMO_P1	- -	- -	- -	- -	0.449	- -
EMO_P2	- -	- -	- -	- -	0.455	- -
EMO_P3	- -	- -	- -	- -	0.510	- -
EMO_P4	- -	- -	- -	- -	0.494	- -
NEG_P1	- -	- -	- -	- -	- -	0.614
NEG_P2	- -	- -	- -	- -	- -	0.594
NEG_P3	- -	- -	- -	- -	- -	0.661
NEG_P4	- -	- -	- -	- -	- -	0.535
NEG_P5	- -	- -	- -	- -	- -	0.561
PLA_P1	- -	- -	- -	- -	- -	- -
PLA_P2	- -	- -	- -	- -	- -	- -
SOB_P1	- -	- -	- -	- -	- -	- -
SOB_P2	- -	- -	- -	- -	- -	- -
SOB_P3	- -	- -	- -	- -	- -	- -
ACH_P1	- -	- -	- -	- -	- -	- -
ACH_P2	- -	- -	- -	- -	- -	- -
ACH_P3	- -	- -	- -	- -	- -	- -
ACH_P4	- -	- -	- -	- -	- -	- -
ACH_P5	- -	- -	- -	- -	- -	- -
ORD_P1	- -	- -	- -	- -	- -	- -
ORD_P2	- -	- -	- -	- -	- -	- -
ORD_P3	- -	- -	- -	- -	- -	- -
ORD_P4	- -	- -	- -	- -	- -	- -
ORD_P5	- -	- -	- -	- -	- -	- -
ORD_P6	- -	- -	- -	- -	- -	- -
TRA_P1	- -	- -	- -	- -	- -	- -
TRA_P2	- -	- -	- -	- -	- -	- -
BRO_P1	- -	- -	- -	- -	- -	- -
BRO_P2	- -	- -	- -	- -	- -	- -
BRO_P3	- -	- -	- -	- -	- -	- -
EPI_P1	- -	- -	- -	- -	- -	- -
EPI_P2	- -	- -	- -	- -	- -	- -
EPI_P3	- -	- -	- -	- -	- -	- -
ITL_P1	- -	- -	- -	- -	- -	- -
ITL_P2	- -	- -	- -	- -	- -	- -
ITL_P3	- -	- -	- -	- -	- -	- -
ITL_P4	- -	- -	- -	- -	- -	- -
ITL_P5	- -	- -	- -	- -	- -	- -

LAMBDA-X

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
EMP_P1	- -	- -	- -	- -	- -	- -
EMP_P2	- -	- -	- -	- -	- -	- -
EMP_P3	- -	- -	- -	- -	- -	- -
FAC_P1	- -	- -	- -	- -	- -	- -
FAC_P2	- -	- -	- -	- -	- -	- -
FAC_P3	- -	- -	- -	- -	- -	- -
FAC_P4	- -	- -	- -	- -	- -	- -
FAC_P5	- -	- -	- -	- -	- -	- -
INT_P1	- -	- -	- -	- -	- -	- -
INT_P2	- -	- -	- -	- -	- -	- -
INT_P3	- -	- -	- -	- -	- -	- -
INT_P4	- -	- -	- -	- -	- -	- -
INT_P5	- -	- -	- -	- -	- -	- -
INT_P6	- -	- -	- -	- -	- -	- -
IPR_P1	- -	- -	- -	- -	- -	- -
IPR_P2	- -	- -	- -	- -	- -	- -
IPR_P3	- -	- -	- -	- -	- -	- -
IPR_P4	- -	- -	- -	- -	- -	- -
SOC_P1	- -	- -	- -	- -	- -	- -
SOC_P2	- -	- -	- -	- -	- -	- -
WAR_P1	- -	- -	- -	- -	- -	- -
WAR_P2	- -	- -	- -	- -	- -	- -
WAR_P3	- -	- -	- -	- -	- -	- -
WAR_P4	- -	- -	- -	- -	- -	- -
WAR_P5	- -	- -	- -	- -	- -	- -
ARR_P1	- -	- -	- -	- -	- -	- -
ARR_P2	- -	- -	- -	- -	- -	- -
ARR_P3	- -	- -	- -	- -	- -	- -
CON_P1	- -	- -	- -	- -	- -	- -
CON_P2	- -	- -	- -	- -	- -	- -
CON_P3	- -	- -	- -	- -	- -	- -
HOS_P1	- -	- -	- -	- -	- -	- -
HOS_P2	- -	- -	- -	- -	- -	- -
HOS_P3	- -	- -	- -	- -	- -	- -
HOS_P4	- -	- -	- -	- -	- -	- -
HOS_P5	- -	- -	- -	- -	- -	- -
HOS_P6	- -	- -	- -	- -	- -	- -
HOS_P7	- -	- -	- -	- -	- -	- -
DEC_P1	- -	- -	- -	- -	- -	- -
DEC_P2	- -	- -	- -	- -	- -	- -
DEC_P3	- -	- -	- -	- -	- -	- -
EMO_P1	- -	- -	- -	- -	- -	- -
EMO_P2	- -	- -	- -	- -	- -	- -
EMO_P3	- -	- -	- -	- -	- -	- -
EMO_P4	- -	- -	- -	- -	- -	- -
NEG_P1	- -	- -	- -	- -	- -	- -
NEG_P2	- -	- -	- -	- -	- -	- -
NEG_P3	- -	- -	- -	- -	- -	- -
NEG_P4	- -	- -	- -	- -	- -	- -
NEG_P5	- -	- -	- -	- -	- -	- -
PLA_P1	0.584	- -	- -	- -	- -	- -
PLA_P2	0.624	- -	- -	- -	- -	- -
SOB_P1	- -	0.686	- -	- -	- -	- -
SOB_P2	- -	0.563	- -	- -	- -	- -
SOB_P3	- -	0.720	- -	- -	- -	- -
ACH_P1	- -	- -	0.438	- -	- -	- -
ACH_P2	- -	- -	0.505	- -	- -	- -
ACH_P3	- -	- -	0.510	- -	- -	- -
ACH_P4	- -	- -	0.388	- -	- -	- -
ACH_P5	- -	- -	0.513	- -	- -	- -
ORD_P1	- -	- -	- -	0.446	- -	- -
ORD_P2	- -	- -	- -	0.463	- -	- -
ORD_P3	- -	- -	- -	0.435	- -	- -
ORD_P4	- -	- -	- -	0.485	- -	- -
ORD_P5	- -	- -	- -	0.494	- -	- -
ORD_P6	- -	- -	- -	0.505	- -	- -
TRA_P1	- -	- -	- -	- -	0.691	- -
TRA_P2	- -	- -	- -	- -	0.820	- -
BRO_P1	- -	- -	- -	- -	- -	0.437
BRO_P2	- -	- -	- -	- -	- -	0.558
BRO_P3	- -	- -	- -	- -	- -	0.465
EPI_P1	- -	- -	- -	- -	- -	- -
EPI_P2	- -	- -	- -	- -	- -	- -

EPI_P3	- -	- -	- -	- -	- -	- -
ITL_P1	- -	- -	- -	- -	- -	- -
ITL_P2	- -	- -	- -	- -	- -	- -
ITL_P3	- -	- -	- -	- -	- -	- -
ITL_P4	- -	- -	- -	- -	- -	- -
ITL_P5	- -	- -	- -	- -	- -	- -

LAMBDA-X

	EPISTEM	INTELLEC
EMP_P1	- -	- -
EMP_P2	- -	- -
EMP_P3	- -	- -
FAC_P1	- -	- -
FAC_P2	- -	- -
FAC_P3	- -	- -
FAC_P4	- -	- -
FAC_P5	- -	- -
INT_P1	- -	- -
INT_P2	- -	- -
INT_P3	- -	- -
INT_P4	- -	- -
INT_P5	- -	- -
INT_P6	- -	- -
IPR_P1	- -	- -
IPR_P2	- -	- -
IPR_P3	- -	- -
IPR_P4	- -	- -
SOC_P1	- -	- -
SOC_P2	- -	- -
WAR_P1	- -	- -
WAR_P2	- -	- -
WAR_P3	- -	- -
WAR_P4	- -	- -
WAR_P5	- -	- -
ARR_P1	- -	- -
ARR_P2	- -	- -
ARR_P3	- -	- -
CON_P1	- -	- -
CON_P2	- -	- -
CON_P3	- -	- -
HOS_P1	- -	- -
HOS_P2	- -	- -
HOS_P3	- -	- -
HOS_P4	- -	- -
HOS_P5	- -	- -
HOS_P6	- -	- -
HOS_P7	- -	- -
DEC_P1	- -	- -
DEC_P2	- -	- -
DEC_P3	- -	- -
EMO_P1	- -	- -
EMO_P2	- -	- -
EMO_P3	- -	- -
EMO_P4	- -	- -
NEG_P1	- -	- -
NEG_P2	- -	- -
NEG_P3	- -	- -
NEG_P4	- -	- -
NEG_P5	- -	- -
PLA_P1	- -	- -
PLA_P2	- -	- -
SOB_P1	- -	- -
SOB_P2	- -	- -
SOB_P3	- -	- -
ACH_P1	- -	- -
ACH_P2	- -	- -
ACH_P3	- -	- -
ACH_P4	- -	- -
ACH_P5	- -	- -
ORD_P1	- -	- -
ORD_P2	- -	- -
ORD_P3	- -	- -
ORD_P4	- -	- -
ORD_P5	- -	- -
ORD_P6	- -	- -

TRA_P1	- -	- -
TRA_P2	- -	- -
BRO_P1	- -	- -
BRO_P2	- -	- -
BRO_P3	- -	- -
EPI_P1	0.335	- -
EPI_P2	0.389	- -
EPI_P3	0.399	- -
ITL_P1	- -	0.371
ITL_P2	- -	0.321
ITL_P3	- -	0.476
ITL_P4	- -	0.414
ITL_P5	- -	0.402

PHI

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMPATHY	1.000					
FACILIT	0.534	1.000				
INTEGRIT	0.640	0.589	1.000			
INTERPER	0.742	0.811	0.755	1.000		
SOC_INT	0.761	0.708	0.600	0.821	1.000	
WARMHEAR	0.869	0.768	0.770	0.933	0.806	1.000
ARROGAN	-0.478	-0.129	-0.487	-0.396	-0.274	-0.434
CONFLICT	-0.328	-0.216	-0.595	-0.412	-0.254	-0.380
HOSTILE	-0.488	-0.302	-0.629	-0.545	-0.397	-0.535
DECEIT	-0.332	-0.424	-0.710	-0.514	-0.391	-0.450
EMOTIONB	0.295	0.576	0.614	0.654	0.525	0.497
NEGATIVE	0.111	-0.310	-0.338	-0.315	-0.151	-0.122
PLAYFULL	0.410	0.382	0.315	0.506	0.578	0.479
SOCIABIL	0.441	0.540	0.419	0.647	0.718	0.589
ACHIEVEM	0.353	0.671	0.676	0.596	0.494	0.547
ORDILIN	0.312	0.448	0.684	0.443	0.333	0.455
TRAD_REL	0.443	0.420	0.446	0.492	0.405	0.519
BROADMIN	0.412	0.536	0.467	0.576	0.506	0.516
EPISTEM	0.435	0.471	0.585	0.537	0.436	0.511
INTELLEC	0.394	0.744	0.656	0.695	0.634	0.584

PHI

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
ARROGAN	1.000					
CONFLICT	0.739	1.000				
HOSTILE	0.854	0.937	1.000			
DECEIT	0.588	0.784	0.836	1.000		
EMOTIONB	-0.215	-0.401	-0.416	-0.540	1.000	
NEGATIVE	0.239	0.493	0.496	0.654	-0.725	1.000
PLAYFULL	-0.020	0.082	-0.046	-0.111	0.326	-0.013
SOCIABIL	-0.122	-0.098	-0.243	-0.346	0.427	-0.198
ACHIEVEM	-0.174	-0.351	-0.360	-0.575	0.664	-0.403
ORDILIN	-0.240	-0.414	-0.393	-0.546	0.466	-0.256
TRAD_REL	-0.273	-0.263	-0.347	-0.346	0.338	-0.109
BROADMIN	-0.061	-0.127	-0.161	-0.235	0.482	-0.153
EPISTEM	-0.212	-0.285	-0.293	-0.324	0.502	-0.190
INTELLEC	-0.060	-0.240	-0.257	-0.437	0.752	-0.418

PHI

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
PLAYFULL	1.000					
SOCIABIL	0.732	1.000				
ACHIEVEM	0.264	0.444	1.000			
ORDILIN	0.113	0.249	0.756	1.000		
TRAD_REL	0.257	0.376	0.432	0.367	1.000	
BROADMIN	0.553	0.510	0.527	0.259	0.298	1.000
EPISTEM	0.337	0.312	0.602	0.407	0.223	0.796
INTELLEC	0.435	0.531	0.763	0.578	0.260	0.745

PHI

	EPISTEM	INTELLEC
EPISTEM	1.000	
INTELLEC	0.750	1.000

SAPI FIRST-ORDER MEASUREMENT MODEL WITH ITEM PAQRCELS AS INDICATORS

Completely Standardized Solution

LAMBDA-X

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMP_P1	0.791	- -	- -	- -	- -	- -
EMP_P2	0.713	- -	- -	- -	- -	- -
EMP_P3	0.789	- -	- -	- -	- -	- -
FAC_P1	- -	0.822	- -	- -	- -	- -
FAC_P2	- -	0.830	- -	- -	- -	- -
FAC_P3	- -	0.790	- -	- -	- -	- -
FAC_P4	- -	0.819	- -	- -	- -	- -
FAC_P5	- -	0.765	- -	- -	- -	- -
INT_P1	- -	- -	0.644	- -	- -	- -
INT_P2	- -	- -	0.705	- -	- -	- -
INT_P3	- -	- -	0.630	- -	- -	- -
INT_P4	- -	- -	0.616	- -	- -	- -
INT_P5	- -	- -	0.672	- -	- -	- -
INT_P6	- -	- -	0.735	- -	- -	- -
IPR_P1	- -	- -	- -	0.639	- -	- -
IPR_P2	- -	- -	- -	0.680	- -	- -
IPR_P3	- -	- -	- -	0.706	- -	- -
IPR_P4	- -	- -	- -	0.712	- -	- -
SOC_P1	- -	- -	- -	- -	0.845	- -
SOC_P2	- -	- -	- -	- -	0.831	- -
WAR_P1	- -	- -	- -	- -	- -	0.744
WAR_P2	- -	- -	- -	- -	- -	0.719
WAR_P3	- -	- -	- -	- -	- -	0.778
WAR_P4	- -	- -	- -	- -	- -	0.772
WAR_P5	- -	- -	- -	- -	- -	0.745
ARR_P1	- -	- -	- -	- -	- -	- -
ARR_P2	- -	- -	- -	- -	- -	- -
ARR_P3	- -	- -	- -	- -	- -	- -
CON_P1	- -	- -	- -	- -	- -	- -
CON_P2	- -	- -	- -	- -	- -	- -
CON_P3	- -	- -	- -	- -	- -	- -
HOS_P1	- -	- -	- -	- -	- -	- -
HOS_P2	- -	- -	- -	- -	- -	- -
HOS_P3	- -	- -	- -	- -	- -	- -
HOS_P4	- -	- -	- -	- -	- -	- -
HOS_P5	- -	- -	- -	- -	- -	- -
HOS_P6	- -	- -	- -	- -	- -	- -
HOS_P7	- -	- -	- -	- -	- -	- -
DEC_P1	- -	- -	- -	- -	- -	- -
DEC_P2	- -	- -	- -	- -	- -	- -
DEC_P3	- -	- -	- -	- -	- -	- -
EMO_P1	- -	- -	- -	- -	- -	- -
EMO_P2	- -	- -	- -	- -	- -	- -
EMO_P3	- -	- -	- -	- -	- -	- -
EMO_P4	- -	- -	- -	- -	- -	- -
NEG_P1	- -	- -	- -	- -	- -	- -
NEG_P2	- -	- -	- -	- -	- -	- -
NEG_P3	- -	- -	- -	- -	- -	- -
NEG_P4	- -	- -	- -	- -	- -	- -
NEG_P5	- -	- -	- -	- -	- -	- -
PLA_P1	- -	- -	- -	- -	- -	- -
PLA_P2	- -	- -	- -	- -	- -	- -
SOB_P1	- -	- -	- -	- -	- -	- -
SOB_P2	- -	- -	- -	- -	- -	- -
SOB_P3	- -	- -	- -	- -	- -	- -
ACH_P1	- -	- -	- -	- -	- -	- -
ACH_P2	- -	- -	- -	- -	- -	- -
ACH_P3	- -	- -	- -	- -	- -	- -
ACH_P4	- -	- -	- -	- -	- -	- -
ACH_P5	- -	- -	- -	- -	- -	- -
ORD_P1	- -	- -	- -	- -	- -	- -
ORD_P2	- -	- -	- -	- -	- -	- -
ORD_P3	- -	- -	- -	- -	- -	- -
ORD_P4	- -	- -	- -	- -	- -	- -
ORD_P5	- -	- -	- -	- -	- -	- -
ORD_P6	- -	- -	- -	- -	- -	- -
TRA_P1	- -	- -	- -	- -	- -	- -
TRA_P2	- -	- -	- -	- -	- -	- -

BRO_P1	- -	- -	- -	- -	- -	- -
BRO_P2	- -	- -	- -	- -	- -	- -
BRO_P3	- -	- -	- -	- -	- -	- -
EPI_P1	- -	- -	- -	- -	- -	- -
EPI_P2	- -	- -	- -	- -	- -	- -
EPI_P3	- -	- -	- -	- -	- -	- -
ITL_P1	- -	- -	- -	- -	- -	- -
ITL_P2	- -	- -	- -	- -	- -	- -
ITL_P3	- -	- -	- -	- -	- -	- -
ITL_P4	- -	- -	- -	- -	- -	- -
ITL_P5	- -	- -	- -	- -	- -	- -

LAMBDA-X

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
EMP_P1	- -	- -	- -	- -	- -	- -
EMP_P2	- -	- -	- -	- -	- -	- -
EMP_P3	- -	- -	- -	- -	- -	- -
FAC_P1	- -	- -	- -	- -	- -	- -
FAC_P2	- -	- -	- -	- -	- -	- -
FAC_P3	- -	- -	- -	- -	- -	- -
FAC_P4	- -	- -	- -	- -	- -	- -
FAC_P5	- -	- -	- -	- -	- -	- -
INT_P1	- -	- -	- -	- -	- -	- -
INT_P2	- -	- -	- -	- -	- -	- -
INT_P3	- -	- -	- -	- -	- -	- -
INT_P4	- -	- -	- -	- -	- -	- -
INT_P5	- -	- -	- -	- -	- -	- -
INT_P6	- -	- -	- -	- -	- -	- -
IPR_P1	- -	- -	- -	- -	- -	- -
IPR_P2	- -	- -	- -	- -	- -	- -
IPR_P3	- -	- -	- -	- -	- -	- -
IPR_P4	- -	- -	- -	- -	- -	- -
SOC_P1	- -	- -	- -	- -	- -	- -
SOC_P2	- -	- -	- -	- -	- -	- -
WAR_P1	- -	- -	- -	- -	- -	- -
WAR_P2	- -	- -	- -	- -	- -	- -
WAR_P3	- -	- -	- -	- -	- -	- -
WAR_P4	- -	- -	- -	- -	- -	- -
WAR_P5	- -	- -	- -	- -	- -	- -
ARR_P1	0.779	- -	- -	- -	- -	- -
ARR_P2	0.825	- -	- -	- -	- -	- -
ARR_P3	0.655	- -	- -	- -	- -	- -
CON_P1	- -	0.675	- -	- -	- -	- -
CON_P2	- -	0.770	- -	- -	- -	- -
CON_P3	- -	0.718	- -	- -	- -	- -
HOS_P1	- -	- -	0.674	- -	- -	- -
HOS_P2	- -	- -	0.583	- -	- -	- -
HOS_P3	- -	- -	0.701	- -	- -	- -
HOS_P4	- -	- -	0.631	- -	- -	- -
HOS_P5	- -	- -	0.773	- -	- -	- -
HOS_P6	- -	- -	0.623	- -	- -	- -
HOS_P7	- -	- -	0.596	- -	- -	- -
DEC_P1	- -	- -	- -	0.739	- -	- -
DEC_P2	- -	- -	- -	0.566	- -	- -
DEC_P3	- -	- -	- -	0.740	- -	- -
EMO_P1	- -	- -	- -	- -	0.627	- -
EMO_P2	- -	- -	- -	- -	0.673	- -
EMO_P3	- -	- -	- -	- -	0.734	- -
EMO_P4	- -	- -	- -	- -	0.767	- -
NEG_P1	- -	- -	- -	- -	- -	0.678
NEG_P2	- -	- -	- -	- -	- -	0.697
NEG_P3	- -	- -	- -	- -	- -	0.702
NEG_P4	- -	- -	- -	- -	- -	0.657
NEG_P5	- -	- -	- -	- -	- -	0.689
PLA_P1	- -	- -	- -	- -	- -	- -
PLA_P2	- -	- -	- -	- -	- -	- -
SOB_P1	- -	- -	- -	- -	- -	- -
SOB_P2	- -	- -	- -	- -	- -	- -
SOB_P3	- -	- -	- -	- -	- -	- -
ACH_P1	- -	- -	- -	- -	- -	- -
ACH_P2	- -	- -	- -	- -	- -	- -
ACH_P3	- -	- -	- -	- -	- -	- -
ACH_P4	- -	- -	- -	- -	- -	- -
ACH_P5	- -	- -	- -	- -	- -	- -
ORD_P1	- -	- -	- -	- -	- -	- -

ORD_P2	- -	- -	- -	- -	- -	- -
ORD_P3	- -	- -	- -	- -	- -	- -
ORD_P4	- -	- -	- -	- -	- -	- -
ORD_P5	- -	- -	- -	- -	- -	- -
ORD_P6	- -	- -	- -	- -	- -	- -
TRA_P1	- -	- -	- -	- -	- -	- -
TRA_P2	- -	- -	- -	- -	- -	- -
BRO_P1	- -	- -	- -	- -	- -	- -
BRO_P2	- -	- -	- -	- -	- -	- -
BRO_P3	- -	- -	- -	- -	- -	- -
EPI_P1	- -	- -	- -	- -	- -	- -
EPI_P2	- -	- -	- -	- -	- -	- -
EPI_P3	- -	- -	- -	- -	- -	- -
ITL_P1	- -	- -	- -	- -	- -	- -
ITL_P2	- -	- -	- -	- -	- -	- -
ITL_P3	- -	- -	- -	- -	- -	- -
ITL_P4	- -	- -	- -	- -	- -	- -
ITL_P5	- -	- -	- -	- -	- -	- -

LAMBDA-X

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
EMP_P1	- -	- -	- -	- -	- -	- -
EMP_P2	- -	- -	- -	- -	- -	- -
EMP_P3	- -	- -	- -	- -	- -	- -
FAC_P1	- -	- -	- -	- -	- -	- -
FAC_P2	- -	- -	- -	- -	- -	- -
FAC_P3	- -	- -	- -	- -	- -	- -
FAC_P4	- -	- -	- -	- -	- -	- -
FAC_P5	- -	- -	- -	- -	- -	- -
INT_P1	- -	- -	- -	- -	- -	- -
INT_P2	- -	- -	- -	- -	- -	- -
INT_P3	- -	- -	- -	- -	- -	- -
INT_P4	- -	- -	- -	- -	- -	- -
INT_P5	- -	- -	- -	- -	- -	- -
INT_P6	- -	- -	- -	- -	- -	- -
IPR_P1	- -	- -	- -	- -	- -	- -
IPR_P2	- -	- -	- -	- -	- -	- -
IPR_P3	- -	- -	- -	- -	- -	- -
IPR_P4	- -	- -	- -	- -	- -	- -
SOC_P1	- -	- -	- -	- -	- -	- -
SOC_P2	- -	- -	- -	- -	- -	- -
WAR_P1	- -	- -	- -	- -	- -	- -
WAR_P2	- -	- -	- -	- -	- -	- -
WAR_P3	- -	- -	- -	- -	- -	- -
WAR_P4	- -	- -	- -	- -	- -	- -
WAR_P5	- -	- -	- -	- -	- -	- -
ARR_P1	- -	- -	- -	- -	- -	- -
ARR_P2	- -	- -	- -	- -	- -	- -
ARR_P3	- -	- -	- -	- -	- -	- -
CON_P1	- -	- -	- -	- -	- -	- -
CON_P2	- -	- -	- -	- -	- -	- -
CON_P3	- -	- -	- -	- -	- -	- -
HOS_P1	- -	- -	- -	- -	- -	- -
HOS_P2	- -	- -	- -	- -	- -	- -
HOS_P3	- -	- -	- -	- -	- -	- -
HOS_P4	- -	- -	- -	- -	- -	- -
HOS_P5	- -	- -	- -	- -	- -	- -
HOS_P6	- -	- -	- -	- -	- -	- -
HOS_P7	- -	- -	- -	- -	- -	- -
DEC_P1	- -	- -	- -	- -	- -	- -
DEC_P2	- -	- -	- -	- -	- -	- -
DEC_P3	- -	- -	- -	- -	- -	- -
EMO_P1	- -	- -	- -	- -	- -	- -
EMO_P2	- -	- -	- -	- -	- -	- -
EMO_P3	- -	- -	- -	- -	- -	- -
EMO_P4	- -	- -	- -	- -	- -	- -
NEG_P1	- -	- -	- -	- -	- -	- -
NEG_P2	- -	- -	- -	- -	- -	- -
NEG_P3	- -	- -	- -	- -	- -	- -
NEG_P4	- -	- -	- -	- -	- -	- -
NEG_P5	- -	- -	- -	- -	- -	- -
PLA_P1	0.700	- -	- -	- -	- -	- -
PLA_P2	0.889	- -	- -	- -	- -	- -
SOB_P1	- -	0.815	- -	- -	- -	- -
SOB_P2	- -	0.813	- -	- -	- -	- -

SOB_P3	- -	0.836	- -	- -	- -	- -
ACH_P1	- -	- -	0.714	- -	- -	- -
ACH_P2	- -	- -	0.777	- -	- -	- -
ACH_P3	- -	- -	0.752	- -	- -	- -
ACH_P4	- -	- -	0.714	- -	- -	- -
ACH_P5	- -	- -	0.791	- -	- -	- -
ORD_P1	- -	- -	- -	0.683	- -	- -
ORD_P2	- -	- -	- -	0.774	- -	- -
ORD_P3	- -	- -	- -	0.717	- -	- -
ORD_P4	- -	- -	- -	0.732	- -	- -
ORD_P5	- -	- -	- -	0.737	- -	- -
ORD_P6	- -	- -	- -	0.830	- -	- -
TRA_P1	- -	- -	- -	- -	0.741	- -
TRA_P2	- -	- -	- -	- -	0.958	- -
BRO_P1	- -	- -	- -	- -	- -	0.701
BRO_P2	- -	- -	- -	- -	- -	0.783
BRO_P3	- -	- -	- -	- -	- -	0.762
EPI_P1	- -	- -	- -	- -	- -	- -
EPI_P2	- -	- -	- -	- -	- -	- -
EPI_P3	- -	- -	- -	- -	- -	- -
ITL_P1	- -	- -	- -	- -	- -	- -
ITL_P2	- -	- -	- -	- -	- -	- -
ITL_P3	- -	- -	- -	- -	- -	- -
ITL_P4	- -	- -	- -	- -	- -	- -
ITL_P5	- -	- -	- -	- -	- -	- -

LAMBDA-X

	EPISTEM	INTELLEC
EMP_P1	- -	- -
EMP_P2	- -	- -
EMP_P3	- -	- -
FAC_P1	- -	- -
FAC_P2	- -	- -
FAC_P3	- -	- -
FAC_P4	- -	- -
FAC_P5	- -	- -
INT_P1	- -	- -
INT_P2	- -	- -
INT_P3	- -	- -
INT_P4	- -	- -
INT_P5	- -	- -
INT_P6	- -	- -
IPR_P1	- -	- -
IPR_P2	- -	- -
IPR_P3	- -	- -
IPR_P4	- -	- -
SOC_P1	- -	- -
SOC_P2	- -	- -
WAR_P1	- -	- -
WAR_P2	- -	- -
WAR_P3	- -	- -
WAR_P4	- -	- -
WAR_P5	- -	- -
ARR_P1	- -	- -
ARR_P2	- -	- -
ARR_P3	- -	- -
CON_P1	- -	- -
CON_P2	- -	- -
CON_P3	- -	- -
HOS_P1	- -	- -
HOS_P2	- -	- -
HOS_P3	- -	- -
HOS_P4	- -	- -
HOS_P5	- -	- -
HOS_P6	- -	- -
HOS_P7	- -	- -
DEC_P1	- -	- -
DEC_P2	- -	- -
DEC_P3	- -	- -
EMO_P1	- -	- -
EMO_P2	- -	- -
EMO_P3	- -	- -
EMO_P4	- -	- -
NEG_P1	- -	- -
NEG_P2	- -	- -

NEG_P3	- -	- -
NEG_P4	- -	- -
NEG_P5	- -	- -
PLA_P1	- -	- -
PLA_P2	- -	- -
SOB_P1	- -	- -
SOB_P2	- -	- -
SOB_P3	- -	- -
ACH_P1	- -	- -
ACH_P2	- -	- -
ACH_P3	- -	- -
ACH_P4	- -	- -
ACH_P5	- -	- -
ORD_P1	- -	- -
ORD_P2	- -	- -
ORD_P3	- -	- -
ORD_P4	- -	- -
ORD_P5	- -	- -
ORD_P6	- -	- -
TRA_P1	- -	- -
TRA_P2	- -	- -
BRO_P1	- -	- -
BRO_P2	- -	- -
BRO_P3	- -	- -
EPI_P1	0.612	- -
EPI_P2	0.728	- -
EPI_P3	0.802	- -
ITL_P1	- -	0.656
ITL_P2	- -	0.613
ITL_P3	- -	0.718
ITL_P4	- -	0.708
ITL_P5	- -	0.704

PHI

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMPATHY	1.000					
FACILIT	0.534	1.000				
INTEGRIT	0.640	0.589	1.000			
INTERPER	0.742	0.811	0.755	1.000		
SOC_INT	0.761	0.708	0.600	0.821	1.000	
WARMHEAR	0.869	0.768	0.770	0.933	0.806	1.000
ARROGAN	-0.478	-0.129	-0.487	-0.396	-0.274	-0.434
CONFLICT	-0.328	-0.216	-0.595	-0.412	-0.254	-0.380
HOSTILE	-0.488	-0.302	-0.629	-0.545	-0.397	-0.535
DECEIT	-0.332	-0.424	-0.710	-0.514	-0.391	-0.450
EMOTIONB	0.295	0.576	0.614	0.654	0.525	0.497
NEGATIVE	0.111	-0.310	-0.338	-0.315	-0.151	-0.122
PLAYFULL	0.410	0.382	0.315	0.506	0.578	0.479
SOCIABIL	0.441	0.540	0.419	0.647	0.718	0.589
ACHIEVEM	0.353	0.671	0.676	0.596	0.494	0.547
ORDILIN	0.312	0.448	0.684	0.443	0.333	0.455
TRAD_REL	0.443	0.420	0.446	0.492	0.405	0.519
BROADMIN	0.412	0.536	0.467	0.576	0.506	0.516
EPISTEM	0.435	0.471	0.585	0.537	0.436	0.511
INTELLEC	0.394	0.744	0.656	0.695	0.634	0.584

PHI

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
ARROGAN	1.000					
CONFLICT	0.739	1.000				
HOSTILE	0.854	0.937	1.000			
DECEIT	0.588	0.784	0.836	1.000		
EMOTIONB	-0.215	-0.401	-0.416	-0.540	1.000	
NEGATIVE	0.239	0.493	0.496	0.654	-0.725	1.000
PLAYFULL	-0.020	0.082	-0.046	-0.111	0.326	-0.013
SOCIABIL	-0.122	-0.098	-0.243	-0.346	0.427	-0.198
ACHIEVEM	-0.174	-0.351	-0.360	-0.575	0.664	-0.403
ORDILIN	-0.240	-0.414	-0.393	-0.546	0.466	-0.256
TRAD_REL	-0.273	-0.263	-0.347	-0.346	0.338	-0.109
BROADMIN	-0.061	-0.127	-0.161	-0.235	0.482	-0.153
EPISTEM	-0.212	-0.285	-0.293	-0.324	0.502	-0.190
INTELLEC	-0.060	-0.240	-0.257	-0.437	0.752	-0.418

PHI

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
PLAYFULL	1.000					
SOCIABIL	0.732	1.000				
ACHIEVEM	0.264	0.444	1.000			
ORDILIN	0.113	0.249	0.756	1.000		
TRAD_REL	0.257	0.376	0.432	0.367	1.000	
BROADMIN	0.553	0.510	0.527	0.259	0.298	1.000
EPISTEM	0.337	0.312	0.602	0.407	0.223	0.796
INTELLEC	0.435	0.531	0.763	0.578	0.260	0.745

PHI

	EPISTEM	INTELLEC
EPISTEM	1.000	
INTELLEC	0.750	1.000

THETA-DELTA

EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
0.375	0.492	0.378	0.325	0.311	0.376

THETA-DELTA

FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
0.329	0.415	0.585	0.503	0.604	0.621

THETA-DELTA

INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
0.549	0.459	0.592	0.538	0.501	0.493

THETA-DELTA

SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
0.287	0.310	0.446	0.482	0.394	0.405

THETA-DELTA

WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
0.445	0.393	0.320	0.571	0.545	0.407

THETA-DELTA

CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
0.485	0.545	0.660	0.508	0.601	0.402

THETA-DELTA

HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
0.612	0.645	0.454	0.680	0.453	0.606

THETA-DELTA

EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
0.548	0.461	0.411	0.540	0.514	0.507

THETA-DELTA

NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
0.569	0.525	0.510	0.209	0.336	0.340

THETA-DELTA

SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5

0.301	0.490	0.397	0.435	0.490	0.374

THETA-DELTA

ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
0.534	0.400	0.486	0.464	0.457	0.311

THETA-DELTA

TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
0.451	0.083	0.508	0.387	0.420	0.626

THETA-DELTA

EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
0.470	0.356	0.570	0.624	0.485	0.499

THETA-DELTA

ITL_P5
0.505

Time used: 2258.520 Seconds

```
                              DATE:  6/ 1/2017
                                TIME: 13:12


                           L I S R E L  8.8 (64 bit)

                                      BY

                         Karl G. Joreskog & Dag Sorbom



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The following lines were read from file SAPIP2_2F.SPJ:

SAPI SECOND-ORDER MEASUREMENT MODEL WITH ITEM PARCELS AS INDICATORS
Raw Data from file C:\LISREL88\SAPIP2N.psf
Asymptotic Covariance Matrix From File C:\LISREL88\SAPIP2N.ACM
Sample Size = 3912
Latent Variables  EMPATHY FACILIT INTEGRIT INTERPER SOC_INT WARMHEAR ARROGAN CONFLICTS HOSTILE
DECEIT EMOTIONB NEGATIVE PLAYFULL SOCIABIL ACHIEVEM ORDILIN TRAD_REL BROADMIN
EPISTEM INTELLEC SRP SRN NEUROT EXTRAV CONSC OPENN
Relationships
EMP_P1 = EMPATHY
EMP_P2 = EMPATHY
EMP_P3 = EMPATHY
FAC_P1 = FACILIT
FAC_P2 = FACILIT
FAC_P3 = FACILIT
FAC_P4 = FACILIT
FAC_P5 = FACILIT
INT_P1 = INTEGRIT
INT_P2 = INTEGRIT
INT_P3 = INTEGRIT
INT_P4 = INTEGRIT
INT_P5 = INTEGRIT
INT_P6 = INTEGRIT
IPR_P1 = INTERPER
IPR_P2 = INTERPER
IPR_P3 = INTERPER
IPR_P4 = INTERPER
SOC_P1 = SOC_INT
SOC_P2 = SOC_INT
WAR_P1 = WARMHEAR
WAR_P2 = WARMHEAR
WAR_P3 = WARMHEAR
WAR_P4 = WARMHEAR
WAR_P5 = WARMHEAR
ARR_P1 = ARROGAN
ARR_P2 = ARROGAN
ARR_P3 = ARROGAN
CON_P1 = CONFLICTS
CON_P2 = CONFLICTS
CON_P3 = CONFLICTS
HOS_P1 = HOSTILE
HOS_P2 = HOSTILE
HOS_P3 = HOSTILE
HOS_P4 = HOSTILE
HOS_P5 = HOSTILE
HOS_P6 = HOSTILE
HOS_P7 = HOSTILE
DEC_P1 = DECEIT
DEC_P2 = DECEIT
DEC_P3 = DECEIT
EMO_P1 = EMOTIONB
EMO_P2 = EMOTIONB
EMO_P3 = EMOTIONB
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EMO_P4 = EMOTIONB
NEG_P1 = NEGATIVE
NEG_P2 = NEGATIVE
NEG_P3 = NEGATIVE
NEG_P4 = NEGATIVE
NEG_P5 = NEGATIVE
PLA_P1 = PLAYFULL
PLA_P2 = PLAYFULL
SOB_P1 = SOCIABIL
SOB_P2 = SOCIABIL
SOB_P3 = SOCIABIL
ACH_P1 = ACHIEVEM
ACH_P2 = ACHIEVEM
ACH_P3 = ACHIEVEM
ACH_P4 = ACHIEVEM
ACH_P5 = ACHIEVEM
ORD_P1 = ORDILIN
ORD_P2 = ORDILIN
ORD_P3 = ORDILIN
ORD_P4 = ORDILIN
ORD_P5 = ORDILIN
ORD_P6 = ORDILIN
TRA_P1 = TRAD_REL
TRA_P2 = TRAD_REL
BRO_P1 = BROADMIN
BRO_P2 = BROADMIN
BRO_P3 = BROADMIN
EPI_P1 = EPISTEM
EPI_P2 = EPISTEM
EPI_P3 = EPISTEM
ITL_P1 = INTELLEC
ITL_P2 = INTELLEC
ITL_P2 = INTELLEC
ITL_P3 = INTELLEC
ITL_P4 = INTELLEC
ITL_P5 = INTELLEC
SRP = EMPATHY FACILIT INTEGRIT INTERPER SOC_INT WARMHEAR
SRN = ARROGAN CONFLICTS HOSTILE DECEIT
NEUROT = EMOTIONB NEGATIVE
EXTRAV = PLAYFULL SOCIABIL
CONSC = ACHIEVEM ORDILIN TRAD_REL
OPENN = BROADMIN EPISTEM INTELLEC
Path Diagram
LISREL OUTPUT: SS SC MI RS ND=3 AD=900 IT=900
End of Problem
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SAPI SECOND-ORDER MEASUREMENT MODEL WITH ITEM PARCELS AS INDICATORS

Covariance Matrix

	EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
EMP_P1	0.383					
EMP_P2	0.169	0.254				
EMP_P3	0.247	0.157	0.359			
FAC_P1	0.154	0.146	0.131	0.426		
FAC_P2	0.127	0.127	0.102	0.309	0.506	
FAC_P3	0.112	0.131	0.095	0.285	0.404	0.526
FAC_P4	0.153	0.145	0.136	0.291	0.301	0.291
FAC_P5	0.118	0.124	0.102	0.253	0.251	0.231
INT_P1	0.073	0.091	0.064	0.131	0.104	0.140
INT_P2	0.075	0.100	0.075	0.116	0.095	0.125
INT_P3	0.136	0.141	0.140	0.132	0.117	0.132
INT_P4	0.112	0.135	0.108	0.154	0.122	0.141
INT_P5	0.131	0.126	0.126	0.119	0.101	0.109
INT_P6	0.084	0.097	0.079	0.103	0.091	0.117
IPR_P1	0.123	0.118	0.113	0.173	0.173	0.170
IPR_P2	0.146	0.134	0.136	0.207	0.207	0.196
IPR_P3	0.125	0.115	0.109	0.179	0.188	0.166
IPR_P4	0.142	0.140	0.128	0.148	0.127	0.125
SOC_P1	0.177	0.143	0.149	0.204	0.233	0.208
SOC_P2	0.210	0.154	0.191	0.183	0.187	0.171
WAR_P1	0.160	0.137	0.154	0.174	0.149	0.158
WAR_P2	0.177	0.138	0.170	0.168	0.157	0.148
WAR_P3	0.202	0.149	0.196	0.172	0.142	0.138
WAR_P4	0.147	0.136	0.136	0.199	0.196	0.185
WAR_P5	0.149	0.135	0.142	0.178	0.168	0.164

ARR_P1	-0.132	-0.108	-0.127	-0.055	0.022	-0.001
ARR_P2	-0.141	-0.122	-0.137	-0.075	-0.015	-0.043
ARR_P3	-0.106	-0.106	-0.092	-0.072	-0.007	-0.035
CON_P1	-0.038	-0.082	-0.050	-0.111	-0.053	-0.122
CON_P2	-0.078	-0.091	-0.078	-0.077	-0.039	-0.077
CON_P3	-0.065	-0.072	-0.067	-0.034	0.008	-0.040
HOS_P1	-0.079	-0.090	-0.083	-0.080	-0.031	-0.079
HOS_P2	-0.081	-0.070	-0.087	-0.035	0.002	-0.029
HOS_P3	-0.112	-0.112	-0.104	-0.096	-0.069	-0.095
HOS_P4	-0.142	-0.123	-0.118	-0.108	-0.056	-0.079
HOS_P5	-0.118	-0.115	-0.115	-0.087	-0.045	-0.081
HOS_P6	-0.087	-0.078	-0.073	-0.100	-0.077	-0.114
HOS_P7	-0.068	-0.087	-0.059	-0.090	-0.064	-0.119
DEC_P1	-0.069	-0.087	-0.061	-0.115	-0.104	-0.163
DEC_P2	-0.036	-0.056	-0.043	-0.082	-0.057	-0.089
DEC_P3	-0.097	-0.121	-0.082	-0.154	-0.137	-0.194
EMO_P1	0.066	0.115	0.053	0.167	0.178	0.242
EMO_P2	0.063	0.081	0.047	0.122	0.125	0.144
EMO_P3	0.064	0.088	0.051	0.148	0.154	0.172
EMO_P4	0.053	0.084	0.034	0.148	0.156	0.185
NEG_P1	0.043	-0.015	0.078	-0.078	-0.056	-0.090
NEG_P2	0.010	-0.041	0.038	-0.143	-0.126	-0.185
NEG_P3	0.067	0.003	0.101	-0.113	-0.117	-0.148
NEG_P4	0.140	0.052	0.163	-0.025	-0.019	-0.072
NEG_P5	-0.061	-0.094	-0.043	-0.141	-0.122	-0.183
PLA_P1	0.094	0.096	0.084	0.119	0.160	0.114
PLA_P2	0.114	0.122	0.118	0.115	0.143	0.117
SOB_P1	0.117	0.131	0.102	0.180	0.214	0.195
SOB_P2	0.146	0.144	0.126	0.184	0.201	0.198
SOB_P3	0.128	0.150	0.109	0.192	0.230	0.221
ACH_P1	0.067	0.088	0.054	0.175	0.164	0.193
ACH_P2	0.072	0.114	0.065	0.192	0.198	0.242
ACH_P3	0.067	0.101	0.061	0.169	0.169	0.218
ACH_P4	0.072	0.089	0.062	0.124	0.119	0.161
ACH_P5	0.061	0.108	0.054	0.194	0.216	0.256
ORD_P1	0.058	0.072	0.063	0.095	0.090	0.141
ORD_P2	0.050	0.065	0.047	0.090	0.087	0.138
ORD_P3	0.063	0.083	0.064	0.138	0.135	0.171
ORD_P4	0.075	0.097	0.066	0.117	0.114	0.183
ORD_P5	0.076	0.089	0.074	0.124	0.119	0.169
ORD_P6	0.054	0.075	0.054	0.109	0.104	0.156
TRA_P1	0.122	0.122	0.113	0.151	0.167	0.195
TRA_P2	0.161	0.157	0.172	0.186	0.184	0.213
BRO_P1	0.093	0.103	0.101	0.125	0.124	0.106
BRO_P2	0.080	0.109	0.083	0.187	0.195	0.186
BRO_P3	0.073	0.096	0.084	0.125	0.128	0.123
EPI_P1	0.069	0.090	0.064	0.117	0.100	0.115
EPI_P2	0.077	0.085	0.086	0.098	0.078	0.062
EPI_P3	0.059	0.086	0.064	0.110	0.098	0.097
ITL_P1	0.078	0.085	0.060	0.133	0.130	0.132
ITL_P2	0.056	0.071	0.042	0.110	0.128	0.118
ITL_P3	0.067	0.096	0.059	0.207	0.215	0.205
ITL_P4	0.072	0.092	0.060	0.163	0.181	0.184
ITL_P5	0.075	0.092	0.053	0.174	0.196	0.210

Covariance Matrix

	FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
FAC_P4	0.418					
FAC_P5	0.254	0.350				
INT_P1	0.107	0.099	0.369			
INT_P2	0.103	0.098	0.167	0.258		
INT_P3	0.126	0.103	0.121	0.131	0.314	
INT_P4	0.152	0.132	0.159	0.141	0.096	0.382
INT_P5	0.118	0.106	0.108	0.107	0.139	0.136
INT_P6	0.107	0.092	0.148	0.132	0.119	0.121
IPR_P1	0.173	0.145	0.093	0.080	0.108	0.114
IPR_P2	0.216	0.171	0.106	0.086	0.117	0.161
IPR_P3	0.182	0.166	0.101	0.092	0.100	0.128
IPR_P4	0.155	0.137	0.095	0.087	0.112	0.154
SOC_P1	0.205	0.174	0.099	0.093	0.137	0.127
SOC_P2	0.187	0.156	0.092	0.092	0.142	0.127
WAR_P1	0.169	0.138	0.117	0.102	0.148	0.130
WAR_P2	0.163	0.132	0.104	0.095	0.150	0.125
WAR_P3	0.172	0.141	0.094	0.090	0.141	0.131
WAR_P4	0.200	0.171	0.098	0.095	0.122	0.145

WAR_P5	0.184	0.156	0.092	0.092	0.128	0.126
ARR_P1	-0.051	-0.025	-0.110	-0.088	-0.094	-0.150
ARR_P2	-0.070	-0.038	-0.106	-0.088	-0.108	-0.151
ARR_P3	-0.075	-0.046	-0.087	-0.078	-0.081	-0.148
CON_P1	-0.106	-0.076	-0.167	-0.114	-0.083	-0.189
CON_P2	-0.071	-0.062	-0.107	-0.095	-0.102	-0.141
CON_P3	-0.036	-0.018	-0.095	-0.079	-0.078	-0.116
HOS_P1	-0.085	-0.054	-0.115	-0.080	-0.081	-0.158
HOS_P2	-0.038	-0.021	-0.089	-0.069	-0.068	-0.122
HOS_P3	-0.096	-0.076	-0.094	-0.086	-0.110	-0.132
HOS_P4	-0.097	-0.079	-0.111	-0.098	-0.118	-0.124
HOS_P5	-0.088	-0.066	-0.111	-0.098	-0.111	-0.152
HOS_P6	-0.103	-0.065	-0.114	-0.085	-0.084	-0.123
HOS_P7	-0.085	-0.066	-0.193	-0.137	-0.098	-0.158
DEC_P1	-0.108	-0.088	-0.196	-0.144	-0.124	-0.133
DEC_P2	-0.064	-0.057	-0.155	-0.103	-0.089	-0.099
DEC_P3	-0.145	-0.108	-0.194	-0.129	-0.132	-0.159
EMO_P1	0.164	0.132	0.151	0.121	0.124	0.136
EMO_P2	0.114	0.116	0.098	0.091	0.085	0.122
EMO_P3	0.143	0.132	0.103	0.104	0.095	0.137
EMO_P4	0.143	0.139	0.109	0.107	0.091	0.126
NEG_P1	-0.073	-0.079	-0.095	-0.074	-0.021	-0.103
NEG_P2	-0.122	-0.098	-0.164	-0.118	-0.058	-0.131
NEG_P3	-0.097	-0.095	-0.103	-0.070	-0.019	-0.073
NEG_P4	-0.011	-0.013	-0.053	-0.025	0.036	-0.031
NEG_P5	-0.132	-0.112	-0.140	-0.119	-0.096	-0.165
PLA_P1	0.117	0.127	0.028	0.038	0.085	0.047
PLA_P2	0.133	0.117	0.056	0.051	0.118	0.080
SOB_P1	0.178	0.159	0.073	0.064	0.114	0.093
SOB_P2	0.176	0.159	0.097	0.104	0.143	0.123
SOB_P3	0.194	0.160	0.094	0.078	0.142	0.133
ACH_P1	0.146	0.122	0.122	0.116	0.106	0.093
ACH_P2	0.173	0.149	0.129	0.137	0.121	0.106
ACH_P3	0.161	0.144	0.137	0.134	0.108	0.136
ACH_P4	0.110	0.111	0.117	0.126	0.105	0.106
ACH_P5	0.184	0.158	0.115	0.116	0.119	0.101
ORD_P1	0.091	0.072	0.145	0.117	0.084	0.109
ORD_P2	0.087	0.081	0.141	0.131	0.098	0.088
ORD_P3	0.126	0.120	0.134	0.132	0.093	0.115
ORD_P4	0.114	0.093	0.153	0.159	0.124	0.122
ORD_P5	0.126	0.110	0.123	0.116	0.096	0.112
ORD_P6	0.106	0.095	0.135	0.126	0.095	0.105
TRA_P1	0.161	0.109	0.097	0.090	0.125	0.116
TRA_P2	0.204	0.137	0.119	0.104	0.158	0.156
BRO_P1	0.113	0.112	0.058	0.062	0.089	0.074
BRO_P2	0.172	0.162	0.088	0.083	0.099	0.106
BRO_P3	0.111	0.122	0.075	0.078	0.094	0.094
EPI_P1	0.098	0.100	0.092	0.083	0.084	0.094
EPI_P2	0.078	0.100	0.062	0.076	0.073	0.068
EPI_P3	0.093	0.112	0.081	0.090	0.080	0.091
ITL_P1	0.116	0.124	0.083	0.083	0.082	0.088
ITL_P2	0.095	0.111	0.093	0.099	0.070	0.089
ITL_P3	0.190	0.184	0.108	0.112	0.078	0.118
ITL_P4	0.154	0.160	0.107	0.105	0.089	0.101
ITL_P5	0.158	0.163	0.110	0.106	0.097	0.089

Covariance Matrix

	INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
INT_P5	0.248					
INT_P6	0.116	0.227				
IPR_P1	0.103	0.079	0.330			
IPR_P2	0.118	0.095	0.154	0.433		
IPR_P3	0.111	0.101	0.129	0.191	0.289	
IPR_P4	0.128	0.098	0.121	0.166	0.141	0.260
SOC_P1	0.119	0.093	0.175	0.178	0.164	0.148
SOC_P2	0.125	0.094	0.162	0.169	0.150	0.150
WAR_P1	0.125	0.095	0.137	0.163	0.129	0.135
WAR_P2	0.123	0.088	0.143	0.170	0.140	0.137
WAR_P3	0.129	0.093	0.125	0.162	0.136	0.141
WAR_P4	0.142	0.098	0.149	0.184	0.164	0.141
WAR_P5	0.125	0.094	0.128	0.167	0.142	0.138
ARR_P1	-0.104	-0.088	-0.066	-0.078	-0.056	-0.104
ARR_P2	-0.118	-0.091	-0.095	-0.106	-0.063	-0.117
ARR_P3	-0.093	-0.076	-0.081	-0.107	-0.072	-0.115
CON_P1	-0.081	-0.117	-0.076	-0.127	-0.081	-0.108

CON_P2	-0.099	-0.111	-0.080	-0.094	-0.072	-0.093
CON_P3	-0.079	-0.097	-0.052	-0.055	-0.046	-0.070
HOS_P1	-0.091	-0.086	-0.086	-0.124	-0.069	-0.110
HOS_P2	-0.083	-0.076	-0.057	-0.095	-0.057	-0.076
HOS_P3	-0.101	-0.089	-0.100	-0.128	-0.083	-0.117
HOS_P4	-0.108	-0.090	-0.102	-0.105	-0.086	-0.118
HOS_P5	-0.115	-0.105	-0.092	-0.115	-0.084	-0.117
HOS_P6	-0.080	-0.079	-0.087	-0.115	-0.082	-0.093
HOS_P7	-0.107	-0.131	-0.084	-0.086	-0.077	-0.090
DEC_P1	-0.107	-0.138	-0.098	-0.096	-0.090	-0.088
DEC_P2	-0.074	-0.097	-0.053	-0.064	-0.055	-0.062
DEC_P3	-0.107	-0.131	-0.142	-0.153	-0.118	-0.140
EMO_P1	0.099	0.125	0.129	0.146	0.110	0.122
EMO_P2	0.087	0.092	0.110	0.128	0.100	0.110
EMO_P3	0.096	0.107	0.114	0.164	0.118	0.131
EMO_P4	0.089	0.113	0.105	0.137	0.121	0.117
NEG_P1	-0.041	-0.068	-0.069	-0.098	-0.055	-0.075
NEG_P2	-0.055	-0.099	-0.088	-0.108	-0.086	-0.078
NEG_P3	-0.009	-0.057	-0.066	-0.077	-0.056	-0.050
NEG_P4	0.027	-0.012	-0.012	-0.027	0.007	0.003
NEG_P5	-0.099	-0.112	-0.124	-0.154	-0.100	-0.127
PLA_P1	0.074	0.035	0.124	0.106	0.116	0.090
PLA_P2	0.100	0.060	0.145	0.128	0.118	0.112
SOB_P1	0.097	0.055	0.205	0.152	0.141	0.132
SOB_P2	0.123	0.088	0.203	0.168	0.151	0.143
SOB_P3	0.122	0.077	0.206	0.187	0.156	0.154
ACH_P1	0.080	0.106	0.108	0.100	0.099	0.093
ACH_P2	0.084	0.125	0.116	0.129	0.107	0.105
ACH_P3	0.100	0.133	0.112	0.136	0.125	0.113
ACH_P4	0.093	0.124	0.081	0.084	0.092	0.086
ACH_P5	0.097	0.124	0.122	0.133	0.125	0.114
ORD_P1	0.082	0.123	0.064	0.101	0.079	0.066
ORD_P2	0.074	0.123	0.059	0.052	0.069	0.063
ORD_P3	0.087	0.132	0.085	0.089	0.110	0.088
ORD_P4	0.101	0.149	0.082	0.078	0.096	0.088
ORD_P5	0.092	0.124	0.084	0.099	0.098	0.085
ORD_P6	0.088	0.132	0.074	0.092	0.091	0.074
TRA_P1	0.109	0.108	0.109	0.166	0.092	0.117
TRA_P2	0.132	0.135	0.143	0.202	0.137	0.156
BRO_P1	0.080	0.065	0.097	0.095	0.095	0.094
BRO_P2	0.092	0.078	0.134	0.139	0.126	0.113
BRO_P3	0.090	0.080	0.108	0.097	0.104	0.102
EPI_P1	0.080	0.085	0.088	0.085	0.090	0.080
EPI_P2	0.080	0.069	0.070	0.054	0.084	0.076
EPI_P3	0.078	0.085	0.076	0.073	0.089	0.085
ITL_P1	0.081	0.087	0.100	0.087	0.102	0.089
ITL_P2	0.069	0.086	0.078	0.072	0.088	0.066
ITL_P3	0.084	0.096	0.125	0.143	0.144	0.104
ITL_P4	0.084	0.106	0.113	0.113	0.134	0.099
ITL_P5	0.089	0.106	0.119	0.119	0.125	0.103

Covariance Matrix

	SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4
SOC_P1	0.370					
SOC_P2	0.255	0.357				
WAR_P1	0.156	0.158	0.290			
WAR_P2	0.177	0.181	0.189	0.331		
WAR_P3	0.161	0.173	0.169	0.178	0.283	
WAR_P4	0.175	0.168	0.156	0.157	0.159	0.274
WAR_P5	0.150	0.149	0.162	0.155	0.159	0.156
ARR_P1	-0.054	-0.085	-0.093	-0.107	-0.122	-0.068
ARR_P2	-0.079	-0.106	-0.117	-0.129	-0.132	-0.092
ARR_P3	-0.066	-0.084	-0.096	-0.108	-0.108	-0.083
CON_P1	-0.067	-0.061	-0.092	-0.089	-0.089	-0.088
CON_P2	-0.070	-0.077	-0.092	-0.079	-0.087	-0.085
CON_P3	-0.040	-0.056	-0.063	-0.057	-0.068	-0.059
HOS_P1	-0.073	-0.084	-0.095	-0.097	-0.096	-0.079
HOS_P2	-0.057	-0.065	-0.077	-0.089	-0.089	-0.067
HOS_P3	-0.103	-0.109	-0.107	-0.106	-0.115	-0.101
HOS_P4	-0.101	-0.111	-0.125	-0.123	-0.134	-0.103
HOS_P5	-0.090	-0.110	-0.112	-0.118	-0.122	-0.104
HOS_P6	-0.093	-0.087	-0.102	-0.101	-0.101	-0.089
HOS_P7	-0.082	-0.079	-0.095	-0.078	-0.082	-0.091
DEC_P1	-0.106	-0.095	-0.098	-0.090	-0.087	-0.090
DEC_P2	-0.038	-0.052	-0.059	-0.067	-0.057	-0.053

DEC_P3	-0.141	-0.127	-0.126	-0.135	-0.107	-0.122
EMO_P1	0.143	0.120	0.122	0.108	0.090	0.119
EMO_P2	0.127	0.110	0.095	0.092	0.078	0.111
EMO_P3	0.142	0.129	0.095	0.101	0.079	0.118
EMO_P4	0.138	0.110	0.087	0.084	0.079	0.109
NEG_P1	-0.053	-0.021	-0.019	-0.008	-0.010	-0.050
NEG_P2	-0.082	-0.048	-0.061	-0.039	-0.034	-0.062
NEG_P3	-0.065	-0.022	-0.016	-0.004	0.025	-0.025
NEG_P4	0.019	0.058	0.034	0.048	0.065	0.020
NEG_P5	-0.115	-0.096	-0.109	-0.092	-0.082	-0.112
PLA_P1	0.159	0.134	0.085	0.096	0.082	0.115
PLA_P2	0.188	0.189	0.118	0.131	0.105	0.145
SOB_P1	0.250	0.217	0.144	0.155	0.113	0.175
SOB_P2	0.246	0.219	0.156	0.170	0.134	0.182
SOB_P3	0.267	0.219	0.158	0.178	0.132	0.196
ACH_P1	0.119	0.097	0.104	0.087	0.081	0.097
ACH_P2	0.135	0.123	0.120	0.105	0.096	0.117
ACH_P3	0.124	0.112	0.120	0.103	0.097	0.132
ACH_P4	0.099	0.088	0.095	0.083	0.081	0.099
ACH_P5	0.149	0.121	0.114	0.096	0.083	0.132
ORD_P1	0.074	0.060	0.091	0.090	0.072	0.084
ORD_P2	0.072	0.070	0.082	0.073	0.064	0.067
ORD_P3	0.095	0.087	0.094	0.086	0.086	0.103
ORD_P4	0.100	0.090	0.100	0.096	0.082	0.097
ORD_P5	0.090	0.079	0.097	0.089	0.087	0.107
ORD_P6	0.079	0.071	0.088	0.079	0.073	0.089
TRA_P1	0.133	0.125	0.148	0.139	0.116	0.133
TRA_P2	0.165	0.173	0.179	0.178	0.161	0.163
BRO_P1	0.112	0.119	0.086	0.097	0.084	0.103
BRO_P2	0.143	0.132	0.108	0.112	0.089	0.142
BRO_P3	0.122	0.118	0.093	0.093	0.079	0.112
EPI_P1	0.081	0.083	0.086	0.085	0.079	0.090
EPI_P2	0.080	0.085	0.066	0.068	0.069	0.080
EPI_P3	0.084	0.089	0.079	0.073	0.076	0.093
ITL_P1	0.132	0.116	0.087	0.080	0.075	0.105
ITL_P2	0.099	0.079	0.064	0.050	0.060	0.084
ITL_P3	0.151	0.116	0.099	0.099	0.089	0.138
ITL_P4	0.153	0.128	0.095	0.088	0.091	0.123
ITL_P5	0.158	0.127	0.100	0.093	0.083	0.117

Covariance Matrix

	WAR_P5	ARR_P1	ARR_P2	ARR_P3	CON_P1	CON_P2
WAR_P5	0.272					
ARR_P1	-0.075	0.609				
ARR_P2	-0.091	0.367	0.535			
ARR_P3	-0.086	0.298	0.295	0.562		
CON_P1	-0.071	0.242	0.209	0.211	0.728	
CON_P2	-0.066	0.213	0.213	0.175	0.259	0.383
CON_P3	-0.047	0.221	0.209	0.194	0.262	0.223
HOS_P1	-0.068	0.250	0.247	0.193	0.341	0.231
HOS_P2	-0.054	0.232	0.209	0.162	0.234	0.184
HOS_P3	-0.085	0.215	0.226	0.185	0.196	0.212
HOS_P4	-0.108	0.250	0.254	0.219	0.178	0.170
HOS_P5	-0.097	0.264	0.279	0.223	0.242	0.230
HOS_P6	-0.090	0.189	0.192	0.179	0.228	0.172
HOS_P7	-0.061	0.205	0.203	0.189	0.315	0.236
DEC_P1	-0.077	0.159	0.171	0.137	0.250	0.203
DEC_P2	-0.051	0.158	0.140	0.135	0.229	0.155
DEC_P3	-0.111	0.210	0.218	0.196	0.269	0.214
EMO_P1	0.113	-0.063	-0.100	-0.091	-0.150	-0.130
EMO_P2	0.089	-0.048	-0.065	-0.071	-0.103	-0.094
EMO_P3	0.101	-0.047	-0.063	-0.065	-0.103	-0.094
EMO_P4	0.097	-0.038	-0.053	-0.058	-0.113	-0.099
NEG_P1	-0.011	0.065	0.067	0.083	0.183	0.138
NEG_P2	-0.058	0.114	0.100	0.134	0.266	0.153
NEG_P3	-0.015	0.013	0.008	0.057	0.177	0.086
NEG_P4	0.037	0.014	0.010	0.048	0.147	0.063
NEG_P5	-0.090	0.177	0.177	0.184	0.281	0.234
PLA_P1	0.109	0.053	0.028	0.009	0.127	0.027
PLA_P2	0.127	0.004	-0.028	-0.031	0.088	-0.013
SOB_P1	0.132	0.008	-0.030	-0.047	0.005	-0.019
SOB_P2	0.147	-0.051	-0.090	-0.075	-0.047	-0.081
SOB_P3	0.161	-0.010	-0.056	-0.057	-0.039	-0.044
ACH_P1	0.095	-0.038	-0.057	-0.046	-0.105	-0.075
ACH_P2	0.112	-0.047	-0.063	-0.073	-0.121	-0.096

ACH_P3	0.123	-0.043	-0.073	-0.076	-0.148	-0.103
ACH_P4	0.104	-0.057	-0.075	-0.068	-0.101	-0.086
ACH_P5	0.128	0.023	-0.021	-0.031	-0.081	-0.069
ORD_P1	0.086	-0.071	-0.100	-0.067	-0.147	-0.101
ORD_P2	0.084	-0.053	-0.064	-0.051	-0.123	-0.077
ORD_P3	0.101	-0.040	-0.059	-0.049	-0.109	-0.086
ORD_P4	0.103	-0.080	-0.094	-0.072	-0.153	-0.106
ORD_P5	0.114	-0.062	-0.088	-0.058	-0.136	-0.093
ORD_P6	0.097	-0.056	-0.072	-0.041	-0.133	-0.095
TRA_P1	0.150	-0.075	-0.113	-0.081	-0.089	-0.082
TRA_P2	0.188	-0.114	-0.151	-0.121	-0.121	-0.106
BRO_P1	0.096	-0.023	-0.038	-0.032	-0.006	-0.042
BRO_P2	0.132	0.021	-0.005	-0.014	-0.055	-0.025
BRO_P3	0.098	-0.012	-0.028	-0.040	-0.031	-0.051
EPI_P1	0.080	-0.071	-0.082	-0.075	-0.081	-0.087
EPI_P2	0.076	-0.046	-0.042	-0.032	-0.008	-0.050
EPI_P3	0.086	-0.039	-0.036	-0.045	-0.052	-0.066
ITL_P1	0.092	-0.024	-0.026	-0.036	-0.057	-0.054
ITL_P2	0.073	0.001	-0.012	-0.013	-0.027	-0.036
ITL_P3	0.122	0.020	-0.002	-0.030	-0.080	-0.045
ITL_P4	0.105	-0.016	-0.019	-0.033	-0.069	-0.062
ITL_P5	0.105	-0.004	-0.017	-0.024	-0.085	-0.064

Covariance Matrix

	CON_P3	HOS_P1	HOS_P2	HOS_P3	HOS_P4	HOS_P5
CON_P3	0.394					
HOS_P1	0.230	0.576				
HOS_P2	0.187	0.244	0.497			
HOS_P3	0.174	0.209	0.187	0.376		
HOS_P4	0.157	0.176	0.138	0.195	0.442	
HOS_P5	0.211	0.254	0.213	0.219	0.214	0.412
HOS_P6	0.157	0.234	0.174	0.176	0.191	0.196
HOS_P7	0.225	0.280	0.197	0.187	0.172	0.232
DEC_P1	0.174	0.213	0.163	0.171	0.165	0.192
DEC_P2	0.125	0.170	0.135	0.123	0.133	0.150
DEC_P3	0.169	0.241	0.170	0.206	0.212	0.234
EMO_P1	-0.091	-0.129	-0.068	-0.144	-0.101	-0.117
EMO_P2	-0.073	-0.110	-0.057	-0.108	-0.063	-0.071
EMO_P3	-0.059	-0.091	-0.056	-0.111	-0.075	-0.078
EMO_P4	-0.074	-0.100	-0.053	-0.102	-0.069	-0.077
NEG_P1	0.104	0.174	0.108	0.141	0.083	0.103
NEG_P2	0.123	0.202	0.119	0.134	0.117	0.147
NEG_P3	0.050	0.116	0.022	0.089	0.070	0.057
NEG_P4	0.046	0.092	0.023	0.060	0.037	0.037
NEG_P5	0.194	0.265	0.165	0.232	0.189	0.207
PLA_P1	0.052	0.052	0.046	-0.007	-0.026	0.034
PLA_P2	0.010	0.003	0.010	-0.048	-0.053	-0.021
SOB_P1	0.021	-0.003	0.010	-0.058	-0.088	-0.038
SOB_P2	-0.042	-0.077	-0.047	-0.110	-0.123	-0.103
SOB_P3	0.002	-0.070	-0.020	-0.094	-0.098	-0.068
ACH_P1	-0.047	-0.060	-0.038	-0.078	-0.076	-0.073
ACH_P2	-0.059	-0.075	-0.040	-0.097	-0.096	-0.093
ACH_P3	-0.080	-0.099	-0.047	-0.100	-0.087	-0.098
ACH_P4	-0.071	-0.066	-0.058	-0.075	-0.082	-0.089
ACH_P5	-0.038	-0.043	-0.002	-0.071	-0.053	-0.063
ORD_P1	-0.096	-0.108	-0.100	-0.088	-0.065	-0.121
ORD_P2	-0.072	-0.065	-0.054	-0.066	-0.073	-0.078
ORD_P3	-0.059	-0.054	-0.036	-0.061	-0.068	-0.072
ORD_P4	-0.091	-0.097	-0.075	-0.087	-0.090	-0.114
ORD_P5	-0.084	-0.095	-0.073	-0.079	-0.075	-0.100
ORD_P6	-0.080	-0.087	-0.069	-0.073	-0.065	-0.094
TRA_P1	-0.065	-0.107	-0.057	-0.099	-0.095	-0.108
TRA_P2	-0.099	-0.146	-0.087	-0.136	-0.127	-0.153
BRO_P1	-0.017	-0.020	-0.006	-0.056	-0.049	-0.044
BRO_P2	-0.001	-0.033	0.007	-0.043	-0.033	-0.026
BRO_P3	-0.034	-0.034	-0.018	-0.061	-0.050	-0.044
EPI_P1	-0.066	-0.059	-0.054	-0.093	-0.081	-0.086
EPI_P2	-0.033	-0.013	-0.018	-0.056	-0.062	-0.042
EPI_P3	-0.042	-0.039	-0.035	-0.066	-0.062	-0.057
ITL_P1	-0.041	-0.035	-0.017	-0.062	-0.054	-0.041
ITL_P2	-0.020	-0.013	-0.007	-0.038	-0.051	-0.027
ITL_P3	-0.016	-0.035	-0.010	-0.051	-0.049	-0.026
ITL_P4	-0.036	-0.040	-0.022	-0.063	-0.059	-0.049
ITL_P5	-0.022	-0.044	-0.018	-0.066	-0.069	-0.052

Covariance Matrix

	HOS_P6	HOS_P7	DEC_P1	DEC_P2	DEC_P3	EMO_P1
HOS_P6	0.451					
HOS_P7	0.253	0.698				
DEC_P1	0.196	0.322	0.478			
DEC_P2	0.151	0.241	0.213	0.513		
DEC_P3	0.215	0.277	0.284	0.249	0.609	
EMO_P1	-0.111	-0.139	-0.178	-0.125	-0.253	0.513
EMO_P2	-0.087	-0.108	-0.123	-0.051	-0.112	0.176
EMO_P3	-0.085	-0.105	-0.135	-0.075	-0.153	0.213
EMO_P4	-0.095	-0.120	-0.137	-0.074	-0.140	0.207
NEG_P1	0.162	0.190	0.179	0.118	0.162	-0.158
NEG_P2	0.185	0.238	0.251	0.216	0.307	-0.257
NEG_P3	0.130	0.139	0.164	0.142	0.209	-0.208
NEG_P4	0.103	0.116	0.122	0.112	0.155	-0.138
NEG_P5	0.232	0.285	0.254	0.175	0.280	-0.243
PLA_P1	0.012	0.023	0.007	0.019	-0.019	0.052
PLA_P2	-0.015	-0.006	-0.036	0.000	-0.079	0.096
SOB_P1	-0.046	-0.051	-0.065	-0.029	-0.161	0.140
SOB_P2	-0.090	-0.090	-0.109	-0.043	-0.183	0.158
SOB_P3	-0.099	-0.089	-0.101	-0.042	-0.208	0.171
ACH_P1	-0.076	-0.112	-0.137	-0.094	-0.159	0.193
ACH_P2	-0.095	-0.125	-0.148	-0.110	-0.196	0.239
ACH_P3	-0.106	-0.146	-0.149	-0.107	-0.192	0.213
ACH_P4	-0.065	-0.112	-0.124	-0.083	-0.130	0.146
ACH_P5	-0.062	-0.087	-0.124	-0.080	-0.168	0.236
ORD_P1	-0.093	-0.156	-0.137	-0.100	-0.150	0.137
ORD_P2	-0.073	-0.131	-0.144	-0.093	-0.131	0.132
ORD_P3	-0.070	-0.113	-0.124	-0.090	-0.138	0.147
ORD_P4	-0.096	-0.154	-0.169	-0.115	-0.181	0.178
ORD_P5	-0.078	-0.129	-0.121	-0.096	-0.148	0.138
ORD_P6	-0.081	-0.136	-0.137	-0.099	-0.141	0.136
TRA_P1	-0.105	-0.088	-0.075	-0.075	-0.166	0.189
TRA_P2	-0.129	-0.111	-0.117	-0.101	-0.207	0.226
BRO_P1	-0.015	-0.020	-0.037	-0.025	-0.052	0.098
BRO_P2	-0.032	-0.039	-0.073	-0.044	-0.085	0.136
BRO_P3	-0.037	-0.051	-0.059	-0.037	-0.077	0.121
EPI_P1	-0.054	-0.074	-0.091	-0.075	-0.107	0.146
EPI_P2	-0.008	-0.032	-0.054	-0.031	-0.036	0.067
EPI_P3	-0.038	-0.058	-0.070	-0.051	-0.068	0.102
ITL_P1	-0.035	-0.060	-0.088	-0.038	-0.072	0.133
ITL_P2	-0.030	-0.057	-0.078	-0.032	-0.048	0.097
ITL_P3	-0.063	-0.085	-0.100	-0.063	-0.099	0.149
ITL_P4	-0.062	-0.082	-0.112	-0.054	-0.088	0.129
ITL_P5	-0.066	-0.105	-0.134	-0.076	-0.147	0.165

Covariance Matrix

	EMO_P2	EMO_P3	EMO_P4	NEG_P1	NEG_P2	NEG_P3
EMO_P2	0.458					
EMO_P3	0.254	0.482				
EMO_P4	0.230	0.263	0.415			
NEG_P1	-0.250	-0.247	-0.269	0.819		
NEG_P2	-0.176	-0.192	-0.199	0.312	0.726	
NEG_P3	-0.223	-0.242	-0.217	0.389	0.425	0.887
NEG_P4	-0.119	-0.146	-0.134	0.345	0.329	0.451
NEG_P5	-0.224	-0.232	-0.234	0.387	0.320	0.330
PLA_P1	0.105	0.095	0.063	-0.005	0.000	-0.041
PLA_P2	0.132	0.110	0.079	-0.007	-0.009	-0.022
SOB_P1	0.106	0.113	0.085	0.002	-0.066	-0.085
SOB_P2	0.155	0.142	0.136	-0.075	-0.105	-0.114
SOB_P3	0.155	0.150	0.129	-0.060	-0.104	-0.135
ACH_P1	0.093	0.125	0.139	-0.085	-0.147	-0.086
ACH_P2	0.121	0.158	0.164	-0.100	-0.178	-0.139
ACH_P3	0.140	0.157	0.162	-0.116	-0.167	-0.121
ACH_P4	0.090	0.115	0.128	-0.053	-0.107	-0.050
ACH_P5	0.127	0.153	0.171	-0.098	-0.152	-0.124
ORD_P1	0.061	0.079	0.088	-0.036	-0.102	-0.002
ORD_P2	0.071	0.094	0.108	-0.045	-0.122	-0.054
ORD_P3	0.083	0.118	0.120	-0.059	-0.116	-0.060
ORD_P4	0.086	0.121	0.133	-0.066	-0.151	-0.082
ORD_P5	0.073	0.097	0.108	-0.033	-0.105	-0.024
ORD_P6	0.074	0.102	0.113	-0.057	-0.128	-0.057
TRA_P1	0.078	0.094	0.088	-0.003	-0.083	-0.031

TRA_P2	0.106	0.128	0.113	-0.011	-0.107	-0.043
BRO_P1	0.086	0.078	0.084	0.005	-0.025	-0.009
BRO_P2	0.138	0.131	0.130	-0.059	-0.084	-0.101
BRO_P3	0.129	0.114	0.110	-0.053	-0.067	-0.061
EPI_P1	0.082	0.091	0.097	-0.067	-0.083	-0.038
EPI_P2	0.076	0.078	0.076	-0.034	-0.025	-0.009
EPI_P3	0.094	0.105	0.103	-0.060	-0.065	-0.043
ITL_P1	0.152	0.161	0.153	-0.080	-0.099	-0.108
ITL_P2	0.098	0.111	0.116	-0.060	-0.070	-0.068
ITL_P3	0.150	0.171	0.173	-0.121	-0.139	-0.154
ITL_P4	0.133	0.144	0.155	-0.098	-0.106	-0.115
ITL_P5	0.129	0.153	0.165	-0.100	-0.151	-0.157

Covariance Matrix

	NEG_P4	NEG_P5	PLA_P1	PLA_P2	SOB_P1	SOB_P2
NEG_P4	0.665					
NEG_P5	0.234	0.662				
PLA_P1	0.044	-0.003	0.695			
PLA_P2	0.049	-0.034	0.364	0.492		
SOB_P1	-0.002	-0.054	0.305	0.315	0.710	
SOB_P2	-0.012	-0.131	0.230	0.253	0.382	0.480
SOB_P3	-0.040	-0.125	0.294	0.336	0.509	0.396
ACH_P1	-0.044	-0.130	0.055	0.053	0.116	0.104
ACH_P2	-0.083	-0.180	0.064	0.082	0.141	0.141
ACH_P3	-0.083	-0.174	0.044	0.072	0.135	0.130
ACH_P4	-0.018	-0.118	0.039	0.055	0.087	0.101
ACH_P5	-0.063	-0.142	0.102	0.127	0.184	0.164
ORD_P1	0.001	-0.102	0.007	0.027	0.048	0.071
ORD_P2	-0.019	-0.104	0.009	0.021	0.046	0.069
ORD_P3	-0.020	-0.105	0.050	0.056	0.084	0.091
ORD_P4	-0.046	-0.138	0.006	0.037	0.086	0.097
ORD_P5	0.010	-0.098	0.029	0.048	0.075	0.090
ORD_P6	-0.029	-0.108	0.018	0.035	0.058	0.081
TRA_P1	0.051	-0.104	0.066	0.118	0.170	0.163
TRA_P2	0.045	-0.135	0.077	0.145	0.190	0.180
BRO_P1	0.058	-0.042	0.167	0.140	0.144	0.126
BRO_P2	-0.009	-0.078	0.186	0.190	0.198	0.168
BRO_P3	0.006	-0.082	0.146	0.164	0.154	0.139
EPI_P1	-0.009	-0.111	0.045	0.055	0.084	0.096
EPI_P2	0.044	-0.048	0.100	0.090	0.072	0.084
EPI_P3	0.001	-0.091	0.075	0.084	0.070	0.086
ITL_P1	-0.035	-0.109	0.096	0.111	0.125	0.139
ITL_P2	-0.005	-0.082	0.098	0.070	0.073	0.099
ITL_P3	-0.066	-0.139	0.144	0.113	0.133	0.131
ITL_P4	-0.034	-0.111	0.130	0.102	0.133	0.144
ITL_P5	-0.059	-0.136	0.147	0.110	0.191	0.183

Covariance Matrix

	SOB_P3	ACH_P1	ACH_P2	ACH_P3	ACH_P4	ACH_P5
SOB_P3	0.741					
ACH_P1	0.109	0.377				
ACH_P2	0.155	0.239	0.423			
ACH_P3	0.149	0.208	0.273	0.461		
ACH_P4	0.094	0.157	0.183	0.207	0.296	
ACH_P5	0.209	0.229	0.262	0.261	0.192	0.421
ORD_P1	0.066	0.125	0.139	0.151	0.129	0.140
ORD_P2	0.062	0.157	0.166	0.185	0.175	0.158
ORD_P3	0.095	0.164	0.183	0.207	0.176	0.186
ORD_P4	0.094	0.192	0.217	0.235	0.210	0.206
ORD_P5	0.101	0.143	0.150	0.182	0.151	0.163
ORD_P6	0.082	0.153	0.159	0.181	0.162	0.165
TRA_P1	0.200	0.131	0.156	0.146	0.101	0.183
TRA_P2	0.231	0.143	0.176	0.180	0.130	0.197
BRO_P1	0.140	0.094	0.091	0.076	0.073	0.125
BRO_P2	0.218	0.149	0.142	0.143	0.117	0.205
BRO_P3	0.170	0.108	0.106	0.111	0.095	0.146
EPI_P1	0.082	0.141	0.138	0.140	0.129	0.138
EPI_P2	0.067	0.084	0.073	0.073	0.083	0.088
EPI_P3	0.073	0.109	0.113	0.121	0.116	0.125
ITL_P1	0.141	0.113	0.122	0.134	0.125	0.144
ITL_P2	0.075	0.109	0.106	0.105	0.107	0.110
ITL_P3	0.154	0.174	0.171	0.179	0.136	0.197
ITL_P4	0.132	0.130	0.138	0.144	0.128	0.155

ITL_P5	0.181	0.170	0.181	0.156	0.133	0.188

Covariance Matrix

	ORD_P1	ORD_P2	ORD_P3	ORD_P4	ORD_P5	ORD_P6
ORD_P1	0.426					
ORD_P2	0.186	0.357				
ORD_P3	0.172	0.206	0.368			
ORD_P4	0.187	0.255	0.214	0.439		
ORD_P5	0.270	0.208	0.208	0.198	0.450	
ORD_P6	0.251	0.231	0.209	0.225	0.290	0.370
TRA_P1	0.194	0.080	0.119	0.138	0.154	0.126
TRA_P2	0.178	0.102	0.139	0.154	0.172	0.132
BRO_P1	0.019	0.034	0.063	0.042	0.052	0.036
BRO_P2	0.039	0.068	0.096	0.086	0.093	0.076
BRO_P3	0.035	0.052	0.079	0.063	0.069	0.056
EPI_P1	0.086	0.091	0.105	0.114	0.089	0.089
EPI_P2	0.023	0.050	0.068	0.055	0.055	0.052
EPI_P3	0.051	0.079	0.101	0.091	0.077	0.079
ITL_P1	0.056	0.111	0.105	0.101	0.082	0.089
ITL_P2	0.060	0.099	0.109	0.096	0.080	0.091
ITL_P3	0.059	0.100	0.141	0.118	0.111	0.104
ITL_P4	0.078	0.128	0.138	0.119	0.102	0.122
ITL_P5	0.102	0.131	0.142	0.150	0.130	0.147

Covariance Matrix

	TRA_P1	TRA_P2	BRO_P1	BRO_P2	BRO_P3	EPI_P1
TRA_P1	0.868					
TRA_P2	0.566	0.733				
BRO_P1	0.068	0.106	0.389			
BRO_P2	0.100	0.139	0.259	0.508		
BRO_P3	0.072	0.119	0.194	0.255	0.372	
EPI_P1	0.087	0.111	0.114	0.121	0.116	0.299
EPI_P2	0.007	0.042	0.161	0.173	0.167	0.120
EPI_P3	0.041	0.077	0.126	0.158	0.161	0.136
ITL_P1	0.053	0.081	0.109	0.160	0.142	0.114
ITL_P2	0.030	0.044	0.091	0.120	0.118	0.096
ITL_P3	0.068	0.101	0.179	0.286	0.185	0.113
ITL_P4	0.059	0.079	0.111	0.150	0.127	0.103
ITL_P5	0.097	0.118	0.106	0.153	0.115	0.097

Covariance Matrix

	EPI_P2	EPI_P3	ITL_P1	ITL_P2	ITL_P3	ITL_P4
EPI_P2	0.285					
EPI_P3	0.158	0.248				
ITL_P1	0.116	0.123	0.320			
ITL_P2	0.111	0.112	0.124	0.273		
ITL_P3	0.135	0.155	0.166	0.157	0.440	
ITL_P4	0.106	0.122	0.179	0.144	0.195	0.341
ITL_P5	0.087	0.099	0.134	0.123	0.174	0.172

Covariance Matrix

	ITL_P5
ITL_P5	0.326

SAPI SECOND-ORDER MEASUREMENT MODEL WITH ITEM PARCELS AS INDICATORS

Parameter Specifications

LAMBDA-X

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMP_P1	1	0	0	0	0	0
EMP_P2	2	0	0	0	0	0
EMP_P3	3	0	0	0	0	0
FAC_P1	0	4	0	0	0	0
FAC_P2	0	5	0	0	0	0
FAC_P3	0	6	0	0	0	0

FAC_P4	0	7	0	0	0	0
FAC_P5	0	8	0	0	0	0
INT_P1	0	0	9	0	0	0
INT_P2	0	0	10	0	0	0
INT_P3	0	0	11	0	0	0
INT_P4	0	0	12	0	0	0
INT_P5	0	0	13	0	0	0
INT_P6	0	0	14	0	0	0
IPR_P1	0	0	0	15	0	0
IPR_P2	0	0	0	16	0	0
IPR_P3	0	0	0	17	0	0
IPR_P4	0	0	0	18	0	0
SOC_P1	0	0	0	0	19	0
SOC_P2	0	0	0	0	20	0
WAR_P1	0	0	0	0	0	21
WAR_P2	0	0	0	0	0	22
WAR_P3	0	0	0	0	0	23
WAR_P4	0	0	0	0	0	24
WAR_P5	0	0	0	0	0	25
ARR_P1	0	0	0	0	0	0
ARR_P2	0	0	0	0	0	0
ARR_P3	0	0	0	0	0	0
CON_P1	0	0	0	0	0	0
CON_P2	0	0	0	0	0	0
CON_P3	0	0	0	0	0	0
HOS_P1	0	0	0	0	0	0
HOS_P2	0	0	0	0	0	0
HOS_P3	0	0	0	0	0	0
HOS_P4	0	0	0	0	0	0
HOS_P5	0	0	0	0	0	0
HOS_P6	0	0	0	0	0	0
HOS_P7	0	0	0	0	0	0
DEC_P1	0	0	0	0	0	0
DEC_P2	0	0	0	0	0	0
DEC_P3	0	0	0	0	0	0
EMO_P1	0	0	0	0	0	0
EMO_P2	0	0	0	0	0	0
EMO_P3	0	0	0	0	0	0
EMO_P4	0	0	0	0	0	0
NEG_P1	0	0	0	0	0	0
NEG_P2	0	0	0	0	0	0
NEG_P3	0	0	0	0	0	0
NEG_P4	0	0	0	0	0	0
NEG_P5	0	0	0	0	0	0
PLA_P1	0	0	0	0	0	0
PLA_P2	0	0	0	0	0	0
SOB_P1	0	0	0	0	0	0
SOB_P2	0	0	0	0	0	0
SOB_P3	0	0	0	0	0	0
ACH_P1	0	0	0	0	0	0
ACH_P2	0	0	0	0	0	0
ACH_P3	0	0	0	0	0	0
ACH_P4	0	0	0	0	0	0
ACH_P5	0	0	0	0	0	0
ORD_P1	0	0	0	0	0	0
ORD_P2	0	0	0	0	0	0
ORD_P3	0	0	0	0	0	0
ORD_P4	0	0	0	0	0	0
ORD_P5	0	0	0	0	0	0
ORD_P6	0	0	0	0	0	0
TRA_P1	0	0	0	0	0	0
TRA_P2	0	0	0	0	0	0
BRO_P1	0	0	0	0	0	0
BRO_P2	0	0	0	0	0	0
BRO_P3	0	0	0	0	0	0
EPI_P1	0	0	0	0	0	0
EPI_P2	0	0	0	0	0	0
EPI_P3	0	0	0	0	0	0
ITL_P1	0	0	0	0	0	0
ITL_P2	0	0	0	0	0	0
ITL_P3	0	0	0	0	0	0
ITL_P4	0	0	0	0	0	0
ITL_P5	0	0	0	0	0	0

LAMBDA-X

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE

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EMP_P1	0	0	0	0	0	0
EMP_P2	0	0	0	0	0	0
EMP_P3	0	0	0	0	0	0
FAC_P1	0	0	0	0	0	0
FAC_P2	0	0	0	0	0	0
FAC_P3	0	0	0	0	0	0
FAC_P4	0	0	0	0	0	0
FAC_P5	0	0	0	0	0	0
INT_P1	0	0	0	0	0	0
INT_P2	0	0	0	0	0	0
INT_P3	0	0	0	0	0	0
INT_P4	0	0	0	0	0	0
INT_P5	0	0	0	0	0	0
INT_P6	0	0	0	0	0	0
IPR_P1	0	0	0	0	0	0
IPR_P2	0	0	0	0	0	0
IPR_P3	0	0	0	0	0	0
IPR_P4	0	0	0	0	0	0
SOC_P1	0	0	0	0	0	0
SOC_P2	0	0	0	0	0	0
WAR_P1	0	0	0	0	0	0
WAR_P2	0	0	0	0	0	0
WAR_P3	0	0	0	0	0	0
WAR_P4	0	0	0	0	0	0
WAR_P5	0	0	0	0	0	0
ARR_P1	26	0	0	0	0	0
ARR_P2	27	0	0	0	0	0
ARR_P3	28	0	0	0	0	0
CON_P1	0	29	0	0	0	0
CON_P2	0	30	0	0	0	0
CON_P3	0	31	0	0	0	0
HOS_P1	0	0	32	0	0	0
HOS_P2	0	0	33	0	0	0
HOS_P3	0	0	34	0	0	0
HOS_P4	0	0	35	0	0	0
HOS_P5	0	0	36	0	0	0
HOS_P6	0	0	37	0	0	0
HOS_P7	0	0	38	0	0	0
DEC_P1	0	0	0	39	0	0
DEC_P2	0	0	0	40	0	0
DEC_P3	0	0	0	41	0	0
EMO_P1	0	0	0	0	42	0
EMO_P2	0	0	0	0	43	0
EMO_P3	0	0	0	0	44	0
EMO_P4	0	0	0	0	45	0
NEG_P1	0	0	0	0	0	46
NEG_P2	0	0	0	0	0	47
NEG_P3	0	0	0	0	0	48
NEG_P4	0	0	0	0	0	49
NEG_P5	0	0	0	0	0	50
PLA_P1	0	0	0	0	0	0
PLA_P2	0	0	0	0	0	0
SOB_P1	0	0	0	0	0	0
SOB_P2	0	0	0	0	0	0
SOB_P3	0	0	0	0	0	0
ACH_P1	0	0	0	0	0	0
ACH_P2	0	0	0	0	0	0
ACH_P3	0	0	0	0	0	0
ACH_P4	0	0	0	0	0	0
ACH_P5	0	0	0	0	0	0
ORD_P1	0	0	0	0	0	0
ORD_P2	0	0	0	0	0	0
ORD_P3	0	0	0	0	0	0
ORD_P4	0	0	0	0	0	0
ORD_P5	0	0	0	0	0	0
ORD_P6	0	0	0	0	0	0
TRA_P1	0	0	0	0	0	0
TRA_P2	0	0	0	0	0	0
BRO_P1	0	0	0	0	0	0
BRO_P2	0	0	0	0	0	0
BRO_P3	0	0	0	0	0	0
EPI_P1	0	0	0	0	0	0
EPI_P2	0	0	0	0	0	0
EPI_P3	0	0	0	0	0	0
ITL_P1	0	0	0	0	0	0
ITL_P2	0	0	0	0	0	0

ITL_P3	0	0	0	0	0	0
ITL_P4	0	0	0	0	0	0
ITL_P5	0	0	0	0	0	0

LAMBDA-X

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
EMP_P1	0	0	0	0	0	0
EMP_P2	0	0	0	0	0	0
EMP_P3	0	0	0	0	0	0
FAC_P1	0	0	0	0	0	0
FAC_P2	0	0	0	0	0	0
FAC_P3	0	0	0	0	0	0
FAC_P4	0	0	0	0	0	0
FAC_P5	0	0	0	0	0	0
INT_P1	0	0	0	0	0	0
INT_P2	0	0	0	0	0	0
INT_P3	0	0	0	0	0	0
INT_P4	0	0	0	0	0	0
INT_P5	0	0	0	0	0	0
INT_P6	0	0	0	0	0	0
IPR_P1	0	0	0	0	0	0
IPR_P2	0	0	0	0	0	0
IPR_P3	0	0	0	0	0	0
IPR_P4	0	0	0	0	0	0
SOC_P1	0	0	0	0	0	0
SOC_P2	0	0	0	0	0	0
WAR_P1	0	0	0	0	0	0
WAR_P2	0	0	0	0	0	0
WAR_P3	0	0	0	0	0	0
WAR_P4	0	0	0	0	0	0
WAR_P5	0	0	0	0	0	0
ARR_P1	0	0	0	0	0	0
ARR_P2	0	0	0	0	0	0
ARR_P3	0	0	0	0	0	0
CON_P1	0	0	0	0	0	0
CON_P2	0	0	0	0	0	0
CON_P3	0	0	0	0	0	0
HOS_P1	0	0	0	0	0	0
HOS_P2	0	0	0	0	0	0
HOS_P3	0	0	0	0	0	0
HOS_P4	0	0	0	0	0	0
HOS_P5	0	0	0	0	0	0
HOS_P6	0	0	0	0	0	0
HOS_P7	0	0	0	0	0	0
DEC_P1	0	0	0	0	0	0
DEC_P2	0	0	0	0	0	0
DEC_P3	0	0	0	0	0	0
EMO_P1	0	0	0	0	0	0
EMO_P2	0	0	0	0	0	0
EMO_P3	0	0	0	0	0	0
EMO_P4	0	0	0	0	0	0
NEG_P1	0	0	0	0	0	0
NEG_P2	0	0	0	0	0	0
NEG_P3	0	0	0	0	0	0
NEG_P4	0	0	0	0	0	0
NEG_P5	0	0	0	0	0	0
PLA_P1	51	0	0	0	0	0
PLA_P2	52	0	0	0	0	0
SOB_P1	0	53	0	0	0	0
SOB_P2	0	54	0	0	0	0
SOB_P3	0	55	0	0	0	0
ACH_P1	0	0	56	0	0	0
ACH_P2	0	0	57	0	0	0
ACH_P3	0	0	58	0	0	0
ACH_P4	0	0	59	0	0	0
ACH_P5	0	0	60	0	0	0
ORD_P1	0	0	0	61	0	0
ORD_P2	0	0	0	62	0	0
ORD_P3	0	0	0	63	0	0
ORD_P4	0	0	0	64	0	0
ORD_P5	0	0	0	65	0	0
ORD_P6	0	0	0	66	0	0
TRA_P1	0	0	0	0	67	0
TRA_P2	0	0	0	0	68	0
BRO_P1	0	0	0	0	0	69

BRO_P2	0	0	0	0	0	70
BRO_P3	0	0	0	0	0	71
EPI_P1	0	0	0	0	0	0
EPI_P2	0	0	0	0	0	0
EPI_P3	0	0	0	0	0	0
ITL_P1	0	0	0	0	0	0
ITL_P2	0	0	0	0	0	0
ITL_P3	0	0	0	0	0	0
ITL_P4	0	0	0	0	0	0
ITL_P5	0	0	0	0	0	0

LAMBDA-X

	EPISTEM	INTELLEC
EMP_P1	0	0
EMP_P2	0	0
EMP_P3	0	0
FAC_P1	0	0
FAC_P2	0	0
FAC_P3	0	0
FAC_P4	0	0
FAC_P5	0	0
INT_P1	0	0
INT_P2	0	0
INT_P3	0	0
INT_P4	0	0
INT_P5	0	0
INT_P6	0	0
IPR_P1	0	0
IPR_P2	0	0
IPR_P3	0	0
IPR_P4	0	0
SOC_P1	0	0
SOC_P2	0	0
WAR_P1	0	0
WAR_P2	0	0
WAR_P3	0	0
WAR_P4	0	0
WAR_P5	0	0
ARR_P1	0	0
ARR_P2	0	0
ARR_P3	0	0
CON_P1	0	0
CON_P2	0	0
CON_P3	0	0
HOS_P1	0	0
HOS_P2	0	0
HOS_P3	0	0
HOS_P4	0	0
HOS_P5	0	0
HOS_P6	0	0
HOS_P7	0	0
DEC_P1	0	0
DEC_P2	0	0
DEC_P3	0	0
EMO_P1	0	0
EMO_P2	0	0
EMO_P3	0	0
EMO_P4	0	0
NEG_P1	0	0
NEG_P2	0	0
NEG_P3	0	0
NEG_P4	0	0
NEG_P5	0	0
PLA_P1	0	0
PLA_P2	0	0
SOB_P1	0	0
SOB_P2	0	0
SOB_P3	0	0
ACH_P1	0	0
ACH_P2	0	0
ACH_P3	0	0
ACH_P4	0	0
ACH_P5	0	0
ORD_P1	0	0
ORD_P2	0	0

ORD_P3	0	0
ORD_P4	0	0
ORD_P5	0	0
ORD_P6	0	0
TRA_P1	0	0
TRA_P2	0	0
BRO_P1	0	0
BRO_P2	0	0
BRO_P3	0	0
EPI_P1	72	0
EPI_P2	73	0
EPI_P3	74	0
ITL_P1	0	75
ITL_P2	0	76
ITL_P3	0	77
ITL_P4	0	78
ITL_P5	0	79

GAMMA

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
SRP	80	81	82	83	84	85
SRN	0	0	0	0	0	0
NEUROT	0	0	0	0	0	0
EXTRAV	0	0	0	0	0	0
CONSC	0	0	0	0	0	0
OPENN	0	0	0	0	0	0

GAMMA

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
SRP	0	0	0	0	0	0
SRN	86	87	88	89	0	0
NEUROT	0	0	0	0	90	91
EXTRAV	0	0	0	0	0	0
CONSC	0	0	0	0	0	0
OPENN	0	0	0	0	0	0

GAMMA

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
SRP	0	0	0	0	0	0
SRN	0	0	0	0	0	0
NEUROT	0	0	0	0	0	0
EXTRAV	92	93	0	0	0	0
CONSC	0	0	94	95	96	0
OPENN	0	0	0	0	0	97

GAMMA

	EPISTEM	INTELLEC
SRP	0	0
SRN	0	0
NEUROT	0	0
EXTRAV	0	0
CONSC	0	0
OPENN	98	99

PHI

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMPATHY	0					
FACILIT	100	0				
INTEGRIT	101	102	0			
INTERPER	103	104	105	0		
SOC_INT	106	107	108	109	0	
WARMHEAR	110	111	112	113	114	0
ARROGAN	115	116	117	118	119	120
CONFLICT	121	122	123	124	125	126
HOSTILE	128	129	130	131	132	133
DECEIT	136	137	138	139	140	141
EMOTIONB	145	146	147	148	149	150

NEGATIVE	155	156	157	158	159	160
PLAYFULL	166	167	168	169	170	171
SOCIABIL	178	179	180	181	182	183
ACHIEVEM	191	192	193	194	195	196
ORDILIN	205	206	207	208	209	210
TRAD_REL	220	221	222	223	224	225
BROADMIN	236	237	238	239	240	241
EPISTEM	253	254	255	256	257	258
INTELLEC	271	272	273	274	275	276

PHI

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
ARROGAN	0					
CONFLICT	127	0				
HOSTILE	134	135	0			
DECEIT	142	143	144	0		
EMOTIONB	151	152	153	154	0	
NEGATIVE	161	162	163	164	165	0
PLAYFULL	172	173	174	175	176	177
SOCIABIL	184	185	186	187	188	189
ACHIEVEM	197	198	199	200	201	202
ORDILIN	211	212	213	214	215	216
TRAD_REL	226	227	228	229	230	231
BROADMIN	242	243	244	245	246	247
EPISTEM	259	260	261	262	263	264
INTELLEC	277	278	279	280	281	282

PHI

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
PLAYFULL	0					
SOCIABIL	190	0				
ACHIEVEM	203	204	0			
ORDILIN	217	218	219	0		
TRAD_REL	232	233	234	235	0	
BROADMIN	248	249	250	251	252	0
EPISTEM	265	266	267	268	269	270
INTELLEC	283	284	285	286	287	288

PHI

	EPISTEM	INTELLEC
EPISTEM	0	
INTELLEC	289	0

PSI

SRP	SRN	NEUROT	EXTRAV	CONSC	OPENN
290	291	292	293	294	295

THETA-DELTA

EMP_P1	EMP_P2	EMP_P3	FAC_P1	FAC_P2	FAC_P3
296	297	298	299	300	301

THETA-DELTA

FAC_P4	FAC_P5	INT_P1	INT_P2	INT_P3	INT_P4
302	303	304	305	306	307

THETA-DELTA

INT_P5	INT_P6	IPR_P1	IPR_P2	IPR_P3	IPR_P4
308	309	310	311	312	313

THETA-DELTA

SOC_P1	SOC_P2	WAR_P1	WAR_P2	WAR_P3	WAR_P4

```
          314        315        316        317        318        319

        THETA-DELTA

           WAR_P5     ARR_P1     ARR_P2     ARR_P3     CON_P1     CON_P2
         --------   --------   --------   --------   --------   --------
              320        321        322        323        324        325

        THETA-DELTA

           CON_P3     HOS_P1     HOS_P2     HOS_P3     HOS_P4     HOS_P5
         --------   --------   --------   --------   --------   --------
              326        327        328        329        330        331

        THETA-DELTA

           HOS_P6     HOS_P7     DEC_P1     DEC_P2     DEC_P3     EMO_P1
         --------   --------   --------   --------   --------   --------
              332        333        334        335        336        337

        THETA-DELTA

           EMO_P2     EMO_P3     EMO_P4     NEG_P1     NEG_P2     NEG_P3
         --------   --------   --------   --------   --------   --------
              338        339        340        341        342        343

        THETA-DELTA

           NEG_P4     NEG_P5     PLA_P1     PLA_P2     SOB_P1     SOB_P2
         --------   --------   --------   --------   --------   --------
              344        345        346        347        348        349

        THETA-DELTA

           SOB_P3     ACH_P1     ACH_P2     ACH_P3     ACH_P4     ACH_P5
         --------   --------   --------   --------   --------   --------
              350        351        352        353        354        355

        THETA-DELTA

           ORD_P1     ORD_P2     ORD_P3     ORD_P4     ORD_P5     ORD_P6
         --------   --------   --------   --------   --------   --------
              356        357        358        359        360        361

        THETA-DELTA

           TRA_P1     TRA_P2     BRO_P1     BRO_P2     BRO_P3     EPI_P1
         --------   --------   --------   --------   --------   --------
              362        363        364        365        366        367

        THETA-DELTA

           EPI_P2     EPI_P3     ITL_P1     ITL_P2     ITL_P3     ITL_P4
         --------   --------   --------   --------   --------   --------
              368        369        370        371        372        373

        THETA-DELTA

           ITL_P5
         --------
              374


SAPI SECOND-ORDER MEASUREMENT MODEL WITH ITEM PARCELS AS INDICATORS

Number of Iterations =233

LISREL Estimates (Robust Maximum Likelihood)

W_A_R_N_I_N_G: GA 1_1 may not be identified.
               Standard Errors, z-Values, Modification Indices,
               and Standardized Residuals cannot be computed.

        LAMBDA-X

          EMPATHY    FACILIT   INTEGRIT   INTERPER    SOC_INT   WARMHEAR
```

EMP_P1	0.489	- -	- -	- -	- -	- -
EMP_P2	0.359	- -	- -	- -	- -	- -
EMP_P3	0.472	- -	- -	- -	- -	- -
FAC_P1	- -	0.536	- -	- -	- -	- -
FAC_P2	- -	0.591	- -	- -	- -	- -
FAC_P3	- -	0.573	- -	- -	- -	- -
FAC_P4	- -	0.530	- -	- -	- -	- -
FAC_P5	- -	0.452	- -	- -	- -	- -
INT_P1	- -	- -	0.391	- -	- -	- -
INT_P2	- -	- -	0.358	- -	- -	- -
INT_P3	- -	- -	0.353	- -	- -	- -
INT_P4	- -	- -	0.381	- -	- -	- -
INT_P5	- -	- -	0.335	- -	- -	- -
INT_P6	- -	- -	0.351	- -	- -	- -
IPR_P1	- -	- -	- -	0.367	- -	- -
IPR_P2	- -	- -	- -	0.448	- -	- -
IPR_P3	- -	- -	- -	0.380	- -	- -
IPR_P4	- -	- -	- -	0.363	- -	- -
SOC_P1	- -	- -	- -	- -	0.513	- -
SOC_P2	- -	- -	- -	- -	0.496	- -
WAR_P1	- -	- -	- -	- -	- -	0.401
WAR_P2	- -	- -	- -	- -	- -	0.414
WAR_P3	- -	- -	- -	- -	- -	0.414
WAR_P4	- -	- -	- -	- -	- -	0.404
WAR_P5	- -	- -	- -	- -	- -	0.388
ARR_P1	- -	- -	- -	- -	- -	- -
ARR_P2	- -	- -	- -	- -	- -	- -
ARR_P3	- -	- -	- -	- -	- -	- -
CON_P1	- -	- -	- -	- -	- -	- -
CON_P2	- -	- -	- -	- -	- -	- -
CON_P3	- -	- -	- -	- -	- -	- -
HOS_P1	- -	- -	- -	- -	- -	- -
HOS_P2	- -	- -	- -	- -	- -	- -
HOS_P3	- -	- -	- -	- -	- -	- -
HOS_P4	- -	- -	- -	- -	- -	- -
HOS_P5	- -	- -	- -	- -	- -	- -
HOS_P6	- -	- -	- -	- -	- -	- -
HOS_P7	- -	- -	- -	- -	- -	- -

DEC_P1	- -	- -	- -	- -	- -	- -
DEC_P2	- -	- -	- -	- -	- -	- -
DEC_P3	- -	- -	- -	- -	- -	- -
EMO_P1	- -	- -	- -	- -	- -	- -
EMO_P2	- -	- -	- -	- -	- -	- -
EMO_P3	- -	- -	- -	- -	- -	- -
EMO_P4	- -	- -	- -	- -	- -	- -
NEG_P1	- -	- -	- -	- -	- -	- -
NEG_P2	- -	- -	- -	- -	- -	- -
NEG_P3	- -	- -	- -	- -	- -	- -
NEG_P4	- -	- -	- -	- -	- -	- -
NEG_P5	- -	- -	- -	- -	- -	- -
PLA_P1	- -	- -	- -	- -	- -	- -
PLA_P2	- -	- -	- -	- -	- -	- -
SOB_P1	- -	- -	- -	- -	- -	- -
SOB_P2	- -	- -	- -	- -	- -	- -
SOB_P3	- -	- -	- -	- -	- -	- -
ACH_P1	- -	- -	- -	- -	- -	- -
ACH_P2	- -	- -	- -	- -	- -	- -
ACH_P3	- -	- -	- -	- -	- -	- -
ACH_P4	- -	- -	- -	- -	- -	- -
ACH_P5	- -	- -	- -	- -	- -	- -
ORD_P1	- -	- -	- -	- -	- -	- -
ORD_P2	- -	- -	- -	- -	- -	- -
ORD_P3	- -	- -	- -	- -	- -	- -
ORD_P4	- -	- -	- -	- -	- -	- -
ORD_P5	- -	- -	- -	- -	- -	- -
ORD_P6	- -	- -	- -	- -	- -	- -
TRA_P1	- -	- -	- -	- -	- -	- -
TRA_P2	- -	- -	- -	- -	- -	- -
BRO_P1	- -	- -	- -	- -	- -	- -
BRO_P2	- -	- -	- -	- -	- -	- -
BRO_P3	- -	- -	- -	- -	- -	- -
EPI_P1	- -	- -	- -	- -	- -	- -
EPI_P2	- -	- -	- -	- -	- -	- -
EPI_P3	- -	- -	- -	- -	- -	- -
ITL_P1	- -	- -	- -	- -	- -	- -
ITL_P2	- -	- -	- -	- -	- -	- -
ITL_P3	- -	- -	- -	- -	- -	- -

ITL_P4	- -	- -	- -	- -	- -	- -
ITL_P5	- -	- -	- -	- -	- -	- -

LAMBDA-X

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
EMP_P1	- -	- -	- -	- -	- -	- -
EMP_P2	- -	- -	- -	- -	- -	- -
EMP_P3	- -	- -	- -	- -	- -	- -
FAC_P1	- -	- -	- -	- -	- -	- -
FAC_P2	- -	- -	- -	- -	- -	- -
FAC_P3	- -	- -	- -	- -	- -	- -
FAC_P4	- -	- -	- -	- -	- -	- -
FAC_P5	- -	- -	- -	- -	- -	- -
INT_P1	- -	- -	- -	- -	- -	- -
INT_P2	- -	- -	- -	- -	- -	- -
INT_P3	- -	- -	- -	- -	- -	- -
INT_P4	- -	- -	- -	- -	- -	- -
INT_P5	- -	- -	- -	- -	- -	- -
INT_P6	- -	- -	- -	- -	- -	- -
IPR_P1	- -	- -	- -	- -	- -	- -
IPR_P2	- -	- -	- -	- -	- -	- -
IPR_P3	- -	- -	- -	- -	- -	- -
IPR_P4	- -	- -	- -	- -	- -	- -
SOC_P1	- -	- -	- -	- -	- -	- -
SOC_P2	- -	- -	- -	- -	- -	- -
WAR_P1	- -	- -	- -	- -	- -	- -
WAR_P2	- -	- -	- -	- -	- -	- -
WAR_P3	- -	- -	- -	- -	- -	- -
WAR_P4	- -	- -	- -	- -	- -	- -
WAR_P5	- -	- -	- -	- -	- -	- -
ARR_P1	0.608	- -	- -	- -	- -	- -
ARR_P2	0.603	- -	- -	- -	- -	- -
ARR_P3	0.491	- -	- -	- -	- -	- -
CON_P1	- -	0.575	- -	- -	- -	- -
CON_P2	- -	0.476	- -	- -	- -	- -
CON_P3	- -	0.451	- -	- -	- -	- -
HOS_P1	- -	- -	0.512	- -	- -	- -
HOS_P2	- -	- -	0.411	- -	- -	- -
HOS_P3	- -	- -	0.430	- -	- -	- -

HOS_P4	- -	- -	0.420	- -	- -	- -
HOS_P5	- -	- -	0.496	- -	- -	- -
HOS_P6	- -	- -	0.418	- -	- -	- -
HOS_P7	- -	- -	0.498	- -	- -	- -
DEC_P1	- -	- -	- -	0.511	- -	- -
DEC_P2	- -	- -	- -	0.405	- -	- -
DEC_P3	- -	- -	- -	0.577	- -	- -
EMO_P1	- -	- -	- -	- -	0.449	- -
EMO_P2	- -	- -	- -	- -	0.455	- -
EMO_P3	- -	- -	- -	- -	0.510	- -
EMO_P4	- -	- -	- -	- -	0.494	- -
NEG_P1	- -	- -	- -	- -	- -	0.614
NEG_P2	- -	- -	- -	- -	- -	0.594
NEG_P3	- -	- -	- -	- -	- -	0.661
NEG_P4	- -	- -	- -	- -	- -	0.535
NEG_P5	- -	- -	- -	- -	- -	0.561
PLA_P1	- -	- -	- -	- -	- -	- -
PLA_P2	- -	- -	- -	- -	- -	- -
SOB_P1	- -	- -	- -	- -	- -	- -
SOB_P2	- -	- -	- -	- -	- -	- -
SOB_P3	- -	- -	- -	- -	- -	- -
ACH_P1	- -	- -	- -	- -	- -	- -
ACH_P2	- -	- -	- -	- -	- -	- -
ACH_P3	- -	- -	- -	- -	- -	- -
ACH_P4	- -	- -	- -	- -	- -	- -
ACH_P5	- -	- -	- -	- -	- -	- -
ORD_P1	- -	- -	- -	- -	- -	- -
ORD_P2	- -	- -	- -	- -	- -	- -
ORD_P3	- -	- -	- -	- -	- -	- -
ORD_P4	- -	- -	- -	- -	- -	- -
ORD_P5	- -	- -	- -	- -	- -	- -
ORD_P6	- -	- -	- -	- -	- -	- -
TRA_P1	- -	- -	- -	- -	- -	- -
TRA_P2	- -	- -	- -	- -	- -	- -
BRO_P1	- -	- -	- -	- -	- -	- -
BRO_P2	- -	- -	- -	- -	- -	- -
BRO_P3	- -	- -	- -	- -	- -	- -
EPI_P1	- -	- -	- -	- -	- -	- -

EPI_P2	- -	- -	- -	- -	- -	- -
EPI_P3	- -	- -	- -	- -	- -	- -
ITL_P1	- -	- -	- -	- -	- -	- -
ITL_P2	- -	- -	- -	- -	- -	- -
ITL_P3	- -	- -	- -	- -	- -	- -
ITL_P4	- -	- -	- -	- -	- -	- -
ITL_P5	- -	- -	- -	- -	- -	- -

LAMBDA-X

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
EMP_P1	- -	- -	- -	- -	- -	- -
EMP_P2	- -	- -	- -	- -	- -	- -
EMP_P3	- -	- -	- -	- -	- -	- -
FAC_P1	- -	- -	- -	- -	- -	- -
FAC_P2	- -	- -	- -	- -	- -	- -
FAC_P3	- -	- -	- -	- -	- -	- -
FAC_P4	- -	- -	- -	- -	- -	- -
FAC_P5	- -	- -	- -	- -	- -	- -
INT_P1	- -	- -	- -	- -	- -	- -
INT_P2	- -	- -	- -	- -	- -	- -
INT_P3	- -	- -	- -	- -	- -	- -
INT_P4	- -	- -	- -	- -	- -	- -
INT_P5	- -	- -	- -	- -	- -	- -
INT_P6	- -	- -	- -	- -	- -	- -
IPR_P1	- -	- -	- -	- -	- -	- -
IPR_P2	- -	- -	- -	- -	- -	- -
IPR_P3	- -	- -	- -	- -	- -	- -
IPR_P4	- -	- -	- -	- -	- -	- -
SOC_P1	- -	- -	- -	- -	- -	- -
SOC_P2	- -	- -	- -	- -	- -	- -
WAR_P1	- -	- -	- -	- -	- -	- -
WAR_P2	- -	- -	- -	- -	- -	- -
WAR_P3	- -	- -	- -	- -	- -	- -
WAR_P4	- -	- -	- -	- -	- -	- -
WAR_P5	- -	- -	- -	- -	- -	- -
ARR_P1	- -	- -	- -	- -	- -	- -
ARR_P2	- -	- -	- -	- -	- -	- -
ARR_P3	- -	- -	- -	- -	- -	- -
CON_P1	- -	- -	- -	- -	- -	- -

CON_P2	- -	- -	- -	- -	- -	- -
CON_P3	- -	- -	- -	- -	- -	- -
HOS_P1	- -	- -	- -	- -	- -	- -
HOS_P2	- -	- -	- -	- -	- -	- -
HOS_P3	- -	- -	- -	- -	- -	- -
HOS_P4	- -	- -	- -	- -	- -	- -
HOS_P5	- -	- -	- -	- -	- -	- -
HOS_P6	- -	- -	- -	- -	- -	- -
HOS_P7	- -	- -	- -	- -	- -	- -
DEC_P1	- -	- -	- -	- -	- -	- -
DEC_P2	- -	- -	- -	- -	- -	- -
DEC_P3	- -	- -	- -	- -	- -	- -
EMO_P1	- -	- -	- -	- -	- -	- -
EMO_P2	- -	- -	- -	- -	- -	- -
EMO_P3	- -	- -	- -	- -	- -	- -
EMO_P4	- -	- -	- -	- -	- -	- -
NEG_P1	- -	- -	- -	- -	- -	- -
NEG_P2	- -	- -	- -	- -	- -	- -
NEG_P3	- -	- -	- -	- -	- -	- -
NEG_P4	- -	- -	- -	- -	- -	- -
NEG_P5	- -	- -	- -	- -	- -	- -
PLA_P1	0.584	- -	- -	- -	- -	- -
PLA_P2	0.624	- -	- -	- -	- -	- -
SOB_P1	- -	0.686	- -	- -	- -	- -
SOB_P2	- -	0.563	- -	- -	- -	- -
SOB_P3	- -	0.720	- -	- -	- -	- -
ACH_P1	- -	- -	0.438	- -	- -	- -
ACH_P2	- -	- -	0.505	- -	- -	- -
ACH_P3	- -	- -	0.510	- -	- -	- -
ACH_P4	- -	- -	0.388	- -	- -	- -
ACH_P5	- -	- -	0.513	- -	- -	- -
ORD_P1	- -	- -	- -	0.446	- -	- -
ORD_P2	- -	- -	- -	0.463	- -	- -
ORD_P3	- -	- -	- -	0.435	- -	- -
ORD_P4	- -	- -	- -	0.485	- -	- -
ORD_P5	- -	- -	- -	0.494	- -	- -
ORD_P6	- -	- -	- -	0.505	- -	- -
TRA_P1	- -	- -	- -	- -	0.691	- -
TRA_P2	- -	- -	- -	- -	0.820	- -

BRO_P1	- -	- -	- -	- -	- -	0.437
BRO_P2	- -	- -	- -	- -	- -	0.558
BRO_P3	- -	- -	- -	- -	- -	0.465
EPI_P1	- -	- -	- -	- -	- -	- -
EPI_P2	- -	- -	- -	- -	- -	- -
EPI_P3	- -	- -	- -	- -	- -	- -
ITL_P1	- -	- -	- -	- -	- -	- -
ITL_P2	- -	- -	- -	- -	- -	- -
ITL_P3	- -	- -	- -	- -	- -	- -
ITL_P4	- -	- -	- -	- -	- -	- -
ITL_P5	- -	- -	- -	- -	- -	- -

LAMBDA-X

	EPISTEM	INTELLEC
EMP_P1	- -	- -
EMP_P2	- -	- -
EMP_P3	- -	- -
FAC_P1	- -	- -
FAC_P2	- -	- -
FAC_P3	- -	- -
FAC_P4	- -	- -
FAC_P5	- -	- -
INT_P1	- -	- -
INT_P2	- -	- -
INT_P3	- -	- -
INT_P4	- -	- -
INT_P5	- -	- -
INT_P6	- -	- -
IPR_P1	- -	- -
IPR_P2	- -	- -
IPR_P3	- -	- -
IPR_P4	- -	- -
SOC_P1	- -	- -
SOC_P2	- -	- -
WAR_P1	- -	- -
WAR_P2	- -	- -
WAR_P3	- -	- -
WAR_P4	- -	- -
WAR_P5	- -	- -

ARR_P1	- -	- -
ARR_P2	- -	- -
ARR_P3	- -	- -
CON_P1	- -	- -
CON_P2	- -	- -
CON_P3	- -	- -
HOS_P1	- -	- -
HOS_P2	- -	- -
HOS_P3	- -	- -
HOS_P4	- -	- -
HOS_P5	- -	- -
HOS_P6	- -	- -
HOS_P7	- -	- -
DEC_P1	- -	- -
DEC_P2	- -	- -
DEC_P3	- -	- -
EMO_P1	- -	- -
EMO_P2	- -	- -
EMO_P3	- -	- -
EMO_P4	- -	- -
NEG_P1	- -	- -
NEG_P2	- -	- -
NEG_P3	- -	- -
NEG_P4	- -	- -
NEG_P5	- -	- -
PLA_P1	- -	- -
PLA_P2	- -	- -
SOB_P1	- -	- -
SOB_P2	- -	- -
SOB_P3	- -	- -
ACH_P1	- -	- -
ACH_P2	- -	- -
ACH_P3	- -	- -
ACH_P4	- -	- -
ACH_P5	- -	- -
ORD_P1	- -	- -
ORD_P2	- -	- -
ORD_P3	- -	- -

ORD_P4	- -	- -
ORD_P5	- -	- -
ORD_P6	- -	- -
TRA_P1	- -	- -
TRA_P2	- -	- -
BRO_P1	- -	- -
BRO_P2	- -	- -
BRO_P3	- -	- -
EPI_P1	0.335	- -
EPI_P2	0.389	- -
EPI_P3	0.399	- -
ITL_P1	- -	0.371
ITL_P2	- -	0.321
ITL_P3	- -	0.476
ITL_P4	- -	0.414
ITL_P5	- -	0.402

Covariance Matrix of ETA and KSI

	SRP	SRN	NEUROT	EXTRAV	CONSC	OPENN
SRP	- -					
SRN	- -	- -				
NEUROT	- -	- -	- -			
EXTRAV	- -	- -	- -	- -		
CONSC	- -	- -	- -	- -	- -	
OPENN	- -	- -	- -	- -	- -	- -
EMPATHY	- -	- -	- -	- -	- -	- -
FACILIT	- -	- -	- -	- -	- -	- -
INTEGRIT	- -	- -	- -	- -	- -	- -
INTERPER	- -	- -	- -	- -	- -	- -
SOC_INT	- -	- -	- -	- -	- -	- -
WARMHEAR	- -	- -	- -	- -	- -	- -
ARROGAN	- -	- -	- -	- -	- -	- -
CONFLICT	- -	- -	- -	- -	- -	- -
HOSTILE	- -	- -	- -	- -	- -	- -
DECEIT	- -	- -	- -	- -	- -	- -
EMOTIONB	- -	- -	- -	- -	- -	- -
NEGATIVE	- -	- -	- -	- -	- -	- -
PLAYFULL	- -	- -	- -	- -	- -	- -
SOCIABIL	- -	- -	- -	- -	- -	- -
ACHIEVEM	- -	- -	- -	- -	- -	- -
ORDILIN	- -	- -	- -	- -	- -	- -
TRAD_REL	- -	- -	- -	- -	- -	- -
BROADMIN	- -	- -	- -	- -	- -	- -
EPISTEM	- -	- -	- -	- -	- -	- -
INTELLEC	- -	- -	- -	- -	- -	- -

Covariance Matrix of ETA and KSI

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMPATHY	1.000					
FACILIT	0.534	1.000				
INTEGRIT	0.640	0.589	1.000			
INTERPER	0.742	0.811	0.755	1.000		
SOC_INT	0.761	0.708	0.600	0.821	1.000	
WARMHEAR	0.869	0.768	0.770	0.933	0.806	1.000
ARROGAN	-0.478	-0.129	-0.487	-0.396	-0.274	-0.434
CONFLICT	-0.328	-0.216	-0.595	-0.412	-0.254	-0.380
HOSTILE	-0.488	-0.302	-0.629	-0.545	-0.397	-0.535

DECEIT	-0.332	-0.424	-0.710	-0.514	-0.391	-0.450
EMOTIONB	0.295	0.576	0.614	0.654	0.525	0.497
NEGATIVE	0.111	-0.310	-0.338	-0.315	-0.151	-0.122
PLAYFULL	0.410	0.382	0.315	0.506	0.578	0.479
SOCIABIL	0.441	0.540	0.419	0.647	0.718	0.589
ACHIEVEM	0.353	0.671	0.676	0.596	0.494	0.547
ORDILIN	0.312	0.448	0.684	0.443	0.333	0.455
TRAD_REL	0.443	0.420	0.446	0.492	0.405	0.519
BROADMIN	0.412	0.536	0.467	0.576	0.506	0.516
EPISTEM	0.435	0.471	0.585	0.537	0.436	0.511
INTELLEC	0.394	0.744	0.656	0.695	0.634	0.584

Covariance Matrix of ETA and KSI

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
ARROGAN	1.000					
CONFLICT	0.739	1.000				
HOSTILE	0.854	0.937	1.000			
DECEIT	0.588	0.784	0.836	1.000		
EMOTIONB	-0.215	-0.401	-0.416	-0.540	1.000	
NEGATIVE	0.239	0.493	0.496	0.654	-0.725	1.000
PLAYFULL	-0.020	0.082	-0.046	-0.111	0.326	-0.013
SOCIABIL	-0.122	-0.098	-0.243	-0.346	0.427	-0.198
ACHIEVEM	-0.174	-0.351	-0.360	-0.575	0.664	-0.403
ORDILIN	-0.240	-0.414	-0.393	-0.546	0.466	-0.256
TRAD_REL	-0.273	-0.263	-0.347	-0.346	0.338	-0.109
BROADMIN	-0.061	-0.127	-0.161	-0.235	0.482	-0.153
EPISTEM	-0.212	-0.285	-0.293	-0.324	0.502	-0.190
INTELLEC	-0.060	-0.240	-0.257	-0.437	0.752	-0.418

Covariance Matrix of ETA and KSI

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
PLAYFULL	1.000					
SOCIABIL	0.732	1.000				
ACHIEVEM	0.264	0.444	1.000			
ORDILIN	0.113	0.249	0.756	1.000		
TRAD_REL	0.257	0.376	0.432	0.367	1.000	
BROADMIN	0.553	0.510	0.527	0.259	0.298	1.000
EPISTEM	0.337	0.312	0.602	0.407	0.223	0.796
INTELLEC	0.435	0.531	0.763	0.578	0.260	0.745

Covariance Matrix of ETA and KSI

	EPISTEM	INTELLEC
EPISTEM	1.000	
INTELLEC	0.750	1.000

PHI

	EMPATHY	FACILIT	INTEGRIT	INTERPER	SOC_INT	WARMHEAR
EMPATHY	1.000					
FACILIT	0.534	1.000				
INTEGRIT	0.640	0.589	1.000			
INTERPER	0.742	0.811	0.755	1.000		
SOC_INT	0.761	0.708	0.600	0.821	1.000	
WARMHEAR	0.869	0.768	0.770	0.933	0.806	1.000
ARROGAN	-0.478	-0.129	-0.487	-0.396	-0.274	-0.434
CONFLICT	-0.328	-0.216	-0.595	-0.412	-0.254	-0.380
HOSTILE	-0.488	-0.302	-0.629	-0.545	-0.397	-0.535
DECEIT	-0.332	-0.424	-0.710	-0.514	-0.391	-0.450
EMOTIONB	0.295	0.576	0.614	0.654	0.525	0.497

NEGATIVE	0.111	-0.310	-0.338	-0.315	-0.151	-0.122
PLAYFULL	0.410	0.382	0.315	0.506	0.578	0.479
SOCIABIL	0.441	0.540	0.419	0.647	0.718	0.589
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ORDILIN	0.312	0.448	0.684	0.443	0.333	0.455
TRAD_REL	0.443	0.420	0.446	0.492	0.405	0.519
BROADMIN	0.412	0.536	0.467	0.576	0.506	0.516
EPISTEM	0.435	0.471	0.585	0.537	0.436	0.511
INTELLEC	0.394	0.744	0.656	0.695	0.634	0.584

PHI

	ARROGAN	CONFLICT	HOSTILE	DECEIT	EMOTIONB	NEGATIVE
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CONFLICT	0.739	1.000				
HOSTILE	0.854	0.937	1.000			
DECEIT	0.588	0.784	0.836	1.000		
EMOTIONB	-0.215	-0.401	-0.416	-0.540	1.000	
NEGATIVE	0.239	0.493	0.496	0.654	-0.725	1.000
PLAYFULL	-0.020	0.082	-0.046	-0.111	0.326	-0.013
SOCIABIL	-0.122	-0.098	-0.243	-0.346	0.427	-0.198
ACHIEVEM	-0.174	-0.351	-0.360	-0.575	0.664	-0.403
ORDILIN	-0.240	-0.414	-0.393	-0.546	0.466	-0.256
TRAD_REL	-0.273	-0.263	-0.347	-0.346	0.338	-0.109
BROADMIN	-0.061	-0.127	-0.161	-0.235	0.482	-0.153
EPISTEM	-0.212	-0.285	-0.293	-0.324	0.502	-0.190
INTELLEC	-0.060	-0.240	-0.257	-0.437	0.752	-0.418

PHI

	PLAYFULL	SOCIABIL	ACHIEVEM	ORDILIN	TRAD_REL	BROADMIN
PLAYFULL	1.000					
SOCIABIL	0.732	1.000				
ACHIEVEM	0.264	0.444	1.000			
ORDILIN	0.113	0.249	0.756	1.000		
TRAD_REL	0.257	0.376	0.432	0.367	1.000	
BROADMIN	0.553	0.510	0.527	0.259	0.298	1.000
EPISTEM	0.337	0.312	0.602	0.407	0.223	0.796
INTELLEC	0.435	0.531	0.763	0.578	0.260	0.745

PHI

	EPISTEM	INTELLEC

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 EPISTEM      1.000

INTELLEC      0.750      1.000

W_A_R_N_I_N_G: PSI is not positive definite

NOTE: Rý for Structural Equatios are Hayduk's (2006) Blocked-Error Rý
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