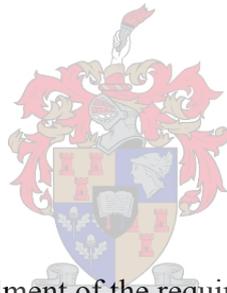


**A FURTHER ELABORATION AND EMPIRICAL EVALUATION OF THE
OEHLEY PARTIAL TALENT MANAGEMENT COMPETENCY MODEL**

Trevor Dwayne Herselman



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Commerce in the Faculty of Economic and Management Sciences at Stellenbosch
University

**Supervisor: Prof CC Theron
April 2014**

DECLARATION

By submitting this dissertation electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

Date: April 2014

OPSOMMING

Suid - Afrikaanse organisasies in beide die privaat – en openbare sektor maak beduidende beleggings in hul talentvolle werknemers in 'n poging om 'n volhoubare mededingende voordeel te bewerkstellig. Hierdie mededingende voordeel word egter bedreig wanneer werknemers die organisasie verlaat. Die studie het ten doel gehad om die faktore te verstaan wat bydra tot werknemers se diensverlatingsvoorneme gegee hul persepsie van opleiding en ontwikkelings - inisiatiewe.

Die empiriese bevindinge toon dat sekere lynbestuur - talentbestuurbevoegdhele lei tot die behoud van talent. Die studie het 'n bestaande talentbestuur bevoegdheids model ondersoek, met 'n spesifieke fokus op twee talentbestuur bevoegdhele wat verband hou met werknemer ontwikkeling, naamlik: *Talentbestuur – ingesteldheiden Ontwikkeling van Ander*. Die studie het voorts ook die insluiting van addisionale latent veranderlikes (*Organisatoriese Vertroue, Waargenome Organisatoriese Ondersteuning, en Verpligting Ervaar*) ondersoek wat moontlik addisionele variansie in verskeie organisatoriese uitkoms veranderlikes kan verklaar (i.e. *Werkstevredenheid, Affektiewe Verbintenis, Normatiewe Verbintenis, en Diensverlatingsvoornemes*). Deur te verstaan hoe lynbestuurders se bevoegdheid op talentbestuur bevoegdhele werknemers se persepsies van organisatoriese ontwikkelings-inisiatiewe beïnvloed en hoe hierdie persepsie oorsaaklik verband hou met *Diensverlatingsvoorneme*, sal organisasies in 'n gunstige posisie wees om diensverlating op 'n effektiewe wyse aan te spreek deur middel van gestruktureerde talentbestuur behoud programme.

Die resultate van die huidige studie toon dat die oorspronklike strukturele model goeie pasgehalte behaal het. Na aanleiding van die modifikasie–indekswaardes wat bereken is vir die Γ en B matryse, is 'n aantal veranderinge aan die strukturele model gemaak. Nadat die veranderinge aan die oorspronklike model aangebring is, het die pasgehalte van die model verbeter en steun is verkry vir verskeie oorsaaklike verwantskappe wat voor gehou is in die model, terwyl ander nie steun verkry het nie.

ABSTRACT

South African organisations within both the private and public sectors of the economy are investing heavily into their talented employees, in an attempt to derive a sustainable competitive advantage. This competitive advantage is threatened when employees engage in turnover behaviours. This study is directed at understanding those factors that contribute to employees' intention to quit following employees' perceptions of training and development initiatives.

Empirical support has been found that certain line management talent management competencies would result in the retention of talented employees. This study investigated an existing talent management competency structural model, with a specific focus on two talent management competencies related to employee development, namely: *Talent Management Mindset* and *Develops Others*. Furthermore, this study investigated the inclusion of additional latent variables (*Organisational Trust*, *Perceived Organisational Support*, and *Felt Obligation*) that may potentially explain additional variance in various organisational outcome variables (i.e. *Job Satisfaction*, *Affective Commitment*, *Normative Commitment*, and *Intention to Quit*). Through understanding how line managers' competence on talent management competencies influence employees' perceptions of organisational development initiatives and how these employee perceptions are causally related to *Intention to Quit*, organisations will be in the prime position to effectively address the issue of employee turnover, through structured talent management retention programmes.

The results of the current study showed that the original structural model displayed good fit. Based on the modification index values calculated for the Γ and \mathbf{B} matrices, a number of modifications were made to the structural model. Following the modifications to the original model, the fit of the model improved, and support was derived for numerous causal relationships proposed in the model, whilst others were not supported.

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CHAPTER 1

RESEARCH PROBLEMS AND RESEARCH OBJECTIVES

1.1. INTRODUCTION

In today's economy, organisations face various conflicting issues that they have to balance in order for them to keep ahead of competitors. Organisations continually need to improve profits by reducing costs, innovating processes and products, and improving quality and productivity. Furthermore, there is a great concern about recruiting, retaining, training, managing, and motivating the workforce due to the changing nature of the world of work. The world of work can be best described as highly turbulent.

Brewster, Carey, Globler, Holland and Wörnich (2008) remark that a primary source of competitive advantage in business industry derives from organisations human resources (i.e. labour force) and that this source of competitive advantage is more inimitable and enduring than any particular product. Organisations spend vast amounts of resources each year in an effort to attract, develop, train, and retain talented employees. Employee turnover negatively affects these investments in human resources. Organisations are reluctant to invest in talented employees for fear that a competitor may potentially poach talented employees before the training investment can be recovered (Forrier & Sels, 2003). Niewenhuizen (2009) notes that, the retention of employees is important for both the private and public sectors of the economy. Ingham (2006, p.20) remarks, "the acquisition, allocation, development and succession of the most important value adding people ... best create competitive advantage".

It is widely reported that South Africa has a major skills shortage and high vacancy rates that places immense pressure on service delivery, particularly within the public sector (Masibigirl & Nienaber, 2011). Lin and Chang (2005, p.336) remark "turnover is costly and devastating because it may not only reduce organisational effectiveness and employee productivity... but also cause a deterioration of rapport and trust, leading to increase client dissatisfaction with the organisation's services (Powell & York, 1992)". South African organisations' ability to retain the appropriate talent is a challenging endeavour due to the recent phenomena such as "the war for talent", skills shortages and employee mobility (Masibigirl & Nienaber, 2011; McKinsey & Co, 2001 as cited in Oehley, 2007).

The country is still plagued by the atrocities that occurred during the Apartheid regime. There continues to be large-scale under-representation of designated individuals in higher occupational levels within organisations. It can logically be inferred that this may be the result of the under-development of designated individuals during the Apartheid regime. The current South African government has made significant attempts to address the skills shortage that is confronting the country through the introduction of training legislation like the - Skills Development Act (Republic of South Africa, 1998) and the Skills Development Levies Act (Republic of South Africa, 1999) that place a legal obligation on organisations to re-evaluate their contributions to skills development and education and training. Human resource development is of a national priority. All organisations in both the private and public sectors should regard human resource development as a priority, in order to develop talented employees. Through these talented employees, organisations are able to obtain the much needed competitive advantage in order to ensure continuity in the highly turbulent world of work. Erasmus, Loedolff, Mda and Nel (2006) remark that training and development initiatives of human resources have been broadly neglected by South African organisations. The consequences for not investing in human resources include; low productivity, redundancy of older organisational members, a high employee turnover, fear of technological advancement and an illiterate workforce (Erasmus et al., 2006).

The South African government has further implemented other legislative measures. The Employment Equity Act (Republic of South Africa, 1998) and the Broad-Based Black Economic Empowerment Act (Republic of South Africa, 2003) that legally compels organisations to undertake affirmative action measure to bring about a representative spread of gender-racioethnic groups in all organisations, and organisational levels within a specified time period (Oehley & Theron, 2010). Furthermore, these Acts encourage the implementation other measures to address inequalities due to the Apartheid regime (Oehley & Theron, 2010). For organisations, these Acts are attempts (by organisations) to ensure that suitably qualified Black talented employees have an equal and fair opportunity to become productive participants in the world of work.

Employees vary in the degree to which they are able to benefit from affirmative developmental opportunities, thus the assessment of learning potential can fulfil a valuable role in the identification of those previously disadvantaged Black talented employees that would benefit most, through a favourable return-on-investment from such initiatives (De

Goede & Theron, 2010; De Goede, 2007; Oehley & Theron, 2010). It has been stressed that an assessment of learning potential and the related affirmative development initiatives in and by itself would be ineffective in bringing about the successful transformation of the South African workforce. Various authors (De Goede & Theron, 2010; Oehley & Theron, 2010) suggest that the issue of underrepresentation of previously disadvantaged groups should be approached through broad, well-integrated organisational development (OD) interventions that acknowledge the complicated and multifaceted issue. Talent management and the retention of talented employees are two core facets of this multifaceted issue that such an OD intervention will have to address (Oehley & Theron, 2010).

Employee turnover is a major concern confronting numerous organisations operating in both the private and public sectors of the South African economy. Loi, Hang-yue and Foley (2006) note that employee turnover is a practical problem for organisations in terms of loss of talent and additional recruitment and training costs. Thus, turnover intention among employees is a major concern for organisations not only due to the direct financial implications that may result (i.e. recruitment, training and development), but also the loss of scarce talent that is a major source of competitive advantage that could also have major indirect financial implications for organisations. Moreover, Byham, Smith and Paese (2002) remark that rapid growth, a dramatic rise in retirements, poaching of key employees by competitors and the difficulty of retaining talented employees' are but a few of the significant challenges confronting organisations.

The intention of employee to remain in employment of their current organisation is not a random event but rather complexly determined by a network of latent variables characterising employees' and their numerous perceptions of the work environment. It is therefore warranted that the identity of those latent variables and the manner in which they combine to affect turnover intention be validly understood.

Training and development initiatives represents a critically important human resource practice that assists employees in gaining new knowledge and skills required to compete successfully in the marketplace. Koster, De Grip and Fouarge (2011) note that there are two viewpoints concerning investing in employee development acknowledged within the literature. The first perspective originates from the human capital theory, where this theory suggests that through investing in employee development employees' market value increases

and consequently encourages employee turnover. The second perspective, originating from the social investment theory, suggests that by investing in employee development, positive organisational perceptions and attitudes are created (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Koster et al., 2011), which consequently decreases turnover intentions of employees' (Benson, Finegold, & Mohrman, 2004).

Koster et al. (2011, p. 2404) remark, "...it is unclear whether it is the human capital theory or social exchange theory that provides the best explanation for turnover behaviour..." It would be of value to develop and investigate a comprehensive explanatory model of employee turnover intention that recognises the primary causal factors and the manner in which they structurally combine to influence employee turnover, following employees' perceptions of training and development initiatives. The intention of employees to remain in employment due to their perceptions of training and development interventions is not a random event, but rather the result of a complex systematic network of latent variables characterising employees' and their numerous perceptions of the work environment.

Oehley (2007) has proposed and empirically evaluated such an explanatory model. The model proposed by Oehley (2007) was explicitly developed with the intention to explain intention to quit among employees' within a large telecommunications organisation in South Africa. This model can serve a valuable purpose in accounting for employees' turnover intentions due to employees' perceptions of development interventions. Oehley (2007) sought to investigate the nature of the causal linkages between eight talent management competency variables and the outcomes variables of job satisfaction, affective commitment and intention to quit. She proposed that certain line management talent management competencies would result in the retention of skilled employees. In the study undertaken by Oehley (2007) she found support for her proposed model, with adequate good fit (null hypothesis of close fit not being rejected i.e. $H_{02}: RMSEA \leq .05$), as well as support for various hypothesised model paths. However, she was unable to find support for specific hypotheses. Of particular interest for the purposes of this research endeavour, is that Oehley (2007) was unable to find support for the relationship between *Talent Management Mindset* and *Develops Others*.

The structural network of influences characterising employee behaviour ought to be considered to be complexly determined, in that a large number of latent variables combine to determine any individual's relative position on the latent variable of interest (i.e. intention to

quit) (Oehley & Theron, 2010). Additionally, the structural network of influences ought to be considered complexly determined, in that these latent variables are either highly interconnected, so that the majority of the latent variables are directly or indirectly influenced by every other latent variable (Oehley & Theron, 2010). Cilliers (in Oehley & Theron, 2010) proposes a similar argument. He notes that the structural network of influences ought to be considered complexly determined, in that feedback loops exist, linking outcome variables (i.e. *Intention to Quit*) back to person centred latent variables and behavioural latent variables that both directly and indirectly influence the outcome latent variables as to create a dynamic system. Of particular interest to this argument is the fact that in a complex nomological network of latent variables the meaning or explanation of the phenomenon of interest is not located at any point in the network, but rather spread across the whole of the network. To the extent that attempts at modelling the psychological process underpinning a complexly determined behavioural phenomenon omits important variables and paths meaning is lost.

Because of the large number of latent variables and paths involved it is highly doubtful that a single explanatory research study would provide an accurate account of the manner in which a complex nomological network of variables combine and interact with each other to establish the phenomenon of interest. The probability of making meaningful progress towards arriving at penetrating understanding of the psychological process underlying the phenomena of interest will improve, if overt attempts are undertaken to formally model the structural relations governing this phenomenon (Oehley & Theron, 2010). Furthermore, by elaborating and expanding on existing explanatory models of the phenomena of interest, further progress will be made towards a valid understanding of the phenomena of interest (i.e. intention to quit). This view is shared by Gordon, Kleiman and Hanie (1978, p. 901) who stress the importance of cumulative research undertakings where researchers expand and elaborate on the research of their predecessors.

The short-lived interest that industrial-organizational psychologists display in their work promotes severe intellectual disarray. Lack of commitment to thorough exploration of a subject is inimical to the creation of viable psychological theory. By continuing to ignore the integrative role of theory, industrial-organizational psychologists are likely to share a fate that Ring (1967) forecast for social psychologists: We approach our work with a kind of restless pioneer spirit: a new (or seemingly new) territory is discovered, explored for a while, and then usually abandoned when the going gets rough or uninteresting. We are a field of many frontiersmen, but few settlers. And, to the degree that this remains true, the

history of social psychology will be written in terms not of flourishing interlocking communities, but of ghost towns, (pp. 119 - 120).

Oehley (2007) has proposed a valuable explanatory model of turnover intention that should not be discarded in favour of developing a new model. It would consequently serve the epistemic ideal of science to rather modify and expand on the partial talent management model proposed by Oehley (2007).

1.2. RESEARCH OBJECTIVE

The primary objective of this study is to modify and elaborate the partial talent management competency model proposed by Oehley (2007). Specifically, this study will focus on the talent management competency *Develops Others* and its influence on employee turnover intentions. Oehley (2007) proposed that the causal relationship between the talent management competency *Develops Others* and *Intention to Quit* is mediated by the latent variable *Affective Commitment*. In reality, the manner in which the talent management competency *Develops Others* influences *Intention to Quit* is probably more complexly determined than Oehley (2007) initially proposed.

Oehley (2007) failed to find support for various linkages between the talent management competency variables and the outcomes variables. However, she notes that this could possibly be the result of the omission of various moderator variables or mediators and consequently recommends investigating this argument as a possible future research endeavour.

It seems plausible, that the talent management competency *Develops Others* will result in various perceived individual and organisational outcome variables. As such, this study will attempt to determine how various individual and organisational outcome latent variables causally combine, to form the complex nomological network underlying employees' *Intention to Quit*. More specifically, the research objective is to elaborate the partial talent management competency model proposed by Oehley (2007) by determining how employees' perceptions of developmental initiatives causally related to their intention to quit their current employer.

CHAPTER 2

LITERATURE REVIEW: TALENT MANAGEMENT COMPETENCIES, OUTCOMES, AND STRUCTURAL MODEL

2.1 LITERATURE REVIEW

The objective of this research initiative is to modify and elaborate on the partial talent management competency model proposed by Oehley (2007) and empirically validate an expanded model. Specifically, this study will endeavour to investigate the complex nomological network of latent variables and the nature in which they combine and interact to determine intention to quit. Before any attempt to investigate the complex nomological network of latent variables, it would be necessary to discuss the model proposed by Oehley (2007) as she has laid the primary foundation for this study. It would be necessary to disseminate the theoretical argument underlying her proposed model, report on her proposed model fit statistics and her findings related to the construct *Develops Others* and its proposed causal relations within the proposed model.

Oehley (2010) proposed a partial talent management competency structural model linking various talent management competencies to various talent management outcomes, including *Job Satisfaction*, *Affective Commitment*, and *Intention to Quit*. In her study, she argued that *Intention to Quit* is influenced both directly and indirectly by specific line managers' talent management competencies. Oehley (2007) hypothesised that the majority of the line managers' talent management competencies influence *Intention to Quit* indirectly through their influence on *Job Satisfaction* and *Organisational Commitment*. Thus, *Job Satisfaction* and *Organisational Commitment* are regarded as mediator variables in the relationship between line managers' talent management competencies and *Intention to Quit*. In the partial talent management structural model, *Intention to Quit* is regarded as the primary outcome variable.

2.2. CLASSIFICATION OF TALENT MANAGEMENT COMPETENCIES

In an effort to identify those core talent management competencies through which line managers influence their subordinates' intention to quit, Oehley (2007) sought to define the construct of talent management competencies. She was however unsuccessful in her

endeavour to find an appropriate definition contained within empirical literature. She consequently investigated the two terms namely talent management and competencies comprising the composite term talent management competencies.

Lewis and Heckman (2006) remark that it is challenging to identify the exact meaning of 'talent management' as a result of confusion regarding the definitions and terms and the numerous assumptions made by authors who research the construct. Terms such as 'talent strategy', 'succession management', and 'human resource planning' are often used interchangeably to refer to 'talent management' (Lewis & Heckman, 2006). They further note that there are three approaches to talent management. The first approach defines talent management as a collection of classical human resource management practices, functions, activities, or specialist areas, including; recruitment, selection, training and development, career and succession management (Byham, 2001; Chowanec & Newstrom, 1991; Hilton, 2000). For these authors talent management concerns human resources doing what they have always done, but faster (Lewis & Heckman, 2006).

The second approach to talent management concerns the concept of talent pools. The authors, who hold this view of talent management, regard it as the development of a set of processes designed to guarantee an adequate flow of employees into positions throughout the organisation (Pascal, as cited in Lewis & Heckman, 2006). The third approach to talent management views the construct holistically, without a regard for organisational boundaries or specific positions (Lewis & Heckman, 2006). They further remark that within this approach two views on talent emerge. Lewis and Heckman (2006, p.144) remark, the first view considers talent to be an "unqualified good and resource to be managed primarily according to performance levels". This in essence refers to the process of hiring highly competent performers and differentially rewarding them irrespective of their specific role or organisational needs. The second view regards talent as an "undifferentiated good" (Lewis & Heckman, 2006, p.144), where it is the human resource managements function to ensure that all employees are directed towards high performance as changes in the world of work make talent in general more valuable (Romans & Lardner, 2005).

Oehley (2007, p. 13), used the definition of talent management proposed by the Society for Human Resource Management (SHRM), which defines the construct as:

...the implementation of integrated strategies or systems designed to increase workplace productivity by developing improved processes for attracting, developing, retaining and utilising people with the required skills and aptitude to meet current and future business needs.

Oehley (2007) remarks that a myriad definitions exist within the literature (Bailey, Bartman, & Kruz, 2001; Cheng, Dainty & Moore, 2003; Hoffman, 1999; Reese & Ganrnsey, 2003; SHL, 2000a; Whiddette & Hollyforde, 2000 in Oehley, 2007) for the term ‘competency’, which consequently has resulted in a disagreement on a formal definition for the term. Oehley and Theron (2010, p.6) note that competencies could be defined as “sets of desirable behaviours, where ‘desirable’ is defined in terms of the outcomes such behaviours lead to”. Additionally, Oehley (2007, p.14) remarks that other researchers regard competencies as “relatively stable sets of behaviours that are instrumental in the delivery of superior performance defined in terms of outcomes for which the individual is held accountable”.

Spencer and Spencer (1993, p. 9) in contrast regard competencies as any “underlying characteristic of an individual that is casually related to the criterion-referenced effective and/or superior performance in the job”. Therefore, competencies are more than learned knowledge, skills, and abilities (KSA), but include additional constructs such as, traits, self-concept, values, social role and so forth (Boyatzis, 1982; Clardy, 2008). The primary focus of Oehley’s (2007) study was on the talent management outcome latent variables and how these outcome latent variables are structurally linked to each other and how they interact to influence intention to quit. Oehley (2007, p. 15) remarks that “the talent management outcome latent variables of interest characterize the follower and are presumed to affect the follower’s *Intention to Quit*.” As such, Oehley (2007) sought a term that would be suitable in referring to latent behavioural themes that characterise those behaviours necessary of line managers to elicit various states within followers that would increase the probability of them remaining in the employment of organisations.

For the purposes of this study, the term ‘competency’ shall refer to desirable behaviours of line managers. Oehley (2007) acknowledges that definition proposed by (Woodruffe, 1993) as most suitable for her research study as it emphasises competencies as dimensions of behaviour. As such, Woodruffe (1993, p. 29) defines a competency as “A set of behaviour patterns that the incumbent needs to bring to a position in order to perform its tasks and functions with

competence”. Taking the foregoing perspectives and arguments, Oehley (2007, p. 16), for the purposes of her study defined the construct, talent management competencies as:

Sets of behaviour patterns that line managers need to bring to a position in order to attract, select, engage, develop and retain talented employees in order to reach specific desirable business objectives for the organisation

2.3. OUTCOMES RELATED TO TALENT MANAGEMENT COMPETENCIES AND MODEL FORMULATION

2.3.1. Oehley’s Perspective

The retention of talented employees is one of the intended outcomes of a talent management strategy (Oehley, 2007). As a result, Oehley (2007) investigated measurable antecedents to turnover and found that *Job Satisfaction*, *Organisational Commitment* and *Intention to Quit* are attitudinal latent variables, which could potentially mediate the relationship between line manager’s talent management competencies and actual turnover. As such, Oehley (2007) proposed a fundamental partial talent management competency model, where the model in effect hypothesises that various line managers’ talent competencies exert an influence on *Intention to Quit* both directly and indirectly (through the mediating talent management outcome variables of *Job Satisfaction* and *Affective Commitment*). The fundamental partial talent management model proposed by Oehley (2007) reflecting the previous argument is illustrated in Figure 2.1.

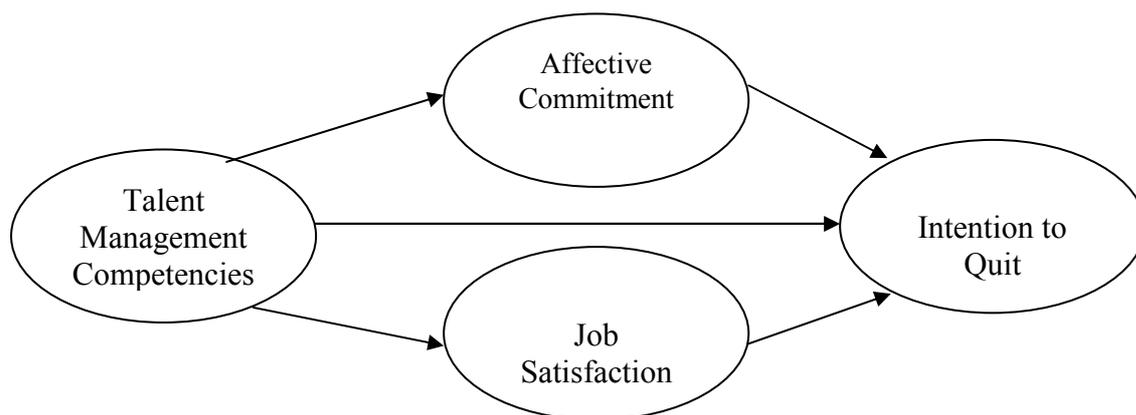


Figure 2.1. Graphical representation of the fundamental Oehley (2007) talent management competency model. Adapted from “*The Development and Evaluation of a Partial Talent Management Competency Model.*” By M Oehley, 2007, unpublished master’s thesis. Copyright 2007 by the University of Stellenbosch, Stellenbosch.

As can be noted from the above model, talent management competencies are considered exogenous latent variables, whilst *Affective Commitment*, *Job Satisfaction*, and *Intention to Quit* are considered endogenous latent variables. Oehley (2007) proposed that certain talent management competency dimensions would assist in the development of *Affective Commitment*, whilst other talent management competency dimensions would improve *Job Satisfaction*. She proposed that both these effects would result in a reduction in *Intention to Quit*.

Oehley (2007) subsequently elaborated the partial talent management competency model (see Figure 2.2) following a comprehensive literature study. Within the model various talent management competencies were linked to various talent management outcomes variables. The initial model (Figure 2.2) proposed a single *Job Satisfaction* latent variable mediating the relationship between talent management competencies and *Intention to Quit*. The six Job Descriptive Index (JDI) subscales were used as indicator variables to operationalise the single *Job Satisfaction* latent variable. Confirmatory factor analysis of the JDI however showed that a single factor measurement model fitted poorly. Exploratory factor analysis of the matrix of inter-job satisfaction subscale score correlations extracted two meaningful job-satisfaction factors (Oehley & Theron, 2010). As such, the initial structural model was adapted, where the initial *Job Satisfaction* latent variable was split into two *Job Satisfaction* factors, namely; *Organisational Job Satisfaction* and *Supervisory Job Satisfaction*. Additionally, the causal relationship between the talent management competencies and the two *Job Satisfaction* latent variables was also adapted (Oehley & Theron, 2010). The modified version of the elaborated partial talent management structural model is illustrated in Figure 2.2.

The manner in which Oehley (2007) defined each of the eight talent management competencies are presented in Table 2.1. Additionally, the talent management outcome variables were defined as follows: *Affective Commitment* was defined as an, “employee’s emotional attachment to, identification with, and involvement in the organisation” (Allen & Meyer in Oehley, 2007, p.40). In terms of *Job Satisfaction*, Oehley utilised the definition proposed by Lock (as cited in Oehley, 2007, p. 44) who defines the construct as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experience”. The talent management outcome variable, *Intention to Quit*, was defined as “a conscious and deliberate wilfulness to leave the organisation” (Tett& Meyer, 1993, p. 2).

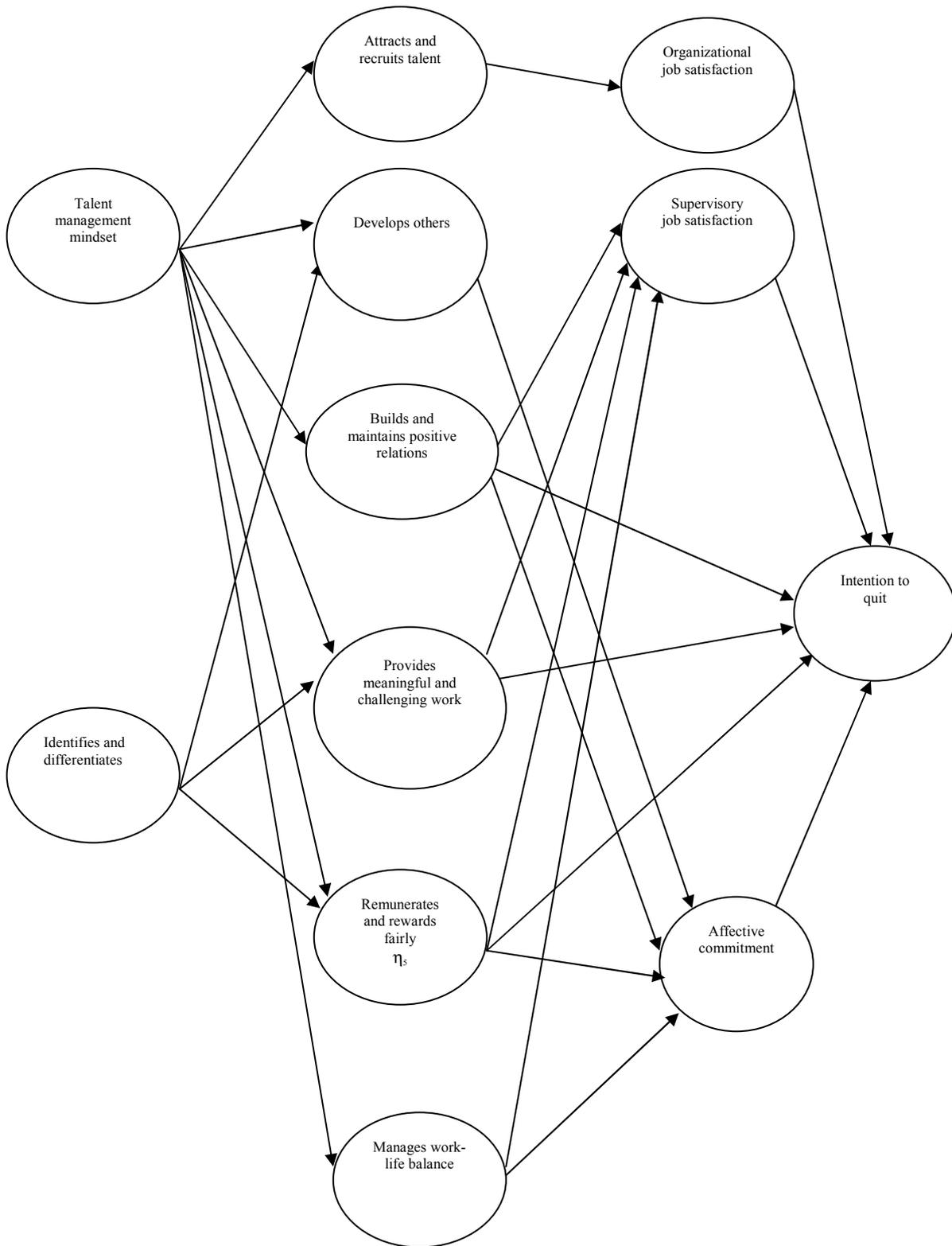


Figure 2.2. Graphical representation of the elaborated Oehley (2007) partial talent management competency model. Adapted from “*The Development and Evaluation of a Partial Talent Management Competency Model.*” By M Oehley, 2007, unpublished master’s thesis. Copyright 2007 by the University of Stellenbosch, Stellenbosch.

Table 2.1***Talent management competencies and their associated definitions (Oehley, 2007, p. 61)*****Displays a Talent Management Mindset**

Persistently and continuously displays a belief that having better talent at all levels provides the means to outperform other organisations. Regularly emphasises this view to others.

Attracts and Recruits Talent

Attracts and recruits competent and committed employees. Ensures that employees have the correct technical expertise and are achievement orientated and motivated.

Develops Others

Accurately assesses people's developmental needs, provides opportunities and ensures that needs are met in order to fully develop the potential of all employees.

Builds and Maintains Relationships

Understands the importance of interpersonal awareness and has the ability to establish and maintain relationships with employees.

Provides Meaningful and Challenging Work

Ensures that subordinates are able to link their individual contributions to organisational and divisional strategic direction. Actively creates opportunities for employees to be engaged in work that is challenging.

Remunerates and Rewards Fairly

Recognises the achievement of employees and provides rewards and recognition accordingly.

Manages Work-Life Balance

Controls work factors, which might have a negative impact on the employee's personal or family life.

2.4. FITTING OF THE PARTIAL TALENT MANAGEMENT MODEL PROPOSED BY OEHLLEY

The goodness of fit statistics for the elaborated Talent Management Competency model proposed by Oehley (2007) (see Figure 2.2) is shown in Table 2.2. Based on the fit statistics the null hypothesis of exact fit ($H_0: RMSEA = 0$) was rejected, although the null hypothesis of close fit ($RMSEA < .05$) is not rejected (Oehley, 2007). Therefore, the Talent Management Competency model proposed by Oehley (2007) show reasonable fit as the estimates derived for the freed model parameters approximately replicates the observed covariance matrix, although not exactly.

Table 2.2***Goodness-of-Fit Statistics for the Oehley (2007) Structural Model***

Degrees of Freedom = 274
Minimum Fit Function Chi-Square = 443.64 (p = 0.00)
Normal Theory Weighted Least Squares Chi-Square = 405.16 (p = 0.00)
Satorra-Bentler Scaled Chi-Square = 375.48 (p = 0.00)
Chi-Square Corrected for Non-Normality = 380.702 (P = 0.0)
Estimated Non-centrality Parameter (NCP) = 101.48
90 Percent Confidence Interval for NCP = (54.67;156.34)
Minimum Fit Function Value = 4.19
Population Discrepancy Function Value (F0) = 0.96
90 Percent Confidence Interval for F0 = (0.52; 1.47)
Root Mean Square Error of Approximation (RMSEA) = 0.059
90 Percent Confidence Interval for RMSEA = (0.043; 0.073)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.965
Expected Cross-Validation Index (ECVI) = 5.00
90 Percent Confidence Interval for ECVI = (4.55; 5.51)
ECVI for Saturated Model = 6.62
ECVI for Independence Model = 59.53
Chi-Square for Independence Model with 325 Degrees of Freedom = 6257.86
Independence AIC = 6309.86
Model AIC = 529.48
Saturated AIC = 702.00
Independence CAIC = 6405.36
Model CAIC = 812.28
Saturated CAIC = 1991.16
Normed Fit Index (NFI) = 0.930
Non-Normed Fit Index (NNFI) = 0.970
Parsimony Normed Fit Index (PNFI) = 0.780
Comparative Fit Index (CFI) = 0.970
Incremental Fit Index (IFI) = 0.970
Relative Fit Index (RFI) = 0.920
Critical N (CN) = 80.18
Root Mean Square Residual (RMR) = 0.580
Standardised RMR = 0.081
Goodness of Fit Index (GFI) = 0.770
Adjusted Goodness of Fit Index (AGFI) = 0.710
Parsimony Goodness of Fit Index (PGFI) = 0.60

2.5. PROPOSED MODEL ALTERATIONS AND EXTENTIONS**2.5.1. Proposed Model Alterations**

Given the aim of expanding on the Talent Management Model proposed by Oehley (2007), it is first necessary to investigate whether the existing model ought to be structurally modified. This will involve making a decision as to whether existing causal paths ought to be deleted and/or whether addition paths need to be included. The decision as to whether to add or delete paths will be based on Oehley's (2007) research findings and on the significance of the path coefficient estimates she obtained, as well as the theoretical soundness proposed in

support of the existing structural hypotheses. The purpose of this study is not to expand on the entire Talent Management Competency model proposed by Oehley (2007), but rather to focus the elaboration of the model on the influence of a single talent management competency, namely; *Develops Others* and its influence on intention to quit. Oehley proposed twenty-four structural hypotheses and of these only three concerns, the competency *Develops Others*. These hypotheses include: 1) *Talent Management Mindset* has a significant positive effect on the competency *Develops Others*, 2) *Identifies and Differentiates* has a significant positive effect on the competency *Develops Others*, and 3) The competency *Develops Others* has a significant effect on *Affective Commitment*. Of these three proposed hypotheses, support was obtained for only one of them, namely; *Identifies and Differentiates* has a significant positive effect on the competency *Develops Others*. The arguments proposed in support of these structural hypotheses will be discussed when presenting the findings of the freed gamma and beta matrices. With a focus on the competency *Develops Others*, Figure 2.3 provides a summary of the results obtained by Oehley (2007) in her study indicating which of the hypothesised structural relationships of her expanded partial talent management competency model were supported, and which were not.

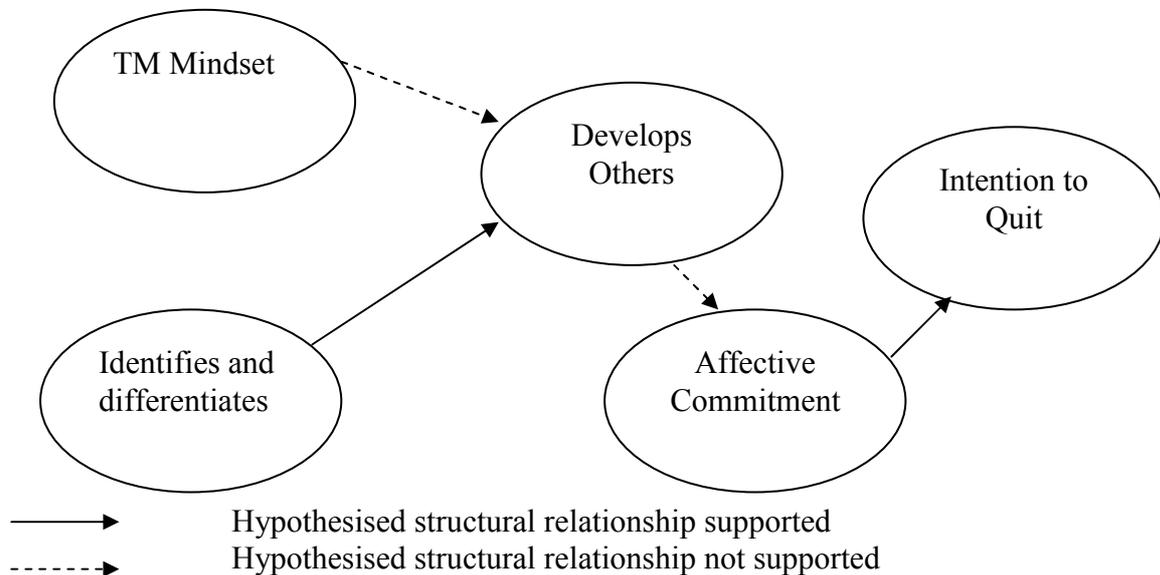


Figure 2.3. Graphical representation of the elaborated Oehley (2007) partial talent management competency model depicting the findings of Oehley (2007). Adapted from “*The Development and Evaluation of a Partial Talent Management Competency Model*”. By M Oehley, 2007, unpublished master’s thesis. Copyright 2007 by the University of Stellenbosch, Stellenbosch.

In an effort to expand and elaborate on Oehley's (2007) proposed talent management structural model it will be necessary to reassess her original arguments supporting her expanded structural model. The question should be asked how the talent management competency *Develops Others* influence *Intention to Quit* and is this influence direct or indirect?

2.5.2. Gamma Matrix

With reference to, the relationship between a *Talent Management Mindset* and *Develops Others* Oehley (2007) was unable to find support for this proposed hypothesis despite her initial theoretical expectations. However, support was found for the relationships between *Talent Management Mindset* and all the other endogenous latent variables it was hypothesised to affect (i.e. *Attracts and Recruits Talent, Builds and Maintains Positive Relations, Provides Meaningful and Challenging Work, Remunerates and Rewards Fairly, and Managers Work-Life Balance*). Oehley (2007, p. 61) defined *Talent Management Mindset* as the degree to which a line manager "persistently and continuously displays a belief that having better talent at all levels provides the means to outperform other organisations and regularly emphasises this view to others".

Oehley relied heavily on the "War for Talent Survey, 2000" undertaken by McKinsey and Company as the foundation for her aforementioned hypotheses. McKinsey and Company (as cited in Oehley, 2007, p. 20) report that 49% of high performing organisations regard the development of talent as one of their top three priorities, whilst only 30% average performing organisations report that developing talent is a priority. She further notes that this finding could potentially indicate a relationship between a *Talent Management Mindset* within an organisation and favourable organisational outcomes including retention of talented employees. In her study, she refers to a study undertaken by Antonucci (as cited in Oehley, 2007) who found that a direct negative link exists between the level of executive commitment to talent management and occurrences of significant leadership shortages within companies. Consequently, "a *Talent Management Mindset* might be the driver behind all other Talent Management competencies" (Oehley, 2007, p. 20) including; *Develops Others*.

In terms of the non-significant relationship found between *Talent management Mindset* and *Develops Others*, Oehley (2007) provides a potential explanation for this finding. She notes

that within the particular organisation where her research study took place, the human resource department's structures and procedures could potentially account for the non-significant relationship found (Oehley, 2007). She notes that as the specific organisation is engaged in a highly competitive industry, a strategic decision had been taken at an executive level to ensure that the organisation develops a sustainable competitive advantage through its approach to employee development. Consequently, she argued that this talent management competency was not under the direct control of line managers, but rather under the control of the human resource department. Thus, line managers would have minimal influence over this Talent Management Competency. This argument however, is contradicted in that the organisation's approach to employee development is similar to that of its remuneration strategy, and support was found for the relationship between *Talent Management Mindset* and *Remunerates and Rewards Fairly* (Oehley, 2007).

With reference to the arguments presented above, in particular the contradictory finding reported by Oehley (2007) that *Talent Management Mindset* statistically significantly [$p < .05$] affects *Remunerates and Rewards Fairly* but not *Develops Others* is difficult to explain. Both relationships originally hypothesised by Oehley make substantive sense. It seems dubious that the structural linkage between *Talent Management Mindset* and the other two talent management competencies are mediated by a currently excluded latent variable. Therefore, in this research study it is recommended that the structural relationship between a *Talent Management Mindset* and the talent management competency *Develops Others* be retained in the modified and expanded model.

Substantive hypothesis 1:

Line managers' degree of competence in *Talent Management Mindset* will positively impact on line managers' degree of competence in *Develops Others*

2.5.3. Beta Matrix

To support her hypothesis concerning the influence of the Talent Management competency *Develops Others* on *Affective Commitment* Oehley (2007) she relied heavily on the work of various researchers. Garger (in Oehley, 2007 p. 29) notes, "when employees see a constructive and individual return from the training they receive, their organisation usually gains in the form of increased commitment, employee satisfaction and retention". Stallworth

(2003) found that mentoring and role modelling are significantly correlated as antecedents to *Affective Commitment*.

Further support for Oehley's (2007) hypothesis is found in the work of Bartlett (2001). In his study, he found a significant and positive relationship between training participation and *Affective Commitment*. Additionally, he found that support for training from senior employees was significantly related to all three forms of commitment (where *Affective Commitment* showed the stronger relationship).

It therefore seems justified to argue that the Talent Management competency *Develops Others* should affect *Affective Commitment*. The original hypothesis presented in Oehley (2007) that the effect is direct should, however be questioned. In this study it is proposed that the relationship between the Talent Management competency *Develops Others* and *Affective Commitment* be retained in the modified and expanded model, although various mediating variables will be introduced (e.g., *Perceived Organisational Support*, *Perceived Developmental Opportunities*). This will be discussed under paragraphs 3.2 and 3.3.

Affective Commitment is regarded as the emotional attachment, identification, and involvement that an employee has with his/her organisation and goals (Meyer, Allen, & Smith, 1993). Individuals' that have strong *Affective Commitment* continue employment because of them wanting to do so (Meyer & Allen, 1991). Porter, Steers, Mowday and Boulian (1974) claim that *Affective Commitment* can be characterised by at least three factors:

1. A strong belief in and acceptance of the organisations' goals and values
2. A willingness to exert a considerable effort on behalf of the organisation
3. A strong desire to maintain membership in the organisation

In the study undertaken by Oehley (2007), support was found that a significant and negative relationship exists between the two endogenous latent variables *Affective Commitment* and *Intention to Quit*. This finding is consistent with other research findings (i.e. Baruch, 1998; Meyer & Allen, 1997). As considerable support exists that a negative structural relationship exists between these two endogenous latent variables as hypothesised by Oehley (2007), it is proposed that this causal relationship be retained in the modified and expanded model.

Substantive hypothesis 2:

Followers' level of *Affective Commitment* will negatively impact on the level of their *Intention to Quit*.

2.6. PROPOSED MODEL EXTENSIONS

Smuts (2011) argues that managerial actions in and by themselves will probably not directly determine the prevailing levels of satisfaction and commitment in followers. Rather the level of competence that line managers exhibit on the talent management competencies shapes the nature of the work environment in which the followers of the line manager functions. The talent management actions of management bring about material changes to the work environment. Followers respond to these material changes. The response is, however, not directly determined by the objectively created reality created by management. It is not the objective reality that directly affects employee behaviour. The work environment created by managers is cognitively assessed (Chan & Taylor as cited in Smuts, 2011) and psychologically interpreted by the followers. It is fundamentally this psychological interpretation of the work environment, rather than the objective reality itself, that expresses itself in organisation and job attitudes like job satisfaction and organisational commitment (Castro, Periñan & Bueno as cited in Smuts, 2011). Joyce, Slocum and Abelson (1977, p. 262) note that “perceptions of the environment are more important determinants of behaviour than is the objective environment itself”. Smuts (2011) thereby, however, does not deny that the managerial competencies might also be psychologically interpreted (amongst others in terms of its intention) by the employee and that these interpretations could also explain variance in job satisfaction and commitment. Smuts (2011) acknowledges that it is at the same time also possible that a certain (ideal) work environment can be created by the talent management competencies but that the behaviour that creates the environment is either not noticed by employees and/or that the ideal environment is not psychologically registered.

This line of reasoning points to a deficiency in the original Oehley (2007) model and provides a possible explanation why Oehley (2007) failed to find support for the causal paths she proposed between specific talent management competencies and job satisfaction, *Organisational Commitment*, and *Turnover Intention*. The causal paths in the original Oehley model (2007) between line managers' competencies and the organisation and job

attitudes *Organisational Commitment* and *Job Satisfaction* are therefore simply too long (Smuts, 2011). The importance of perceptual reality suggests that line managers need to materially change the work environment through their talent management competencies, those changes to the work environment need to be observed, found relevant or important, and internalised by employees before satisfaction with their jobs and commitment to the organisation will be enhanced, and as an end result, intention to leave the organisation reduced.

The revised model proposed in this study will therefore in terms of this argument have to make provision for specific organisational outcomes brought about by the talent management competency *Develops Others* and for the mediating role of the psychological interpretation of these features of the work environment created through this talent management competency.

Craig, Kimberly and Bouchikhi (2002) note that, one the best ways to lose talented employees is to deny them the opportunity to become more marketable towards other organisations. This would imply that organisations ought to make developmental opportunities available to employees, in an effort to ensure they remain with the organisation. The social exchange theory (Blau, 1964) proposes that individuals who receive encouraging treatments from others are more likely to reciprocate the other parties favour based on the norm of reciprocity (Guoldner, 1960). In addition, the organisational support theory (Eisenberger, et al., 1986) suggests that in the employer-employee exchange relationship, employees' who perceive that that they have received high levels of support from their organisation are more inclined to reciprocate with favourable work attitudes and behaviours that are beneficial to their organisation.

It is proposed that *Perceived Organisational Support* be included in the model as a latent variable that mediates the casual path between the talent management competency *Develops Others* and *Job Satisfaction*, *Organisation Commitment* and *Intention to Quit*. The inclusion of this latent variable can be justified, when considering the antecedents and outcomes of *Perceived Organisational Support*.

Eisenberger et al. (1986) developed the construct of *Perceived Organisational Support* in an attempt to explain the development of an employee's commitment to his/her organisation. *Perceived Organisational Support* is defined as "the extent to which employees perceive that

their contributions are valued by their organisation and that their organisation cares about their well-being” (Eisenberger et al., 1986, p. 501). They further argue that employees develop perceptions of organisational support due to them attributing qualities or traits to their organisation through a process of personification (Levinson, 1965). Wayne, Shore and Linden (1997, p. 87) remark that “This personification of an employer by an employee represents an accumulation over time of rewards and punishments the employee has received from other, more powerful organisation members”. The latent construct of perceived organisational support is regarded as the result of an exchange relationship between an employee and the organisation (Lew, 2009; Wayne et al., 1997) where employees form general perceptions about the intentions and attributes of their organisation toward them from the policies and procedures enacted by line managers (Levinson, 1965; Whitener, 2001).

2.7. ANTECEDENTS OF PERCEIVED ORGANISATIONAL SUPPORT

In order to understand how the construct of *Perceived Organisational Support* is structurally related to the talent management competency *Develops Others*, and employees’ turnover intention, the issue of whether the line manager competency *Develops Others* directly supports employees developmental needs, or whether line managers competencies contribute to the creation of a work environment that could be perceived that their organisation is supportive.

The behavioural manifestations of line managers’ talent management competencies, contribute to the creation of work environments wherein employees’ function (Oehley & Theron, 2010; Smuts, 2011). With reference to the behavioural indicators of the talent management competency *Develops Others*, Oehley (2007) suggests that the competency manifest in behaviours such as; fostering the learning and development of people, objectively assessing individuals developmental needs, coaching staff one-on-one, giving honest feedback for developmental purposes, creating developmental opportunities for subordinates, and meeting with subordinates for formal career planning sessions (Oehley, 2007, Appendix A, p. 152). It is through line manager behaviours that a supportive work environment is created. The work environment is consequently, psychologically appraised by employees. An employee’s perception of the work environment is useful in predicting organisational and job attitudes (i.e. *Job Satisfaction, Organisational Commitment, Intention to Quit* etc.) (James

& Jones, 1974). The level of competence of the line manager on the talent management competency *Develops Others* should in terms of the foregoing argument firstly affect the extent to which development opportunities are actually available to employees which in turn should correlate positively with employees psychological perception of the availability of developmental opportunities. To the extent that these development opportunities are perceived to be valuable, the perceived availability of developmental opportunities should result in *Perceived Organisational Support*. Smuts (2011, p. 34) defines the construct of *Perceived Development Opportunities* as “having a clear perception that personal developmental opportunities are available to enhance competence and performance in the workplace and that these opportunities are accessible”.

As line managers’ talent management competencies contribute to the creation of a specific work environment, and the work environment is subsequently psychologically appraised, so too may the talent management competencies be appraised. The manner in which employees appraise the behavioural manifestations of line managers’ talent management competencies may potentially account for further variance in *Perceived Organisational Support*, and indirectly through this latent variable, variance in *Job Satisfaction*, *Organisational Commitment*, and *Intention to Quit*. The behavioural manifestations of line managers’ talent management competencies may therefore potentially not in and by itself directly influence Employees Satisfaction and Commitment (Oehley & Theron, 2010) but could directly affect *Perceived Organisational Support*.

It can therefore be argued that the line manager competency *Develops Others* has an influence in the development of employees *Perceived Organisational Support*. This influence is most likely both direct and indirect in nature. Line managers facilitate the creation of an organisational environment that is perceived by employees to denote that their organisation is supportive of their developmental needs but at the same time, the actions of line managers are also interpreted as signals of the extent to which their organisation is supportive of them. In the same way that employees form general perceptions concerning their valuation by the organisation, they form general perception regarding the extent to which their line managers value and care for their welfare (Rhoades & Eisenberger, 2002). Levinson (1965) notes that the actions by agents (i.e. line managers) are often regarded as a signal of an organisation’s intent rather than solely as actions of a particular individual.

It can therefore, be argued that line managers as representatives of the organisation have the responsibility for developing their subordinates, where they (the subordinates) could view both their supervisor and organisation as supportive of their developmental needs. Wayne et al. (1997) proposed that job training is a discretionary practice enacted by line managers, signals an investment in an employee, and implies future support from their organisation, thus resulting to an increase in *Perceived Organisational Support*. Support from line managers in terms of career development assists employees' in achieving their needs for personal growth through self-development and continuous learning (London & Smither, 1999) and may as a result lead to favourable individual and organisational outcomes. Shore and Shore (as cited in Nasurdin, Hemdi & Guat, 2008, p. 22) argue that "certain human resource management practices (such as training and development) would serve as a signal about an employee's potential and implies investment by the organisation in an employee". Rhodes and Eisenberger (2002) note that employees' developmental experience may be perceived as an indicator of positive evaluations of their contributions by their organisation, which consequently results in superior perceptions of organisational support.

Additionally, Tansky and Cohen (2001) argue that developing employees could be perceived as a type of social exchange, where employees are afforded opportunities and benefits, and they may in turn feel an obligation to reciprocate this opportunity/benefit by engaging in behaviours or exhibiting attitudes indicating commitment to their organisation.

Generally, empirical evidence proposes that inducements such as positive and beneficial actions (e.g. development programmes) aimed at employees by the organisation (through the efforts of line managers) create conditions for employees to reciprocate in favourable ways (Settoon, Bennett, & Linden, 1996).

Thus, it can be argued that the line manager's supportive behaviour (i.e. creates developmental opportunities) can be perceived by employees that their organisation is investing in them and is supportive of them, and where employees may feel obliged to reciprocate the treatment in the form of commitment to their organisation, dependent on the supportive behaviour being discretionary. In a study among military personnel Mullen, Kroustalis, Meade, and Surface (2006) found that training did have an influence on the perceptions of organisational support among trainees.

In order for supportive developmental behaviours enacted by line managers to have any favourable outcomes for an employee or his/her organisation, employees need to perceive this behaviour as supportive. Shore and Shore (as cited in Wayne et al., 1997) identified two essential human resource management practices that are associated with *Perceived Organisational Support*, they include (p. 87):

- 1) Discretionary practices that imply investment by an organisation in an employee, and
- 2) Organisational recognition

Wayne et al. (1997) argue that employees' should believe that the actions undertaken by their organisation are discretionary and reflecting positive evaluations of them, to improve perception that their organisation is supportive. Nasurdin et al. (2008) note that supportive human resource practices (i.e. employee development) represent discretionary actions by an organisation that typically benefits employees, indicate that the organisation values and cares about its employees, and can be relied on in future. They further note, "Such positive valuation would enhance employees' judgements about organisational support" (p. 20).

In terms of the foregoing argument it is thus, hypothesised that that a positive structural relationship exists between *Develops Others* and *Perceived Development Opportunities*.

Substantive hypothesis 3:

Line managers' degree of competence in *Develops Others* will positively impact on followers' level of *Perceived Development Opportunities*.

In terms of the foregoing argument, it is further hypothesised that *Perceived Development Opportunities* mediates the causal relationship between the talent management competency *Develops Others* and *Perceived Organisational Support*.

Substantive hypothesis 4:

Followers' level of *Perceived Development Opportunities* will positively impact on the level of their *Perceived Organisational Support*.

In terms of the forgoing argument, it is in addition hypothesised that a positive structural relationship exists between *Develops Others* and *Perceived Organisational Support*.

Substantive hypothesis 5:

Line managers' degree of competence in *Develops Others* will positively impact on followers' level of *Perceived Organisational Support*.

2.8. OUTCOMES OF PERCEIVED ORGANISATIONAL SUPPORT

2.8.1. Trust

In the organisational behaviour literature, trust is considered a complex phenomenon that has long eluded precise definition due to it encompassing various facets and levels that ought to be carefully considered (Whitener, 2001). It would be worthwhile to distinguish between two referents of trust namely; supervisory trust (i.e. line managers) and organisational trust (i.e. organisational leaders). Bass (as cited in DeConinck, 2010) notes that direct line managers perform supervisory duties whilst organisational leaders are responsible for strategic decisions of an organisation. Tan and Tan (2000, p. 343) defines follower trust in line managers as “the willingness of a subordinate to be vulnerable to the actions of his or her supervisor whose behaviour and actions he/she cannot control”, whilst they define organisational trust as (p. 343) “the global evaluation of an organisation’s trustworthiness as perceived by the employee. It is the employee’s confidence that the organisation will perform an action that is beneficial or at least not detrimental to him or her”.

Whitener (2001) suggests that trust develops in the same manner as *Perceived Organisational Support*, through a social exchange process, where employees interpret the actions of management and reciprocate with favourable work attitudes and behaviours. Blau (1964, p. 98) remarks, “Since social exchange requires trusting other parties to reciprocate, the initial problem is to prove oneself trustworthy”. He further notes “...the gradual expansion of the exchange permits the partners to prove their trustworthiness to each other. Processes of social exchange, consequently, generate trust” (p. 315). When employees perceive that, the target of trust is authentically concerned for their welfare and is motivated to seek joint gain, trust will emerge (Doney, Cannon, & Mullen, 1998).

Additionally, Dirks and Ferrin (2002) argue that in terms of the relationship-based perspective of how trust develops employees are more willing to reciprocate care and consideration that a leader may express in a relationship. Thus, employees who perceive that

their line manager (as a representative of their organisation) has, or will, exhibit care or consideration toward them will reciprocate this caring orientation in the form of favourable behaviours. Similarly, Tan and Tan (2000) note that employees may make decisions as to whether to trust their organisation by making inferences about the trustworthiness of their line managers from their exchanges with line managers. When employees trust their line manager, they could generalise this trust to the entire organisation, as they may perceive their line manager as representing the organisation (Konovsky & Pugh, Citizen, 1994). Dirks and Ferrin (2002, p. 612) note that “trust-related concerns about a leader’s character are important because the leader may have the authority to make decisions that have a significant impact on a follower and the follower’s ability to achieve his or her goals”. They termed this perspective of how trust develops the *character-based* perspective. In terms of this perspective, employees “will draw inferences about their leader’s characteristic’s such as integrity, dependability, fairness, and ability and that these inferences have consequences for work behaviour and attitudes” (Dirks & Ferrin, p. 612).

Research examining the relationship between *Perceived Organisational Support* and trust is sparse, while theoretically a relationship should exist between the two constructs. Eisenberger, Fasolo and Davis-LaMastro (1990, p. 57) note, “perceived support would create trust that the organisation will fulfil its exchange obligations of noticing and rewarding employees efforts made on its behalf”. Similarly, Wayne et al. (1997, p. 83) argue, “Perceptions of being valued and cared about by an organisation also enhances employees’ trust that the organisation will fulfil its exchange obligations of recognising and rewarding desired employee attitudes and behaviour”. In a study undertaken by Dulac et al. (as cited in DeConinck, 2010) they found that *Perceived Organisational Support* is a direct and significant predictor of *Organisational Trust*. Armstrong-Stassen (1998) found in a longitudinal study that *Perceived Organisational Support* is a significant predictor of *Organisational Trust*. In a meta-analytic study of the antecedents and outcomes of trust, Dirks and Ferrin (2002) report that a strong correlation exists between *Perceived Organisational Support* and trust in the organisation.

It is consequently hypothesised that there is a positive causal relationship between *Perceived Organisational Support* and *Organisational Trust*.

Substantive hypothesis 6:

The level of *Perceived Organisational Support* held by employees will positively impact on employees' level of *Organisational Trust*

2.8.2. Organisational Commitment

In their review of the literature, Rhodes and Eisenberger (2002) established (using meta-analytic techniques) that *Organisational Commitment* is an important outcome of *Perceived Organisational Support*. Meyer and Allen (1997), argue that a general theme underlying the relationship between the antecedents of *Organisational Commitment* and the latent construct itself is the extent to which these antecedents signal that the organisation is supportive of its employees'.

Various researchers (Eisenberger et al., 1986; Eisenberger et al., 1990; Shore & Wayne, 1993) have suggested that, in terms of the social exchange theory proposed by Blau (1964), favourable actions undertaken by an organisation and/or its representatives (e.g. line managers) directed at employees will contribute to the development of high quality exchange relationships. Feelings of obligation are in turn created for employees to reciprocate in a manner that is beneficial to the organisation (Nasurdin et al., 2008; Wayne et al., 1997). Whitener (2001, p.518) notes, "Employees' commitment to the organization would be significantly related to their perceptions of the employer's commitment to them (i.e. *Perceived Organisational Support*) as they reciprocate their perceptions of the organization's actions in their own attitude and behaviour". It has been proposed by numerous authors (Eisenberger et al., 1990; Nasurdin et al., 2008; Rhoades et al., 2001) - that one-avenue employees could pursue in attending to this obligation is through increased commitment to the organisation.

Allen and Meyer (1990) developed a three-component model of organisational commitment where they labelled the various components as "affective", "continuance" and "normative" commitment. Meyer and Allen (1997), distinguish the nature of the commitment as; the emotional attachment to and identification with and involvement in an organisation (*Affective Commitment*), commitment because of necessity (*Continuance Commitment*), commitment from obligation (*Normative Commitment*).

2.8.2.1. Affective Commitment

Affective Commitment is regarded as the emotional attachment, identification, and involvement that an employee has with his/her organisation and goals (Meyer, Allen, & Smith, 1993). Various researchers have found that *Perceived Organisational Support* is strongly related to *Affective Commitment*, although the two constructs are empirically distinct (Allen, Shore, & Griffeth, 2003; Eisenberger et al., 1990; Guzzo, Noonan, & Elron, 1994; Shore & Tetrick, 1991; Shore & Wayne, 1993). Rhoades, Eisenberger and Armeli (2001) further note that within the literature *Perceived Organisational Support* and *Affective Commitment* have been found to have similar antecedents and outcomes.

Eisenberger et al. (1990) found support for a positive relationship between *Perceived Organisational Support* and *Affective Commitment*. Additionally, Hutchison (1997) found support for a positive relationship between *Perceived Organisational Support* and *Affective Commitment*. Wayne et al. (1997) hypothesised that *Perceived Organisational Support* was positively related to *Affective Commitment*, and they found support for this hypothesis. In their study Nasurdin et al. (2008) found that, the relationship between *Perceived Organisational Support* and *Affective Commitment* was significant and positive. Rhoades et al. (2001) found longitudinal evidence that *Perceived Organisational Support* is causally related to *Organisational Commitment*, specifically *Affective Commitment*. In their review of the literature concerning *Perceived Organisational Support*, Rhodes and Eisenberger (2002) note that there is much empirical evidence that *Perceived Organisational Support* is positively and significantly related to *Affective Commitment*.

Given the overwhelming evidence, it is consequently hypothesised that there is a positive causal relationship between *Perceived Organisational Support* and *Affective Commitment*.

Substantive hypothesis 7:

The level of *Perceived Organisational Support* held by employees will positively impact on employees' level of *Affective Commitment*

Various authors have identified numerous outcome variables related to *Organisational Trust* including *Organisational Commitment*. In their study, Cook and Wall (1990) found that trust in management was positively correlated with individual measures of identification,

involvement and loyalty. Furthermore, Hrebiniak and Alutto (1972) found further support that trust is correlated with *Organisational Commitment*. In a study among public servants Liou (as cited in Tan & Tan, 2000) found that, *Organisational Trust* was a significant predictor of *Organisational Commitment*. Recent meta-analyses (Colquitt, Scott, & LePine, 2007; Dirks & Ferrin, 2002) have found that organisational trust is significantly associated with *Organisational Commitment*.

As previously mentioned, in terms of the relationship-based perspective of how trust develops, employees will reciprocate favourably toward the other party in the relationship when they perceive that the other party is fulfilling their exchange obligation. Dirks and Ferrin (2002, p. 615) notes, “trust in organizational leadership may involve reciprocating to that referent in the form of organizational-level commodities such as organizational commitment”. Thus, when employees trust their organisation, they may reward their organisation by remaining committed to their respective organisations. In a study by Albrecht and Travaglione (2003) they found that trust in senior management has a significant influence on the degree to which employees feel emotionally committed (i.e. *Affective Commitment*) to their organisations.

It can be argued, that based on the findings previously mentioned, that a causal path exists between *Organisational Trust* and *Affective Commitment*. As such, it is hypothesised that a positive causal relationship exists between *Organisational Trust* and *Affective Commitment*.

Substantive hypothesis 8:

The level of *Organisational Trust* held by employees will positively impact on employees' level of *Affective Commitment*

2.8.2.2. Normative Commitment

As opposed to the other forms of commitment (*Affective* and *Continuance Commitment*), *Normative Commitment* has been the focus of few empirical investigations. *Normative Commitment* refers to those feelings of obligation to remain with an organisation (Meyer & Allen, 1991). Wiener (1982, p. 21) defines *Normative Commitment* as “the totality of internalized normative pressures to act in a way which meets organizational goals and

interests". He further proposed that employees display such behaviours, as "they believe it is the 'right' and moral thing to do" (p. 421).

In terms of the organisational support theory, Armeli, Eisenberger, Fasolo, and Lynch (1998) note that *Perceived Organisational Support* would result in the development of *Affective Commitment* through assisting the satisfaction of employees' socio-emotional needs and creating a *Felt Obligation* to the organisation. However, Meyer and Parfyonova (2010) argue that through creating an obligation to reciprocate it is more likely to result in the development of *Normative Commitment* as opposed to *Affective Commitment*. Studies concerning the relationship between *Perceived Organisational Support* and *Normative Commitment* are sparse, in comparison to *Affective Commitment*, however, in Meyer, Stanley, Herscovitch, and Topolnytsky (2002) meta-analysis they report that *Perceived Organisational Support* had a significant influence on *Normative Commitment*.

Additionally, it can be argued that employees who perceive that their organisation is supportive would feel that they have a moral obligation to remain in the employment of their current organisation. This argument is consistent with the social exchange theory (Blau, 1964) which proposes that employees who receive encouraging treatments from others (i.e. their employer) are more likely to reciprocate the other parties favour based on the norm of reciprocity (Guoldner, 1960). Thus, employees who perceive greater support from their organisation may reciprocate by continuing employment due to them feeling they have a moral obligation to do so.

As opposed to hypothesising a direct causal relationship between *Perceived Organisational Support* and *Normative Commitment*, it is proposed that the relationships between the two constructs will be mediated by their level of *Felt Obligation*. This will be discussed further in paragraph 2.8.4.

2.8.3. Job Satisfaction

Byham et al. (2002) argue that a lack of opportunities regarding both personal growth and job challenge are reasons why people voluntarily leave organisations. The national skills shortage leads to an abundance of vacant positions, which results in the increased mobility of skilled employees. Rhoades and Eisenberger (2002) argue that *Perceived Organisational Support*

ought to contribute to the development of overall employee *Job Satisfaction* “by meeting socio-emotional needs, increasing performance-reward expectancies, and signalling the availability of aid when needed” (p. 701). Employees have the basic socio-emotional affiliation need to be accepted as a valued member of a group (Benson & Dundis, 2003). Support in addition signals safety and security in the face of environmental threats. It therefore follows that if employees perceive their organisation will fulfil these needs by being supportive of them that they should experience satisfaction. Considering Maslow’s hierarchy of needs, a question that arises in the aforementioned regard is whether the effect of *Perceived Organisational Support on Job Satisfaction* is not mediated and/or moderated by the relative saliency of the lower-order needs?

It can be argued that employees’ *Job Satisfaction* would increase, in relation to their perceptions that their organisation would provide training and development initiatives (i.e. *Perceived Developmental Opportunities*) to improve their work performance. Similarly, if an organisation provides developmental opportunities directed at improving employees competence in performing their respective jobs, their *Job Satisfaction* would consequently improve. Costen and Salazar (2011, p. 275) argue that providing employees with training and development “involves providing employees with the basic knowledge and skills they need to perform their duties to the company’s standards”. Hartline and Ferrell (as cited in Costen & Salazar, 2011) note that employees may experience feelings of competence following their participation in training programmes, which consequently increases their level of *Job Satisfaction*.

Employees participate in training and development programmes for numerous reasons. Benson and Dundis (2003, p. 317) note that through participating in training and development programmes employees are able to satisfy their self-esteem needs, where employee development “... represents an opportunity to feel and actually be more productive and confident in the work environment”. Consequently, it can be argued that as employee development contributes to improved confidence and performance, employees have a greater opportunity to obtain rewards, recognition, and positive performance appraisals (Benson & Dundis, 2003). Employee development may additionally satisfy employees’ self-actualisation needs. As employees’ participate in developmental programmes, they are able to develop their potential, learn new skills, improve their knowledge, and feel even more confident in what they do (Benson & Dundis, 2003).

Given the forgoing argument, it can be argued, that a causal path exists between *Perceived Developmental Opportunities* and *Job Satisfaction*. As such, it is hypothesised that a positive causal relationship exists between *Perceived Developmental Opportunities* and *Job Satisfaction*.

Substantive hypothesis 9:

The level of *Perceived Developmental Opportunities* held by employees will positively impact on employees' level of *Job Satisfaction*.

Eisenberger, Cummings, Armeli, and Lynch(1997) found that *Perceived Organisational Support* and *Job Satisfaction* were strongly related, however, they also found empirical support that the two constructs are distinct. Additionally, Armstrong-Stassen (1998) found longitudinal support that *Perceived Organisational Support* is positively related to *Job Satisfaction*. In their study, Allen et al. (2003) proposed a causal relationship between *Perceived Organisational Support* and *Job Satisfaction* and found that the relationship was significant and positive.

It is consequently hypothesised that a positive causal relationship exists between *Perceived Organisational Support* and *Job Satisfaction*.

Substantive hypothesis 10:

The level of *Perceived Organisational Support* held by employees will positively impact on employees' level of *Job Satisfaction*

2.8.4. Felt Obligation

As previous mentioned, the social exchange theory (Blau, 1964) proposes that individuals who receive encouraging treatments from others are more likely to reciprocate the other parties favour based on the norm of reciprocity (Guoldner, 1960). In addition, the organisational support theory (Eisenberger et al., 1986) suggests that in the employer-employee exchange relationship, employees' who perceive that that they have received high levels of support from their organisation are more inclined to reciprocate with favourable work attitudes and behaviours that are beneficial to their organisation.

Similarly, Wayne et al. (1997, p. 83) notes that “high levels of POS create feelings of obligation, whereby employees not only feel that they ought to be committed to their employers, but also feel an obligation to return the employers’ commitment by engaging in behaviours that support organizational goals”. Thus, it can be argued that due to the norm of reciprocity, *Perceived Organisational Support* will lead to a *Felt Obligation*. Eisenberger, Armeli, Rexwinkel, Lynch, and Rhoades (2001, p.42) defines *Felt Obligation* as “... a prescriptive belief regarding whether one should care about the organization’s well-being and should help the organization reach its goals”.

In their study, Eisenberger et al. (2001) found that *Felt Obligation* mediated the relationship between *Perceived Organisational Support* and *Affective Commitment*. Lew (2009) found that that *Perceived Organisational Support* had a direct influence on *Affective Commitment*, but also that *Perceived Organisational Support* had an indirect influence on *Affective Commitment* through *Felt Obligation*.

It is thus hypothesised that a positive causal relationship exists between *Perceived Organisational Support* and *Felt Obligation*.

Substantive hypothesis 11:

The level of *Perceived Organisational Support* held by employees will positively impact on employees’ *Felt Obligation*

Further, it is further hypothesised that *Felt Obligation* mediates the causal relationship between *Perceived Organisational Support* and *Affective Commitment*.

Substantive hypothesis 12:

The effect of the level of *Perceived Organisational Support* held by employees on their level of *Affective Commitment* will be mediated by their level of *Felt Obligation*.

It can also be argued that, as *Normative Commitment* refers to those feelings of obligation to remain with an organisation (Meyer & Allen, 1991) that *Felt Obligation* would be causally related to *Normative Commitment*. Although, a causal relationship should exist between *Felt Obligation* and *Normative Commitment* no empirical evidence could be found in support of

this causal relationship. Thus, it is also hypothesised that *Felt Obligation* mediates the causal relationship between *Perceived Organisational Support* and *Normative Commitment*.

Substantive hypothesis 13:

The effect of the level of *Perceived Organisational Support* held by employees on their level of *Normative Commitment* will be mediated by their level of *Felt Obligation*.

2.8.5. Intention to Quit

In their study, Wayne et al. (1997) found support that *Perceived Organisational Support* was negatively related to *Intention to Quit*. They further found that *Perceived Organisational Support* had an indirect negative effect on *Intention to Quit*, through the construct of *Affective Commitment*. Their finding is consistent with various other researchers.

The results from the study undertaken by Eisenberger et al. (2001) indicate that a significant indirect negative relationship exists between *Perceived Organisational Support* and withdrawal behaviours (i.e. *Intention to Quit*). Lew (2009) also found that the influence of *Perceived Organisational Support* on Turnover Intentions (i.e. *Intention to Quit*) was due to the indirect effect through *Affective Commitment*. However, he further found that *Perceived Organisational Support* had an insignificant direct effect on turnover intention.

Various studies have found that turnover intentions (i.e. *Intention to Quit*) are the best predictor of actual turnover (Arnold & Feldman, 1982; Tett & Meyer, 1993). *Job Satisfaction*, *Organisational Commitment* and *Intention to Quit* are commonly cited in the literature as critical antecedents to job turnover (Arnold & Feldman, 1982).

Tett and Meyer (1993) note that important discrepancies exist concerning the relative contributions of *Job Satisfaction* and *Organisational Commitment* to the withdrawal process. The first perspective holds that commitment to an organisation develops from *Job Satisfaction* such that commitment mediates the effect of satisfaction on the turnover behaviour (Mathieu & Zajack 1990; Tett & Meyer, 1993). The satisfaction-to-commitment mediation model reflects Porter et al. (1974) argument that commitment takes longer to develop and is more enduring than satisfaction (Tett & Meyer, 1993). This argument has received considerable empirical support (Williams & Hazer, 1986). Thus, this model implies

that *Job Satisfaction* has only an indirect influence on an employee's *Intention to Quit* through *Organisational Commitment*.

The second perspective holds the opposite view where *Job Satisfaction* develops from *Organisational Commitment* (Vandenberg & Lance, 1992; Salancik & Pfeffer, 1978). The commitment-to-satisfaction model suggests that commitment to an organisation engenders a positive attitude towards the job and that employees' stay based on how they feel about their jobs (Tett & Meyer, 1993; Salancik & Pfeffer, 1978). Thus, the model proposes the view that commitment can only be expected to have an indirect impact through *Job Satisfaction* on turnover behaviours. Curry et al. (as cited in Tett & Meyer, 1993) have provided support for this model.

The final perspective holds that both *Job Satisfaction* and *Organisation Commitment* contribute equally to the turnover process (Tett & Meyer, 1993). Vandenberg and Lance (1992) however argue that both previously mentioned perspectives are empirically defensible. Colquitt, LePine, and Wesson (2010) found that, *Job Satisfaction* has a strong positive effect on *Organisational Commitment*. It has been reported by various authors that individuals who experience higher levels of *Job Satisfaction* tend to feel higher levels of *Affective Commitment* and *Normative Commitment*; however, the effects on *Continuance Commitment* are weaker (Colquitt et al., 2010; Meyer et al., 2002, Meyer & Allen, 1997).

Chiu, Lin, Tsai and Hsiao (2005) report that *Job Satisfaction* has a direct effect on turnover intentions, but also as an indirect effect on turnover intention through *Organisational Commitment*. According to Brough and Frame (in Chiu et al., 2005), *Job Satisfaction* is a strong predictor of turnover intentions. Arnold and Feldman (1982) found that turnover behaviours are significantly influenced by overall *Job Satisfaction*.

It is hypothesised that a dual positive causal relationship exists between the two components of *Organisational Commitment* that are the focus on this study (i.e. *Affective* and *Normative Commitment*) and *Job Satisfaction*.

Substantive hypothesis 14:

The level of *Job Satisfaction* held by employees will positively impact on employees' level of *Affective Commitment*

Substantive hypothesis 15:

The level of *Affective Commitment* held by employees will positively impact on employees' level of *Job Satisfaction*.

Substantive hypothesis 16:

The level of *Job Satisfaction* held by employees will positively impact on employees' level of *Normative Commitment*

Substantive hypothesis 17:

The level of *Normative Commitment* held by employees will positively impact on employees' level of *Job Satisfaction*.

Further, it is hypothesised that a direct negative relationship exists between relationship exists between *Normative Commitment* and *Intention to Quit*.

Substantive hypothesis 18:

The level of *Normative Commitment* held by employees will negatively impact on employees' *Intention to Quit*.

Additionally, it is hypothesised that a direct negative causal relationship exists between *Job Satisfaction* and *Intention to Quit*.

Substantive hypothesis 19:

The level of *Job Satisfaction* held by employees will negatively impact on employees' *Intention to Quit*.

Moreover, various researchers have found that a reduction in employee turnover was one of the beneficial organisational outcomes of trust (Costigan, Ilter & Berman, 1998; Mishra & Morrissey, 1990). More specifically, Konovsky and Cropanzano (1991) found support that trust in management (i.e. *Organisational Trust*) was significantly negatively correlated with employees turnover intentions. Davis, Schoorman, Mayer, and Tan (2000, p. 566) remark that "... if a manager is not trusted, employees are likely to devalue the inducements/contributions ratio which ties them to continued membership in the organization". Davis et al. (2000) tested the hypothesis that organisations whose general managers are more trusted by their

employees will have lower turnover rates than organisations whose general managers are less trusted by their employees. The authors found support for this hypothesis.

Considering, Whitener's (2001) suggestion that trust develops through a social exchange process, where employees interpret the actions of management and reciprocate with favourable work attitudes and behaviours, it can be argued that employee whom perceive their organisation as trustworthy may reciprocate this sentiment through continuing their membership in their current organisation.

It is consequently hypothesised that a negative causal relationship exists between *Organisational Trust* and *Intention to Quit*.

Substantive hypothesis 20:

The level of *Organisational Trust* held by employees will negatively influence employees' *Intention to Quit*

The proposed model extensions are schematically represented in Figure 3.1, representing the substantive hypotheses that have been formulated through the literature study.

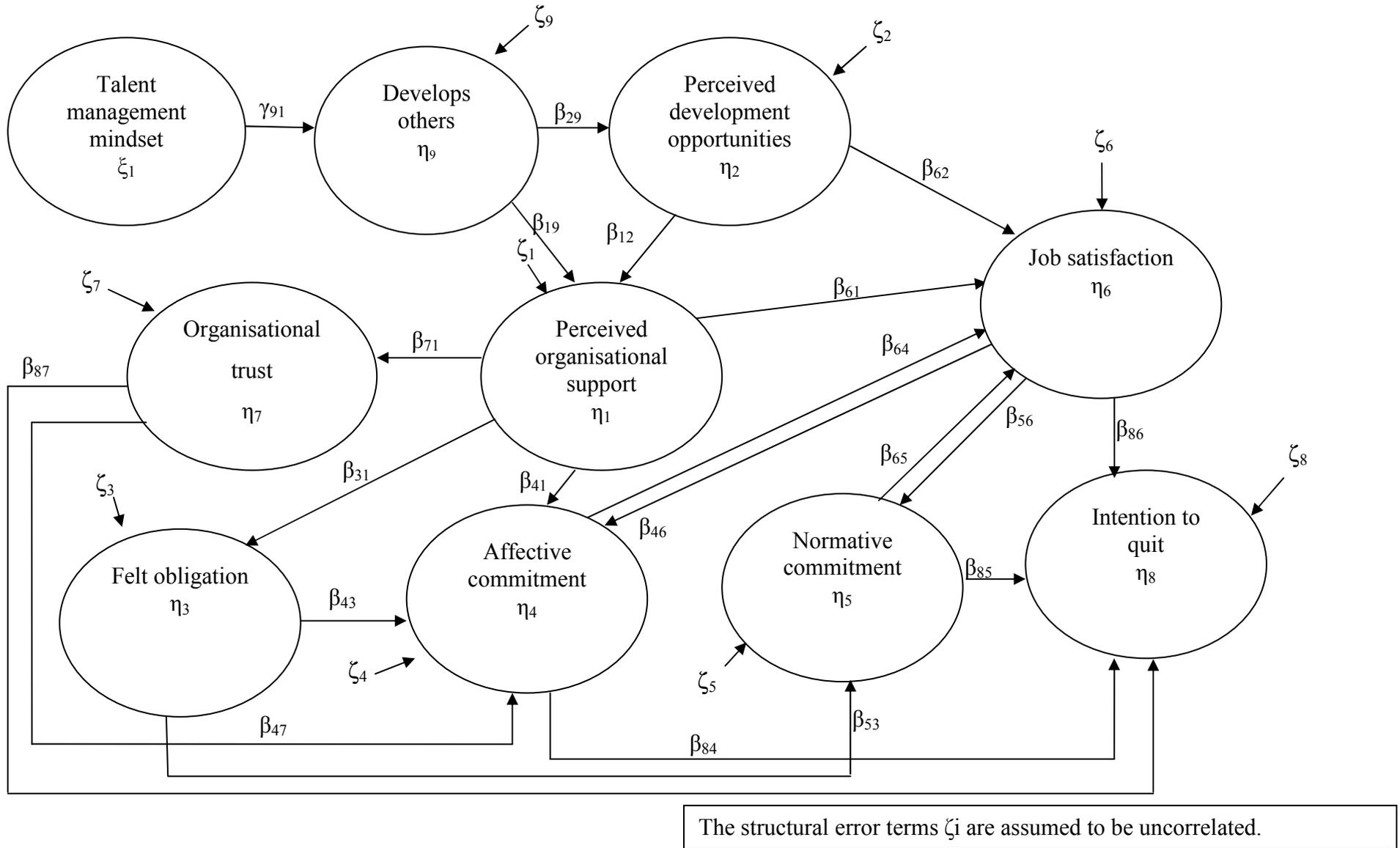


Figure 3.1. Proposed Oehley - Herselman talent management competency model

The proposed Oehley – Herselman talent management competency model focusing on the role of perceived development opportunity can furthermore be expressed as a set of structural equations (see equations 1 to 9 below) representing the path-specific research problems that will be empirically investigated.

$$\eta_1 = \beta_{19} \eta_9 + \beta_{12} \eta_2 \zeta_1 \dots\dots\dots(1)$$

$$\eta_2 = \beta_{29} \eta_9 + \zeta_2 \dots\dots\dots(2)$$

$$\eta_3 = \beta_{31} \eta_1 + \zeta_3 \dots\dots\dots(3)$$

$$\eta_4 = \beta_{41} \eta_1 + \beta_{43} \eta_3 + \beta_{46} \eta_6 + \beta_{47} \eta_7 + \zeta_4 \dots\dots\dots(4)$$

$$\eta_5 = \beta_{53} \eta_3 + \beta_{56} \eta_6 + \zeta_5 \dots\dots\dots(5)$$

$$\eta_6 = \beta_{62} \eta_2 + \beta_{61} \eta_1 + \beta_{64} \eta_4 + \beta_{65} \eta_5 + \zeta_6 \dots\dots\dots(6)$$

$$\eta_7 = \beta_{71} \eta_1 + \zeta_7 \dots\dots\dots(7)$$

$$\eta_8 = \beta_{86} \eta_6 + \beta_{85} \eta_5 + \beta_{84} \eta_4 + \beta_{87} \eta_7 + \zeta_8 \dots\dots\dots(8)$$

$$\eta_9 = \gamma_{91} \xi_1 + \zeta_9 \dots\dots\dots(9)$$

Additionally, the causal relationships hypothesised to exist between the various latent variables (see Figure 3.1) can be expressed in matrix form as Equations 10 and 11.

$$\begin{pmatrix} \eta_1 \\ \eta_2 \\ \eta_3 \\ \eta_4 \\ \eta_5 \\ \eta_6 \\ \eta_7 \\ \eta_8 \\ \eta_9 \end{pmatrix} = \begin{pmatrix} 0 & \beta_{12} & 0 & 0 & 0 & 0 & 0 & 0 & \beta_{19} \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & \beta_{29} \\ \beta_{31} & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \beta_{41} & 0 & \beta_{43} & 0 & 0 & \beta_{46} & \beta_{47} & 0 & 0 \\ 0 & 0 & \beta_{53} & 0 & 0 & \beta_{56} & 0 & 0 & 0 \\ \beta_{61} & \beta_{62} & 0 & \beta_{64} & \beta_{65} & 0 & 0 & 0 & 0 \\ \beta_{71} & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & \beta_{84} & \beta_{85} & \beta_{86} & \beta_{87} & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix} + \begin{pmatrix} \eta_1 \\ \eta_2 \\ \eta_3 \\ \eta_4 \\ \eta_5 \\ \eta_6 \\ \eta_7 \\ \eta_8 \\ \eta_9 \end{pmatrix} \begin{pmatrix} \gamma_{91} \end{pmatrix} \begin{pmatrix} \xi_9 \end{pmatrix} + \begin{pmatrix} \zeta_1 \\ \zeta_2 \\ \zeta_3 \\ \zeta_4 \\ \zeta_5 \\ \zeta_6 \\ \zeta_7 \\ \zeta_8 \\ \zeta_9 \end{pmatrix} \dots\dots(10)$$

$$\eta = B\eta + \Gamma\xi + \zeta \dots\dots\dots(11)$$

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1. INTRODUCTION

The intention of employees' to remain in employment of their current organisation, due to their perceptions of training and development interventions is not a random event, but rather the result of a complex systematic network of latent variables characterising employees' and their numerous perceptions of the work environment. Through utilising a scientific method of inquiry, the probability of reaching a valid and credible understanding of the reasons why employees desire to leave their current employer is enhanced. The scientific method of inquiry is dedicated to the "epistemic ideal" (Babbie & Mouton, 2001, p. 8) in its search for valid and credible understandings. An attempt at obtaining a valid understanding as to why employees desire to leave their current employment has been portrayed in a structural model comprised of numerous complex nomological networks of latent variables (see Figure 3.1.). However, the validity of this understanding is dependent on the extent to which the model closely fits the data obtained (Babbie & Mouton, 2001). Additionally, the validity and credibility of verdicts on the extent to which the structural model provides a valid account as to the psychological process underlying employees leaving their current employer is dependent on the methodology employed to arrive at the verdict. In science, the epistemic ideal is served by the methodology employed. It is in addition vital that a thorough account of the methodological choices should be provided, in order to ensure that other researchers/practitioners can investigate the validity and credibility of the verdict by investigating the methodological rigor of the process that was used to arrive at the verdict. Where researchers provided minimal insights into the methodology they employed, other researcher/practitioners will have no means of evaluating the validity of the conclusions they reached. Where there is doubt and uncertainty surrounding the methodology that the researcher employed the conclusions that were reached should be considered tenuous at best. This situation would consequently not only threaten the rationality of science, but also the epistemic ideal of science (Babbie & Mouton, 2001)

3.2. SUBSTANTIVE RESEARCH HYPOTHESES

The objective of this study is to elaborate the intention to quit structural model proposed by Oehley (2007). The theoretical argument presented in the literature study resulted in the inclusion of a number of additional latent variables into the original model. The resultant elaborated structural model was depicted in Figure 3.1. The over-arching substantive hypothesis of this study (hypothesis 1) is that the structural model depicted in Figure 3.1 provides a valid account of the psychological process that determines the strength of employees' intention to quit from their current organisation. The over-arching substantive research hypothesis is dissected into the following more detailed, specific direct-effect substantive research hypotheses¹.

1. Line managers' degree of competence in *Talent Management Mindset* will positively impact on line managers' degree of competence in *Develops Others*.
2. Followers' level of *Affective Commitment* will negatively impact on the level of their *Intention to Quit*.
3. Line managers' degree of competence in *Develops Others* will positively impact on followers' level of *Perceive Development Opportunities*.
4. Followers' level of *Perceived Development Opportunities* will positively impact on the level of their *Perceived Organisational Support*.
5. Line managers' degree of competence in *Develops Others* will positively impact on followers' level of *Perceived Organisational Support*.
6. The level of *Perceived Organisational Support* held by employees will positively impact on employees' level of *Organisational Trust*.
7. The level of *Perceived Organisational Support* held by employees will positively impact on employees' level of *Affective Commitment*.
8. The level of *Organisational Trust* held by employees will positively impact on employees' level of *Affective Commitment*.
9. The level of *Perceived Development Opportunities* held by employees will positively impact on employees' level of *Job Satisfaction*.

¹ Indirect effect substantive hypotheses in which mediator variables mediate the effect of ζ_i on η_j or the effect of η_i on η_j are not formally stated. Neither will formal statistical hypotheses be formulated for these effects. The significance of the indirect effects will nonetheless be tested.

10. The level of *Perceived Organisational Support* held by employees will positively impact on employees' level of *Job Satisfaction*.
11. The level of *Perceived Organisational Support* held by employees will positively impact on employees *Felt Obligation*.
12. The level of *Job Satisfaction* held by employees will positively impact on employees' level of *Affective Commitment*.
13. The level of *Affective Commitment* held by employees will positively impact on employees' level of *Job Satisfaction*.
14. The level of *Job Satisfaction* held by employees will positively impact on employees' level of *Normative Commitment*.
15. The level of *Normative Commitment* held by employees will positively impact on employees' level of *Job Satisfaction*.
16. The level of *Normative Commitment* held by employees will negatively impact on employees' *Intention to Quit*.
17. The level of *Job Satisfaction* held by employees will negatively impact on employees' *Intention to Quit*.
18. The level of *Organisational Trust* held by employees will positively impact on employees' *Intention to Quit*.

3.3. RESEARCH DESIGN

The proposed Oehley – Herselman talent management model (Figure 3.1) makes claims that specific structural relations exist between the latent variables contained in the model. A strategy is required to investigate the substantive research hypotheses that were derived from the hypothesised structural model. The research design would constitute this strategy or plan (Kerlinger & Lee, 2000). Babbie and Mouton (2001, p. 74) note that “A research design is a plan or blueprint of how you intend conducting the research”. The research hypotheses posed and the intended evidence required to test the research hypotheses would serve as the guide in the choice of which research design would be most appropriate for a research study. The primary objective of the research design is to endeavour and obtain empirical evidence that can be interpreted unambiguously in support or in opposition of the hypotheses being investigated.

In this study, an *ex post facto* (after the fact) correlational research design was utilised to test the research hypotheses. *Ex post facto* research design is a form of non-experimental research design using correlations or covariance's to make inferences about the validity of the hypothesised causal paths in the model (Giuffre, 1997). The *ex post facto* research design is a type of systematic empirical inquiry where the researcher has no direct control over dependent variables, and where the manifestation of the independent variables (i.e. *Talent Management Mindset*) has already occurred or is not inherently changeable (Kerlinger & Lee, 2000). Additionally, inferences concerning the hypothesised causal relationships between ξ (Ksi) and η (Eta) are made from concomitant variations in independent and dependent variables (Kerlinger & Lee, 2000).

To ensure that the comprehensive LISREL model is identified at least two indicator variables were used in the research design to represent each latent variable in the model (Diamantopoulos & Siguaw, 2000). In terms of the logic of the *ex post facto* correlational design, the researcher obtains measures on the observed variables and calculates the observed covariance matrix reflecting the variance in and covariance between the indicator variables. Estimates for the freed structural and measurement model parameters are subsequently obtained in an iterative fashion with the objective of reproducing the observed covariance matrix as closely as possible. The comprehensive LISREL model in essence represents a hypothesis on the nature of the process that produced the variances in and covariance's between the indicator variables. If the fitted model fails to closely, reproduce the observed covariance matrix it follows that the structural model does not provide an acceptable account of the process that brought about the observed covariance matrix. It then follows that the structural relationships hypothesised by the model do not provide an accurate portrayal of the psychological process shaping the strength of employees' *Intention to Quit* their current organisation. The converse, however, is not true. If the fitted or reproduced covariance matrix derived from the estimated structural and measurement model parameters closely agrees with the observed covariance matrix it would not imply that the psychological dynamics postulated by the structural model necessarily produced the observed covariance matrix. If the comprehensive LISREL model fits the data closely, it cannot be concluded that the psychological process depicted in the structural model via the path coefficient estimates necessarily must have produced the levels of the endogenous latent variables comprising the phenomenon of interest. A close fitting model only implies that the psychological processes portrayed in the structural model via the path coefficient estimates provide one plausible

explanation for the observed covariance matrix. This conclusion in addition is only really warranted if prior evidence exists that, the measurement model fits closely.

Kerlinger and Lee (2000) note three primary weaknesses concerning *ex post facto* research (non-experimental research). They include; 1) the inability to manipulate independent variables; 2) the lack of power to randomise; and 3) the risk of improper interpretation. Consequently, *ex post facto* research designs when compared to experimental research designs, and all other factors being held constant, lacks control, and this lack of control is the catalyst of the third weakness (i.e. improper interpretation) (Kerlinger & Lee, 2000). These design weaknesses mean that although the overarching substantive hypothesis as captured by the structural model is explicitly causal in its thinking, positive research findings on the model fit and on the significance of the path coefficient estimates cannot be interpreted to mean that the causal paths have been corroborated. If however the structural model does not fit closely or if the paths coefficient estimates are insignificant then those findings can be interpreted to mean that the causal paths have been refuted. Although there are weaknesses associated in the use of an *ex post facto* research design, the value in its use lies in the fact that numerous research problems, within the social sciences, cannot be inquired into experimentally.

3.4. STATISTICAL HYPOTHESES

Given the purpose of this study, and based on the literature review and the proposed Oehley – Herselman talent management competency model focusing on the role of perceived development opportunities, the subsequent hypotheses were formulated, using the conventional LISREL notational system associated with structural equation modelling (Du Toit & Du Toit, 2001; Jöreskog & Sörbom, 1996a):

Hypothesis 1a:

If the overarching substantive hypothesis is interpreted to mean that the proposed structural model depicted in Figure 3.1 and expressed as Equation 10, fits the observed data to the extent that the reproduced covariance is equivalent to the empirical covariance matrix in the

population, there is no discrepancy between the reproduced covariance matrix inferred by the model ($\Sigma(\Theta)$) and the observed population covariance matrix (Σ).

$$H_{01a}: \Sigma = \Sigma(\Theta)$$

$$H_{a1a}: \Sigma \neq \Sigma(\Theta)$$

Consequently, the exact fit hypothesis can also be expressed as:

$$H_{01a}: \text{RMSEA} = 0$$

$$H_{a1a}: \text{RMSEA} > 0$$

Hypothesis 1b:

If the overarching substantive hypothesis is interpreted to mean that the proposed structural model depicted in Figure 3.1 and expressed as Equation 10 only fits the observed data in the parameter closely, the reproduced covariance matrix inferred by the model ($\Sigma(\Theta)$) closely approximates the observed population covariance matrix (Σ).

$$H_{01b}: \text{RMSEA} \leq .05$$

$$H_{a1b}: \text{RMSEA} > .05$$

The overarching substantive research hypothesis have been dissected into eighteen path specific (direct effect) substantive research hypotheses. These path-specific substantive research hypotheses and their corresponding statistical hypotheses are listed below. The manner in which the statistical hypotheses are formulated reflect the fact that structural equation modelling will be used to analyse the data obtained from the *ex post facto* correlation design.

Hypothesis 2:

A significant positive causal relationship exists between the level of competence of line managers on the *Talent Management Mindset* competency and the level of competence achieved on the *Develops Others* competency.

$$H_{02}: \gamma_{91} = 0$$

$$H_{a2}: \gamma_{91} > 0$$

Hypothesis 3:

A significant positive causal relationship exists between the level of competence line managers achieved on the *Develops Others* competency and *Perceived Development Opportunities*.

$$H_{03}: \beta_{29} = 0$$

$$H_{a3}: \beta_{29} > 0$$

Hypothesis 4:

A significant positive causal relationship exists between the level of competence line managers achieved on the *Develops Others* competency and *Perceived Organisational Support*.

$$H_{04}: \beta_{19} = 0$$

$$H_{a4}: \beta_{19} > 0$$

Hypothesis 5:

A significant positive causal relationship exists between *Perceived Developmental Opportunities* and *Perceived Organisational Support*.

$$H_{05}: \beta_{12} = 0$$

$$H_{a5}: \beta_{12} > 0$$

Hypothesis 6:

A significant positive causal relationship exists between *Perceived Development Opportunities* and *Job Satisfaction*.

$$H_{06}: \beta_{62} = 0$$

$$H_{a6}: \beta_{62} > 0$$

Hypothesis 7:

A significant positive causal relationship exists between *Perceived Organisational Support* and *Organisational Trust*.

$$H_{07}: \beta_{71} = 0$$

$$H_{a7}: \beta_{71} > 0$$

Hypothesis 8:

A significant positive causal relationship exists between *Perceived Organisational Support* and *Affective Commitment*.

$$H_{08}: \beta_{41} = 0$$

$$H_{a8}: \beta_{41} > 0$$

Hypothesis 9:

A significant positive causal relationship exists between *Perceived Organisational Support* and employee *Job Satisfaction*.

$$H_{09}: \beta_{61} = 0$$

$$H_{a9}: \beta_{61} > 0$$

Hypothesis 10:

A significant positive causal relationship exists between *Perceived Organisational Support* and *Felt Obligation*.

$$H_{010}: \beta_{31} = 0$$

$$H_{a10}: \beta_{31} > 0$$

Hypothesis 11:

A significant positive causal relationship exists between *Organisational Trust* and *Affective Commitment*.

$$H_{011}: \beta_{47} = 0$$

$$H_{a11}: \beta_{47} > 0$$

Hypothesis 12:

A significant negative causal relationship exists between *Organisational Trust* and *Intention to Quit*.

$$H_{012}: \beta_{87} = 0$$

$$H_{a12}: \beta_{87} < 0$$

Hypothesis 13:

A significant positive causal relationship exists between *Affective Commitment* and employee *Job Satisfaction*.

$$H_{013}: \beta_{64} = 0$$

$$H_{a13}: \beta_{64} > 0$$

Hypothesis 14:

A significant negative causal relationship exists between *Affective Commitment* and *Intention to Quit*.

$$H_{014}: \beta_{84} = 0$$

$$H_{a14}: \beta_{84} < 0$$

Hypothesis 15:

A significant positive causal relationship exists between *Normative Commitment* and employee *Job Satisfaction*.

$$H_{015}: \beta_{65} = 0$$

$$H_{a15}: \beta_{65} > 0$$

Hypothesis 16:

A significant negative causal relationship exists between *Normative Commitment* and *Intention to Quit*.

$$H_{016}: \beta_{85} = 0$$

$$H_{a16}: \beta_{85} < 0$$

Hypothesis 17:

A significant positive causal relationship exists between employee *Job Satisfaction* and *Affective Commitment*.

$$H_{017}: \beta_{46} = 0$$

$$H_{a17}: \beta_{46} > 0$$

Hypothesis 18:

A significant positive causal relationship exists between employee *Job Satisfaction* and *Normative Commitment*.

$$H_{018}: \beta_{56} = 0$$

$$H_{a18}: \beta_{56} > 0$$

Hypothesis 19:

A significant negative causal relationship exists between employee *Job Satisfaction* and *Intention to Quit*.

$$H_{019}: \beta_{86} = 0$$

$$H_{a19}: \beta_{86} < 0$$

3.5. SAMPLE

In a recent media statement by the Minister of Police, Nathi Mthethwa, (Mthethwa, 2010) requested management of the South African Police Service (SAPS) to present him with an action plan to address the psychological wellbeing of SAPS employees and an employee retention strategy. Furthermore, in the Minister of Police budget vote speech in Parliament in April 2011 (Mthethwa, 2011) he remarked that;

Skills development and the retention of skills remains a priority for 2011/12. Significant emphasis will be placed of detectives training. Coupled with this would be the re-skilling and retraining of police to ensure we produce quality cops as opposed to mere quantity.

Given Minister Mthethwa's abovementioned statements and considering that the objective of this study is to understand the psychological process involved in talented employees intention to remain in the employment of their current organisation due to their perceptions of training and development interventions, it would make sense to utilise a sample of SAPS employees to validate the proposed model. The proposed Oehley – Herselman talent management competency model focusing on the role of perceived development opportunities hypothesises that employees' *Intention to Quit* is influenced by their direct line manager's level competence in the *Displays a Talent Management Mindset* and *Develops Others* competencies.

The target population defined by the proposed talent management competency model encompasses all full-time permanent employees employed by South African organisations. Drawing a representative probability sample from this target population clearly represents a practically insurmountable challenge. No easily accessible sampling frame exists. Multi-stage cluster sampling in addition would require a logistical capacity that far exceeds the resources available in this study. The population of detectives employed by the SAPS constitutes a non-representative sample of the target population. It would also be an impractical objective to investigate all detectives (N) employed by the SAPS (target population) although it would be the methodological ideal. Consequently, a representative sample (n) of detectives (sample population) was utilised. Even if it would be possible to include the population of detectives in the study, it could still not be claimed that detectives

are representative of South African employees. Consequently, a probability sample (n) of detectives was investigated.

Considering the nature of the hypothesised structural model, two samples were utilised in an attempt to validate the proposed model. The first sample comprised of numerous heads of Detective Services at various police stations throughout the Western Cape, who were required to rate the level of talent management competence (*Displays a Talent Management Mindset* and *Develops Others*) of their subordinate commanders. The second sample comprised of detectives reporting to the aforementioned commanders, who will be required to rate their relative standing on the various latent variables proposed by the structural model (i.e. *Affective Commitment*, *Normative Commitment*, *Felt Obligation*, *Perceived Development Opportunities*, *Perceived Organisational Support*, *Organisational Trust*, *Job Satisfaction*, and *Intention to Quit*).

Additionally, considering the nature of the proposed study the subject of sample size was addressed from the perspective of structural equation modelling. Kelloway (1998) and Kline (2010) argue that SEM is a large sample technique. Tabachnick & Fidell (2007) further note that in SEM, parameter estimates and chi-square test of fit are significantly influenced by the size of the sample. Although, Kelloway (1998) proposes that a minimum sample size of 200 observations would be acceptable for most SEM applications, Kline (2010) notes that model complexity and statistical power are factors that influence sample size requirements.

In complex models larger samples are required, in that more parameters need to be estimated in order to ensure that the conclusions derived are reasonably stable (Kline, 2010). Jackson (cited in Kline, 2010, p. 12) proposed the N:q rule² in determining the relation between sample size and model complexity, where the estimation technique employed is maximum likelihood (ML). Kline (2010) suggests that a sample size-to-parameters ratio of 20:1 would be ideal. However, Bentler and Chou (cited in Kelloway, 1998, p. 20) propose a sample size-to-parameters ratio range between 5:1 and 10:1. Given the recommendations of Kline (2010), the appropriate sample sizes to investigate the proposed model would be 1360 detectives, whilst based on the recommendation of Bentler and Chou (cited in Kelloway, 1998) a sample

² Where N refers to sample size and q refers to the number of model parameters requiring statistical estimates

of between 340-680 detectives would be appropriate to investigate the proposed structural model.

Additionally, in terms of sample size requirements the issue of statistical power needs to be addressed, where statistical power refers to the conditional probability of rejecting the null hypothesis given it is false ($P[\text{reject } H_0: \Sigma = \Sigma(\Theta) | H_0 \text{ false}]$) (Theron, 2010). Thus, from the perspective of SEM statistical power concerns the probability of rejecting the null hypothesis of close fit ($H_0: \text{RMSEA} \leq .05$) given that it should be rejected, where the model fit is in fact mediocre ($H_a: \text{RMSEA} = .08$). MacCallum, Browne, and Sugawara (1996) approached sample size requirements by defining the null hypothesis to be a specific value RMSEA, where the appropriate sample size is determined based on rejecting not good fitting models ($H_a: \text{RMSEA} = .08$) (Maxwell, Kelly, & Rausch, 2008). MacCallum et al. (1996) developed power tables that can be utilised to determine sample size requirements, by specifying a significance level (α), a power level, and the degrees of freedom (df). The power tables were consequently utilised to determine the sample size requirements for the test of close fit ($H_0: \text{RMSEA} \leq .05$) with an α of .05, a power level of .80, and df of $[(\frac{1}{2}(p + q) (p + q + 1) - t)] = 275 - 69 = 206$. Thus, in terms of the MacCallum et al. (1996) table a sample size of 132 detectives would be required to ensure that a statistical power of .80 is obtained in evaluating the null hypothesis of close fit of the proposed Oehley – Herselman talent management competency model under the condition that the model actually has mediocre fit [i.e., $\text{RMSEA} = .08$].

Considering the aforementioned concerns regarding the sample size requirements, it was proposed that a sample size of between 200 – 250 SAPS detectives be sampled by means of a two-stage cluster sampling procedure with stratification. In the Western Cape, all employees of the SAPS are grouped into four subpopulations (strata), namely; Boland, Eastern Metropole, Southern Cape, and Western Metropole. After the final sample size had been decided, the number of final sampling units (FSU) that were selected during the second stage of selection from each stratum was determined through proportional assignment. It was assumed that a minimum of thirteen detectives would be selected during the final stage of sampling. The number of detectives that had to be selected from each stratum will then be determined. That allowed the number of primary sampling units (PSU; police stations) that had to be selected from each stratum to be calculated. The required number of PSU's were

then selected during stage one with probability proportional to size (i.e. four police stations). From each selected PSU a minimum of thirteen detectives were randomly selected, which provided a final sample size of (255 SAPS detectives). A list of SAPS detectives of the various selected PSU's was obtained from the Western Cape Personnel Management Division of the SAPS. Informed consent was obtained from all participants in this study (APPENDIX A and APPENDIX B).

3.6. MEASURING INSTRUMENTS

To empirically test whether the proposed Oehley – Herselman talent management competency model focusing on the role of perceived development opportunities (see Figure 3.1) provides a valid account of variance observed in employees' intention to quit, both the exogenous and endogenous latent variables that comprise the model, needed to be operationalised. Additionally, the degree to which the verdict on the validity of the proposed Oehley – Herselman model could be considered valid was dependent on the extent to which the various measuring instruments used to operationalise the exogenous and endogenous latent variables were in fact valid, reliable, and unbiased measures of the latent variable they are tasked to represent. Diamantopoulos and Sigauw (2000, p. 89) remark, "...unless we can trust the quality of our measures, then any assessment of the substantive relations of interest (i.e., the links among the latent variables themselves will be problematic". The hypothesised structural relations cannot be tested by fitting only the structural model. The hypothesised structural relations were tested by fitting the comprehensive LISREL model comprising the structural model and the measurement model. Unambiguous inferences about the fit of the structural model can only be derived from the fit of the comprehensive LISREL model, if it has been shown that the measurement model fits closely. To this end, the psychometric integrity of the selected measuring instruments were discussed. In addition, the psychometric integrity of the selected measuring instruments were be empirically evaluated as part of this study. Classical measurement theory item analysis was conducted, utilising the SPSS 20 reliability procedure (SPSS, 2013) on each of the selected measuring instruments in an attempt to identify problematic items and to determine the reliability coefficient for the subscale. In addition, the unidimensionality assumption, where applicable, was tested using principal axis factor analysis with oblique rotation. The proposed techniques are discussed in more depth in paragraph 3.8.

3.6.1. Displays a Talent Management Mindset

The Displays a Talent Management Mindset subscale of the Talent Management competency scale developed by Oehley (2007) was used to measure this talent management competency. The subscale is comprised of four items, where respondents use a five-point Likert-type scale to answer the questions. Responses can vary between “never” and “always”. Additionally, provision is made for an “unable to rate” response. Examples of the items include: 1) I remind team members of the importance of retaining high calibre employees; 2) I prioritise issues, which concern the development of employees.

In the study undertaken by Oehley (2007) principal axis factoring with Varimax rotation was performed on the Displays a Talent management Mindset subscale of the Talent Management Competency scale. The results supported the unidimensionality of the subscale, where factor loadings ranged from .610 to .826 (Oehley, 2007). She further reports a Cronbach alpha reliability coefficient of .822, which is above the critical cut-off of .80. Smuts (2011) reports a reliability coefficient of .677 (which is below the critical cut-off), where she identified item 4 as problematic. She subsequently removed this item, based on a basket of evidence (i.e., low inter-item correlations with other items, low total-item correlation, and low squared multiple correlation) the reliability coefficient increased from .677 to .766.

3.6.2. Develops Others

The Develops Others subscale of the Talent Management competency scale developed by Oehley (2007) was used to measure this talent management competency. The subscale is comprised of six items, where respondents use a five-point Likert-type scale to answer the questions. Responses can vary between “never” and “always”. Additionally, provision is made for an “unable to rate” response. Examples of the items include: 1) I possess a genuine interest to foster the learning and development of people and; 2) I make an objective assessment of individuals’ development needs.

In the study undertaken by Oehley (2007) principal axis factoring with Varimax rotation was performed on the Develops Others subscale of the Talent Management Competency scale. The results support the unidimensionality of the subscale, where factor loadings ranged from .748 to .825 (Oehley, 2007). She further reports a Cronbach alpha value of .90. Smuts (2011)

reports a reliability coefficient of .840 (which is above the critical cut-off of .80). She identified item 6 as problematic. She subsequently removed this item, based on a basket of evidence (i.e., low total-item correlation and low squared multiple correlation) the reliability coefficient increased from .840 to .846.

3.6.3. Perceived Development Opportunities

This latent variable was measured using a questionnaire developed by Smuts (2011). It is a 4-item scale, where respondents are required to indicate their (dis)agreement on a five-point Likert-type scale. Responses can range from (1) “strongly disagree”, to (5) “strongly agree”. Examples of the items include: 1) I am of the perception that my line manager provides me with developmental opportunities, 2) opportunities to enhance my competence is available within the organisation.

In the study undertaken by Smuts (2011), principal axis factoring with oblique rotation was performed on the scale. The results confirmed the unidimensionality of the scale and factor loadings ranged from .854 to .715 (p. 94). She further found a Cronbach's alpha reliability coefficient of .855, which exceeds the critical cut-off of .80 (p. 69).

3.6.4. Perceived Organisational Support

Perceived Organisational Support was measured with a shortened version of the Survey of Perceived Organisational Support (SPOS), developed by Eisenberger et al. (1986). The questionnaire is designed to measure the degree to which employees' perceive that their organisation values their contributions and cares for their well-being. Use will be made of the shorter eight-item version of the original scale (items 1, 3, 7, 9, 17, 21, 23, and 27) that have high loadings (respectively, .71, .72, .73, .83, .80, .82, .84, and .76) in Eisenberger et al. (1986) factor analysis on the extracted support factor. Items 3, 7, 17 and 23 are reversed scored. Respondents are required to indicate the extent of their agreement with each of the eight items on a 7-point Likert-type scale. Responses can range from (1) “strongly disagree”, to (7) “strongly agree”.

In the original scale development study (Eisenberger et al., 1986) principal components analysis was performed on the responses from 361 employees across nine organisations and revealed that a single factor accounted for 48% of the total variance. Additionally, the researchers performed factor analysis with Varimax rotation on the scale, where all 36 items (that comprise the original scale) loaded high on a single factor, thereby confirming the unidimensionality of the scale. A Cronbach alpha reliability coefficient of .90 has been reported (Eisenberger et al., 1986).

The shorter eight-item SPOS is the result of Rhoades and Eisenberger (2002, p. 699) recommendation that “Because the original scale is unidimensional and has high internal reliability, the use of shorter versions does not appear problematic. Prudence nevertheless dictates that both facets of the definition of POS (valuation of employees’ contribution and care about employees’ well-being) be represented in short versions of the questionnaire.”

3.6.5. Organisational Trust

Organisational Trust was measured using an adapted version of the Organisational Trust Inventory (OTI) developed by Cummings and Bromiley (Nyhan & Marlowe, 1997). The questionnaire is comprised of twelve items, with eight items measuring trust in supervisors (subscale 1) and four items measuring trust in the organisation as a whole (subscale 2) (Nyhan & Marlowe, 1997). Considering the nature of this study use will be made of subscale two. Respondents are required to express their opinion on a 7-point Likert type scale ranging from (1) “nearly zero”, to (7) “nearly 100%”. Sample items are “My level of confidence that this organisation will treat me fairly is” and “The degree to which we can depend on each other in this organisation is”.

In the study undertaken by Nyhan and Marlowe (1997), principal components factoring with Varimax orthogonal rotation was performed on the scale. The results confirmed the multidimensionality of the scale. With specific reference to subscale two, the factor loading ranged from .30 to .93. The researchers noted that items 9 and 10, exhibited a tendency to load on both factors, and attributed the cause to small sample size. Nyhan and Marlowe (1997) have reported reliability coefficients of .9212 and .9646. The authors note (p. 619)

“The strength of these alpha values provides evidence of the internal homogeneity of the scale items; therefore, no questions were omitted”.

3.6.6. Organisational Commitment

Use was made of the three component model (TCM) Employee Commitment Survey developed by Meyer and Allen (1991) to measure the two components of employee commitment that are the focus of this study: 1) desire-based (*Affective Commitment*) and, and 2) obligation-based (*Normative Commitment*). The survey is comprised of three adequately validated scales (although use will be made of two scales) namely; the Affective Commitment Scale (ACS) and the Normative Commitment Scale (NCS). Each of the scales are scored individually and can be used to develop a “commitment profile” of employees within their organisation (Meyer & Allen, 2004).

The ACS comprises of eight items, and responses occur on a 7-point agree-disagree Likert scale, for each item; furthermore the ACS is composed of both positively and negatively phrased items (Meyer & Allen, 1997). Internal consistency as measured by coefficient alpha for the ACS of .85 (Allen & Meyer, 1996) and .87 (Allen & Meyer, 1990) have been found.

The NCS comprises of eight items, and responses are recorded on a 7-point Likert scale with anchors (1) “strongly disagree” and (7) “strongly agree”. Internal consistency as measured by coefficient alpha for the NCS is .79 (Allen & Meyer, 1990).

In the study undertaken by Allen and Meyer (1990), factor analysis with Varimax rotation was performed on the two scales (ACS and NCS). The results indicate that the ACS accounted for 58.8% of the variance, whilst NCS accounted for 15.4% of the variance. The results confirm the multidimensionality of the construct.

3.6.7. Job Satisfaction

Employees’ *Job Satisfaction* was measured using the Minnesota Satisfaction Questionnaire - short form (MSQ-SF). The MSQ-SF is comprised of 20 items and consists of three scales, namely, Intrinsic Satisfaction (items 1, 2, 3, 4, 7, 8, 9, 10, 11, 15, 16, and 20), Extrinsic

Satisfaction (items 5, 6, 12, 13, 14, and 19), and General Satisfaction (all items) (Price, 1997). Two first-order satisfaction factors are therefore measured and one second-order factor. Respondents are required to rate each item on a 5-point Likert type scale. Responses can range from (1) “very dissatisfied”, to (2) “very satisfied”.

Reliability coefficients of .86 (Intrinsic Satisfaction), .80 (Extrinsic Satisfaction), and .90 (General Satisfaction) have been found for the three scale (Weiss et al., in Senter, Morgan, Serna-McDonald, & Bewley, 2010).

3.6.8. Felt Obligation

This latent variable was measured using the questionnaire developed by Eisenberger et al. (2001). The questionnaire is comprised of seven items, which measures employees’ felt obligation to care about the organisation, and help the organisation attain its goals. Respondents are required to indicate the extent of their agreement with each of the seven items on a 7-point Likert-type scale. Responses can range from (1) “strongly disagree”, to (7) “strongly agree”. Item seven is reversed score. A sample item is “I would feel an obligation to take time from my personal schedule to help the organisation if it needs my help”. In a study undertaken by Lew (2009), a Cronbach alpha reliability coefficient of .90 was found.

3.6.9. Intention to Quit

A modified version of Arnold and Feldman’s Intention to Quit scale, developed by Oehley (2007) was used to measure employees’ intention to quit their organisation. Respondents are required to indicate their response to each of the four items on a 5-point frequency scale. Responses can vary between (1) never, to (5) always. The items include; 1) “Wanting to leave the organisation”, 2) “Searching for another position”, 3) “Planning to leave the organisation”, and 4) “Actually leaving this organisation within the next year”.

In the study undertaken by Smuts (2011), principal axis factoring with oblique rotation was performed on the Intention to Quit scale. The results confirmed the uni-dimensionality of the scale and factor loadings ranged from between .960 and .718. She further found a Cronbach alpha reliability coefficient of .880. In Oehley's (2007) study, a Cronbach alpha coefficient of .848 was reported.

3.7. MISSING VALUES

In a social science research endeavour, it is improbable that a complete dataset will be collected and as such, the issue of missing values ought to be addressed. Missing values are frequently described as falling into one of three categories as described by Little and Rubin (in Wayman, 2003). Firstly, values can be missing completely at random (MCAR). Data are considered missing completely at random if “missing” values do not depend on the variables themselves or on the values of other variables in the database. Secondly, values can be missing at random (MAR). Data are missing at random if the probability of missing data on any variable is not related to its particular value. The pattern of missing data is, however, predictable from other variables in the database. Finally, values can be missing in an unmeasurable fashion, referred to as missing not at random (MNAR). Data are not missing at random if missing data depend on the values of the variables that are missing.

The choice as to which technique to employ to address the issue of missing values, ought to be based on the potential of the technique to improve the inferential validity of the results (Ragunathan, 2004). Five techniques that can be employed to address the issue of missing values will be discussed, namely: 1) list-wise deletion, 2) pair-wise deletion, 3) full information maximum likelihood, 4) multiple imputations, and 5) imputation by matching.

List-wise deletion is an *ad hoc* technique for addressing the issue of missing values in that it addresses the issue prior to any substantive analysis being done (Carter, 2006). The use of list-wise deletion is the conventional technique used to address missing values in datasets to produce complete datasets (Mels, 2003). It is required that in using this technique, that all incomplete cases be removed from the dataset. In utilising this technique and depending on the sample size and the number of latent variables being investigated, a large reduction in the size of the sample available for data analysis may result (Carter, 2006; Mels, 2003, Ragunathan, 2004).

Pair-wise deletion is also an *ad hoc* technique that can be employed to address missing values in a dataset. Pair-wise deletion calculates the covariance estimates for each pair of observed variables for only the cases where complete observations for both variables are available (Wothke as cited in Carter, 2006). In employing this technique, it is required that cases be removed when they have any missing values on the variables involved in the

calculation of covariance estimates (Kline as cited in Carter, 2006). As with the list-wise deletion, this technique may result in a sizable reduction in the size of the sample available for data analysis. Pigott (2001) notes that this technique may generate invalid estimates because of the varying sample sizes used to estimate parameters.

The **full information maximum likelihood** (FIML) approach utilises "...all of the information of the observed data, including mean and variance for the missing portions of the variable, given the observed portion(s) of other variables" (Wothke as cited in Carter, 2006, p.4). This technique assumes that values are MAR and that the observed data follows a multivariate normal distribution (Du Toit & Du Toit, 2001). The FIML technique utilises the Expectation Maximisation (EM) algorithm to uncover the estimate of a parameter when closed form solutions to the maximisation of a likelihood cannot be performed (Pigott, 2001). The FIML technique does not produce values for individual missing variables, but rather provides estimates for the means, variance, and covariance matrix of the variables of interest, which are then subsequently used to obtain model parameters (Pigott, 2001). The disadvantage of this feature is that it is not possible to perform item analysis or dimensionality analysis on the imputed data and neither is it possible to calculate item parcels from the imputed data.

The **multiple imputation** (MI) technique utilises existing values from observed variables to predict missing values. In the use of MI, numerous plausible values for each missing value in the dataset are generated in order to produce multiple complete datasets (Pigott, 2001). MI addresses missing values by restoring the inherent variability in the missing values and accounts for the ambiguity caused in estimating the missing value (Wayman, 2003). As with the FIML technique, the MI technique assumes the data is MAR and follows a multivariate normal distribution (Du Toit & Du Toit, 2001). These assumptions are in most cases not satisfied. According to Mels (2007), it would be acceptable to use multiple imputation if observed variables are measured on a scale comprising five or more scale values, provided that the observed variables are not exclusively skewed even though the null hypothesis of multivariate normality might have been rejected and provided that less than 30% of the data constitutes missing values. In contrast to FIML, however, multiple imputation does return an imputed data set and it does so for all cases.

The **imputation by matching** approach refers to a process of substituting real values for missing values. The substitute values replaced for cases are derived from one or more other cases that have a similar response pattern over a set of matching variables (Jöreskog & Sörbom, 1996a). The imputation of a missing value on variable y_a for a specific case a with no missing values on a set of p matching variables x_1, x_2, \dots, x_p involves the following procedure:

- All cases $b_i; i=1, 2, \dots, n$ are identified with no missing values on either y_{bi} or on the set of matching variables for which $W = \sum(z_{bi} - z_{ai})^2; i=1, 2, \dots, n$ is a minimum.
- If only $n=1$ case exists for which W is a minimum, then y_a is simply replaced by y_b .
- If, however W is a minimum for $n>1$ cases, with y values $y_1^{(m)}, y_2^{(m)}, \dots, y_n^{(m)}$, the mean $E(y^m) = (1/n)\sum y_i^{(m)}$ and variance $s_m^2 = (1/[n-1])\sum(y_i^{(m)} - E(y^m))^2$ of the y -values of the matching cases will be calculated.
- If $s_m^2/s_y^2 < v$, where the variance ratio v was set equal to 0,50, y_a is replaced by $E(y^m)$. If the variance ratio does not pass the critical value, no imputation is done (Jöreskog & Sörbom, 1996a)

The ideal is to use matching variables that will not be utilised in the confirmatory factor analysis. This is quite often, however, not feasible. In addition, imputation by matching has the disadvantage that cases that are not successfully imputed are deleted from the imputed data set.

From the foregoing discussion, it is apparent that the FIML and MI techniques have clear advantages over the two deletion techniques (i.e. list-wise and pair-wise) as well as over imputation by matching. Furthermore, Pigott (2001) mentions two difficulties related to FIML that are overcome through employing MI to address the issue of missing values. Firstly, standard errors of estimates can easily be obtained, and secondly, the technique provides greater flexibility, in that MI generates a completed dataset after imputation, which allows further analysis to be performed. To this end, use was made of MI, in the attempt to address the issue of missing values provided the *provisos* outlined by Mels (2007) are satisfied.

3.8. DATA ANALYSIS

3.8.1. Item Analysis

As discussed under paragraph 3.6, ten scales were utilised to operationalise the ten latent variables, each with a specific constitutive definition, that comprise the proposed Oehley – Herselman talent management competency model (see Figure 3.1). Item analysis was performed on each of the scales in an attempt to identify items that fail to reflect the latent variable they are intended to. The items of a scale ought to function as a homogenous stimulus set, where respondents react with specific behaviours that are relatively uncontaminated behavioural expression of the specific underlying latent variable of interest (De Goede, 2007; Theron, 2011).

Item analysis allows for the identification and removal of items that fail to contribute to the internally consistent description of the latent variable as measured by a specific scale. Items that fail to contribute to the internal consistency of the scale measuring a latent variable will, when removed from the scale, contribute to a sizable improvement in the Cronbach alpha of the scale and consequently an improvement in the overall reliability of the scale. Through item analysis, the ideal is to have all the items of a particular scale reflecting a common underlying latent variable.

To this end, item analysis was carried out on each of the ten measuring instruments that were employed to validate the proposed Oehley – Herselman talent management competency model, focusing on the role that perceived development play in employees' *Intention to Quit*. These measuring instruments include; the two talent management competency scales (i.e. Displays a Talent Management Minds Set scale and Develops Others scale), the Perceived Development Opportunities scale, the Survey of Perceived Organisational Support, Organisational Trust Inventory, the two commitment scales of the TCM Employee commitment survey (i.e. Affective and Normative Commitment scales), the subscales of the Minnesota Satisfaction Questionnaire, the Felt Obligation scale, and the Intention to Quit scale.

Various sources of evidence were considered regarding the removal of any item from a specific scale. The various sources of evidence used to confirm the removal of an item

include; the item-total correlation, inter-item correlations, the squared multiple correlation, the change in subscale reliability when an item is deleted, the change in subscale variance if an item is deleted, and the item means and standard deviations (Murphy & Davidshofer, 2005; Smuts, 2011).

The reliability procedure of SPSS version 20 (SPSS, 2013) was be utilised to perform item analysis.

3.8.2. Dimensionality Analysis

The decision to remove any item from any of the scales utilised to operationalise the ten latent variables that comprise the proposed Oehley – Herselman talent management competency model based solely on evidence derived from item analysis (see paragraph 3.8.1) can be considered a bit too impetuous. The more cautious approach would be to gather further evidence to justify the decision to remove any of the items from a specific scale that fail to reflect the latent variable of interest. The total variance accounted for by a specific measure is comprised of two components, namely: 1) variance shared with other items (common variance) and, 2) variance that can reliably be attributed to a specific item (unique variance)³ (Field, 2005).

Through dimensionality analysis, an attempt was made to confirm the unidimensionality of the scales used to operationalise the latent variables that comprise the expanded talent management structural model and to remove items that have weak factor loadings and/or if need be, to divide the heterogeneous scale into two or more homogeneous sets (De Goede, 2007; Theron, 2011). To confirm the unidimensionality of the scales, exploratory factor analysis was performed on each of the scales (see paragraph 3.6 for overview of scales). Use was made of the principal axis factoring (PAF), as opposed to principal component factor analysis (PCA), as the extraction technique. Tabachnick and Fidell (2007) note two advantages associated with PAF as the extraction technique. Firstly, it is the most widely used and understood extraction technique, and secondly, that PAF conforms to the factor analytic model where only common variance is analysed (random/error variance and unique variance is excluded). In factor analysis, the focus is directed at uncovering common

³ Additionally, variance could be explained by a specific measure although not reliably so. This type of variance is termed error or random variance.

underlying dimensions within the data (Field, 2005). Thus, only common variance is analysed and consequently PAF would be the most appropriate technique for extraction⁴. The Guttman-Kaiser rule of thumb of eigenvalues-greater-than-one and the scree test (Tabachnick & Fidell, 2007) were used to determine the number of factors to be extracted.

In the case, that factor fission would present, it was proposed that the factor solution be rotated. Factor rotation is a technique that is employed to discriminate between factors (Field, 2005). Two types of factor rotation can be performed on the factor solution, namely orthogonal and oblique (Field, 2005; Tabachnick & Fidel, 2007). In orthogonal rotation all the factors are considered to be independent (i.e. uncorrelated) with each other, whilst, in oblique rotation the factors are allowed to correlate (Field, 2005; Tabachnick & Fidel, 2007). Oblique rotation was used in the case that factor fission would occur, as this technique would account for the possibility that the extracted factors may be correlated. Stevens (in Field, 2005, p. 637) notes, “The significance of a factor loading will be dependent on the sample size”. If the factor loading (λ) was equal to or greater than .5, it was considered satisfactory.

In the attempt to investigate the dimensionality of the scales used to operationalised the ten latent variables that comprise the proposed Oehley – Herselman talent management competency model, SPSS version 20 (SPSS, 2013) will be utilised.

3.8.3. Structural Equation Modelling

3.8.3.1. Parcelling, Variable Type and Multivariate Normality

Structural equation modelling (SEM) can be performed on the proposed Oehley – Herselman talent management competency mode focusing on the role of *Perceived Development Opportunities* either by utilising the individual items of the scales used to operationalise the latent variables in the model, or alternatively, an item parcelling exercise could be undertaken. Various advantages are associated with using item parcels (as opposed to individual items) to operationalise latent variables. Firstly, parcels typically exhibit higher reliabilities than individual items (Kishton & Widaman, in Coffman & MacCallum, 2005). Secondly, parcels decrease the number of parameters to be estimated in a model (Little,

⁴ Whilst, in PCA all the variance (i.e. common, unique, and error/random) is analysed.

Cunningham, Shahar, & Widaman, 2002). The required sample size to fit the model is thereby reduced as well. Finally, Coffman and MacCallum (2005, p. 238) argue that parcelling items has the added advantage that "... they can be used as an alternative to data transformations or alternative estimation techniques when working with non-normally distributed variables".

Considering the advantages of parcelling items, a parcelling exercise was undertaken. The method that was used to parcel items was based on the grouping of even and uneven numbers as a guide. Thus, all even numbered items comprised one parcel and all uneven items comprised the second parcel. The mean of the items in each parcel was calculated. The variable type of the item parcels was regarded as continuous variables (interval scaled) and consequently the covariance matrix was examined (Jöreskog & Sörbom, 1996a; 1996b; Mels, 2003). The method of parameter estimation that was employed was maximum likelihood (ML). ML assumes that item parcels follow a multivariate normal distribution (Du Toit & Du Toit, 2001; Mels, 2003).

The assumption that item parcels follow a multivariate normal distribution was tested for multivariate distribution of item parcels using PRELIS (Jöreskog & Sörbom, 1996b). In the event that the null hypothesis that item parcels follow a multivariate normal distribution was rejected, an attempt was made to normalise the data using PRELIS (Jöreskog & Sörbom, 1996b). Additionally, if attempts to normalise the data were unsuccessful an alternative parameter estimation method (e.g. weighted least squares, diagonally weighted least squares, or robust maximum likelihood estimation) was considered. Mels (2003) recommends the use of robust maximum likelihood estimation in cases where the data does not follow a multivariate normal distribution.

3.8.3.2. Confirmatory Factor Analysis

In order to pronounce a valid and credible verdict on the validity of the proposed Oehley – Herselman talent management competency model (see Figure 3.1) evidence is required that the indicator variables (parcels) that are employed to operationalise the latent variables are successful in their measurement of the latent variable they are intended to represent. Schreiber, Stage, King, Nora and Barlow (2006) note that an important element of

confirmatory factor analysis (CFA) is evaluating the reliability of indicator variables. This point was also made in paragraph 3.6 when the need to first fit the measurement model before fitting the comprehensive LISREL model was argued. Thus, before evaluating the fit of the structural model, the measurement model needed to be analysed.

When CFA is performed, the hypothesised measurement model is fitted by finding model parameter estimates that allows the estimation of a fitted/reproduced covariance matrix that would subsequently be compared to the observed covariance matrix (Schreiber et al., 2006). In the case that the data follows a multivariate normal distribution, use was made of the maximum likelihood estimation method to derive the model parameter estimates, whilst if the multivariate normality assumption cannot be satisfied the robust maximum likelihood estimation method was employed. The ideal is to establish that the estimated covariance matrix and the observed covariance matrix are identical (i.e. the hypothesised measurement model provides an exact description of the process that produced the observed covariance matrix). This exact fit null hypothesis for the measurement model can be expressed as:⁵ (Kelloway, 1998).

$$H_{020a}: \Sigma = \Sigma(\Theta)$$

$$H_{a20a}: \Sigma \neq \Sigma(\Theta)$$

The null hypothesis of exact measurement model fit could alternatively be expressed in terms of the RMSEA:

$$H_{020a}: \text{RMSEA} = 0$$

$$H_{a20a}: \text{RMSEA} > 0$$

In the event that the substantive research hypothesis is interpreted less arrogantly that the hypothesised measurement model only provides an approximate description of the process that reproduced the covariance matrix, the close fit null hypothesis will be tested. The close fit null hypothesis can be expressed as:

$$H_{020b}: \text{RMSEA} \leq .05$$

⁵ Where; Σ = population covariance matrix and $\Sigma(\Theta)$ = covariance matrix reproduced by the model

H_{a20b} : RMSEA >.05

In performing CFA, use was made of LISREL 8.8 (Du Toit & Du Toit, 2001).

3.8.3.3. Interpretation of Measurement Model Fit

Where support was obtained for the close fit null hypothesis, (i.e. H_{027b} is not rejected) the measurement model was investigated further with the focus on the relationship between the latent variable and the indicator variable that were designated to them.

The relationship between the latent variables and the observed variables in terms of the reliability and validity of the measuring instrument used to operationalise the latent variables that comprise the hypothesised model is of interest when evaluating the measurement model fit and more specifically when evaluating the measurement model parameter estimates (Diamantopoulos & Siguaaw, 2000).

The complete range of indices provided by LISREL was utilised in evaluating measurement model fit (Diamantopoulos & Siguaaw, 2000). Diamantopoulos and Siguaaw (2000) further remark that in terms of evaluating the measurement model fit, that evidence be obtained from numerous sources and be based on several criteria so as to interpret the fit of the model from various perspectives.

Overall model fit has traditionally been assessed by the Satorra-Bentler chi-square (χ^2) statistic. Numerous other fit indices have been suggested and evaluated due to the known sensitivity of χ^2 to variations in sample size. The full spectrum of fit statistics provided by LISREL was reported and interpreted to arrive at a verdict on the fit of the measurement model. The magnitude and distributions of the standardised residuals were investigated. Standardised residuals were interpreted as z-scores (i.e. in terms of standard deviation units from the mean). Standardised residuals were considered large if they exceed +/- 2.58. Residuals ought to be distributed symmetrically around zero. Additionally the factor loading estimates (λ) were investigated in terms of their significance and magnitude. In terms of Hair, Black, Babin, Anderson and Tatham's (2007) recommendation, factor loadings that exceed

.71 were considered satisfactory large in that approximately 50.41% of the variance in the indicator variable is accounted for by the latent variable they are assigned to represent.

The reliability of the indicator variables was investigated through inspection of the square multiple correlations (R^2) for each. The R^2 estimate reveals the amount of variance in the indicator variable that is accounted for by the latent variable designated to it in the measurement model. High R^2 estimates are desirable in that they reveal that the indicators assigned to a specific latent variable are highly reliable. Variance that is unaccounted for by the R^2 may be attributed to measurement error (Diamantopoulos & Siguaw, 2000). The proportion average variance extracted (ρ_v)⁶ as well as the composite reliability (ρ_c)⁷ will be calculated for each variable. The former indicates the proportion of variance in the indicator variables representing a specific latent variable that is explained by the latent variable rather than by measurement error. The latter measure describes the reliability with which the indicator variables of a latent variable measure the specific construct. A value of at least .50 on ρ_v and a value of at least .60 on ρ_c were considered satisfactory (Diamantopoulos & Siguaw, 2000).

The modification indices for the lambda-X (Λ_x) and theta-delta (Θ_δ) matrices were also investigated. Modification indices reveal the degree to which the χ^2 fit-statistic will decrease if an existing fixed parameter in the model is set free. The modification indices were examined to determine the percentage of large modification index values in each matrix. A small percentage large modification index values comments favourably on the fit of the model.

3.8.3.4. Structural Model Fit

The structural model proposes specific structural hypothesis concerning the psychological process underlying employees' intention to quit. To this end, the structural model provides a tentative description as to why the indicator variables correlate in the manner that they do in the observed covariance matrix. Schermelleh-Engel, Moosbrugger and Muller (2003) note that in structural equation modelling (SEM) a structural model fits the observed data to the

⁶ $\rho_v = (\Sigma\lambda^2)/[\Sigma\lambda^2 + \Sigma(\theta)]$ (Diamantopoulos & Siguaw, 2000)

⁷ $\rho_c = (\Sigma\lambda)^2/[(\Sigma\lambda)^2 + \Sigma(\theta)]$ (Diamantopoulos & Siguaw, 2000)

extent that the reproduced covariance matrix is equivalent to the empirical covariance matrix. The intention of evaluating structural model fit is to determine whether the sample data supports the theoretical relationships proposed in the model (Diamantopoulos & Siguaw, 2000).

Schermelleh-Engel et al. (2003) note that evaluating model fit is not a straightforward process as there is no single significance test that identifies an exact model (i.e. all structural relationships are correct) given the sample data. They propose that various criteria should be taken into account and that the structural model should be evaluated based on various measures simultaneously. Diamantopoulos and Siguaw (2000) remark that close structural model fit proposes only one plausible account of the process underlying the latent variable of interest (i.e. intention to quit). The goodness-of-fit statistics were utilised to evaluate the extent to which a structural model is an accurate representation of the empirical data.

In the event that the close fit measurement model null hypothesis (H_{020b} : $RMSEA \leq .05$) was not rejected ($p > .05$) and if the spectrum of fit indices produced by LISREL provided corroborating evidence of close fit, the structural model fit was investigated, through the testing of hypothesis H_{01a} and H_{01b} (see paragraph 3.4). The covariance matrix was analysed when fitting the hypothesised intention to quit structural model. In the case that the data follows a multivariate normal distribution, use was made of the maximum likelihood estimation method, whilst if the multivariate normality assumption cannot be satisfied the robust maximum likelihood estimation method was employed.

In fitting the structural model, use was made of LISREL 8.8 (Du Toit & Du Toit, 2001).

3.8.3.5. Interpretation of structural model fit

In the event that the exact fit structural model null hypothesis is rejected (which is a likely outcome), the close fit structural model null hypothesis will be investigated. This close fit null hypothesis has been expressed as:

$$H_{01b}: RMSEA \leq .05$$

$$H_{a1b}: RMSEA > .05$$

Where support was obtained for the close fit null hypothesis, (i.e. H_{01b} was not rejected) the full spectrum of fit statistics provided by LISREL was again reported and interpreted to arrive at a verdict on the fit of the structural model. The standardised residuals were also again interpreted to assemble a basket of evidence on the fit of the structural model. If close structural model fit was obtained, the structural model was investigated further. In evaluating the structural model fit, the focus was directed at the causal relationships hypothesised in the model, and whether these causal relationships are corroborated by the data obtained (Diamantopoulos & Siguaw, 2000).

Diamantopoulos and Siguaw (2000) note that an assessment of the signs of the causal relationships hypothesised in the structural model (either positive or negative), whether these causal relationships are significant ($p < .05$) and the magnitudes of the causal relationships are important when evaluating the structural model fit.

The unstandardised gamma (Γ) matrix, which is a (9×1) matrix containing the coefficients signifying the causal relationship between the exogenous and endogenous latent variables was used to investigate the significance of the causal relationships (Diamantopoulos & Siguaw, 2000). Causal relationships were regarded as significant ($p < .05$) if the test statistic (t) is greater than 1.96 (Diamantopoulos & Siguaw, 2000). In terms of the Γ matrix, hypothesis H_{02} was of interest, where a significant finding resulted in the rejection of H_{02} in favour of H_{a2} .

The unstandardised beta (B) matrix, which is a (9×9) matrix containing the coefficients signifying the causal relationship between the endogenous and endogenous latent variables was used to investigate the significance of the causal relationships (Diamantopoulos & Siguaw, 2000). Causal relationships were regarded as significant ($p < .05$) if the test statistic (t) is greater than 1.96. In terms of the B matrix, hypothesis $H_{03} - H_{019}$ were of interest, where a significant finding would result in the rejection of $H_{03} - H_{019}$ in favour of $H_{a3} - H_{a19}$.

Diamantopoulos and Siguaw (2000) note that the squared multiple correlations (R^2) for the structural equations should be investigated. The R^2 estimates represent the proportion of variance that the structural model accounts for in each of the endogenous latent variables. Large R^2 estimates are desirable in that they reveal that the structural model account for a significant portion of the variance in each of the endogenous latent variables, whilst small R^2

estimates reveal that the structural model requires further elaboration. The R^2 estimates dovetailed with the variance estimates derived from phi (Ψ) for each endogenous latent variable.

The modification indices for the Γ , \mathbf{B} , and Ψ matrices were investigated. Modification indices reveal the degree to which the χ^2 fit-statistic will decrease if an existing fixed parameter in the model is set free. The assessment of the modification indices of the Γ and \mathbf{B} matrices were utilised to investigate potential modifications to the currently hypothesised structural model. Additionally, the completely standardised expected change estimates for the Γ and \mathbf{B} matrices were utilised to investigate potential modifications to the structural model. It should be noted that modifications were only proposed if sound theoretical arguments would support such a modification (Diamantopoulos & Siguaw, 2000). The modification indices calculated for Ψ were used to comment on the fit of the structural model rather than suggest modifications to the structural model.

CHAPTER 4

PRESENTAION OF RESEARCH FINDINGS

4.1 INTRODUCTION

The objective of chapter 4 is to present and report on the statistical results of the various analysis performed. This chapter will firstly address the issue of how missing values were treated. Consequently, this chapter will report on the item analysis performed to establish the psychometric integrity of the of the indicator variables utilised to represent the various latent variables, followed by an evaluation of the extent to which the data satisfied the statistical data assumptions pertinent to the data analysis techniques utilised. Subsequently, the fit of the measurement model was evaluated, where in the evaluation of the success to which the latent variables comprising the proposed structural model had been operationalised no distinction is made between the exogenous and endogenous measurement models. Dependent on the condition of acceptable measurement model fit, the structural model was assessed.

4.2 MISSING VALUES

The issue of missing values had to be addressed prior to data analysis being performed. Missing values did not seriously plague the majority of the items comprising the scales utilised to operationalise the latent variables in the model. The maximum number of respondents who failed to respond to any individual items was eleven. Table 4.1 depicts the distribution of missing values across items. The Minnesota Job Satisfaction short-form items (particularly the item measuring the competence of supervisor in making decisions) were seemingly more prone to non-responses.

Table 4.1

Distribution of missing values across items

POS1	POS2	POS3	POS4	POS5	POS6	POS7	POS8	PDO1
0	0	0	1	1	2	1	6	0
PDO2	PDO3	PDO4	FO1	FO2	FO3	FO4	FO5	FO6
2	0	1	0	0	1	0	1	1
FO7	AC1	AC2	AC3	AC4	AC5	AC6	AC7	AC8
3	1	3	0	1	0	1	0	2
NC1	NC2	NC3	NC4	NC5	NC6	NC7	NC8	JS1
0	0	1	2	0	1	1	1	0

JS2	JS3	JS4	JS5	JS6	JS7	JS8	JS9	JS10
0	2	0	4	11	2	4	4	5
JS11	JS12	JS13	JS14	JS15	JS16	JS17	JS18	JS19
2	3	4	2	1	0	2	2	3
JS20	OT1	OT2	OT3	OT4	ITQ1	ITQ2	ITQ3	ITQ4
1	0	0	0	0	0	0	0	1
TMM1	TMM2	TMM3	TMM4	DO1	DO2	DO3	DO4	DO5
0	0	0	0	0	0	0	0	0
DO6								
0								

Various techniques exist to address the issue of missing values. Raghunathan (2004) notes that the technique employed to address the issue of missing values, ought to be based on the potential of the technique to improve the inferential validity of the results. The classical technique employed as the default option in most statistical analyses to address the issue of missing values is list-wise deletion of cases. In this case, it would have reduced the sample from 255 to 225. Additionally, pair-wise deletion of cases was not deemed a satisfactory technique to address the issue of missing values as it Pigott (2001) notes that this technique may generate invalid estimates because of the varying sample sizes used to estimate parameters.

To address the issue of missing values multiple imputation (MI) technique was employed. In the use of MI, numerous plausible values for each missing value in the dataset are generated in order to produce multiple complete datasets (Pigott, 2001). MI addresses missing values by restoring the inherent variability in the missing values and accounts for the ambiguity caused in estimating the missing value (Wayman, 2003). The MI technique assumes the data is missing at random (MAR) and follows a multivariate normal distribution (Du Toit & Du Toit, 2001). These assumptions are in most cases not satisfied. According to Mels (2007), it would be acceptable to use MI if observed variables are measured on a scale comprising five or more scale values, provided that the observed variables are not exclusively skewed even though the null hypothesis of multivariate normality might have been rejected and provided that less than 30% of the data constitutes missing values. The advantage of the MI technique is that all cases are retained in the imputed data set (Du Toit & Du Toit, 2001).

4.3 ITEM ANALYSIS

Item analysis allows for the identification and removal of items that fail to contribute to the internally consistent description of the latent variable as measured by a specific scale. Item analysis was performed on the items of the ten scales utilised to operationalise the ten latent variables that comprise the Oehley – Herselman talent management competency model (see Figure 3.1). Item analysis was performed on each of the scales following imputation. Problematic items were not used to represent latent variables in the model and were excluded in the calculation of item parcels. Item analysis was performed via the reliability procedure of SPSS 20 (SPSS, 2013).

4.3.1 Item Analysis: Survey of Perceived Organisational Support

The shortened version of the *Survey of Perceived Organisational Support* comprised of eight items (see Appendix B) developed by Eisenberger et al. (1986). The survey is designed to measure the degree to which employees' perceive that their organisation values their contributions and cares for their well-being. Four of the items of the *Survey of Perceived Organisational Support* are negatively keyed. These items were reverse coded before proceeding with the item analysis. Table 4.2 presents the item statistics for the *Survey of Perceived Organisational Support*.

Table 4.2.

Item statistics for Survey of Perceived Organisational Support

	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
	0.861	0.861	8

	Mean	Std. Deviation	N
POS1	4.21	1.938	255
POS2R	3.42	2.043	255
POS3R	4.2	1.916	255
POS4	3.5	1.938	255
POS5R	3.73	1.935	255
POS6	3.69	1.877	255

POS7R	3.47	1.911	255
POS8	3.99	1.936	255

	POS1	POS2R	POS3R	POS4	POS5R	POS6	POS7R	POS8
POS1	1	0.036	0.359	0.503	0.362	0.481	0.288	0.488
POS2R	0.036	1	0.514	0.286	0.555	0.267	0.47	0.295
POS3R	0.359	0.514	1	0.35	0.578	0.381	0.460	0.326
POS4	0.503	0.286	0.35	1	0.474	0.599	0.560	0.559
POS5R	0.362	0.555	0.578	0.474	1	0.455	0.661	0.485
POS6	0.481	0.267	0.381	0.599	0.455	1	0.462	0.601
POS7R	0.288	0.470	0.460	0.560	0.661	0.462	1	0.389
POS8	0.488	0.295	0.326	0.559	0.485	0.601	0.389	1

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
POS1	26.00	99.059	.486	.423	.857
POS2R	26.79	98.357	.469	.441	.860
POS3R	26.01	95.775	.589	.443	.846
POS4	26.71	92.908	.666	.531	.837
POS5R	26.49	91.038	.725	.601	.830
POS6	26.53	94.400	.648	.496	.839
POS7R	26.74	93.502	.660	.539	.838
POS8	26.22	94.306	.625	.484	.842

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.776	3.424	4.208	.784	1.229	.102	8
Item Variances	3.753	3.523	4.174	.651	1.185	.035	8
Inter-Item Correlations	.437	.036	.661	.625	18.200	.017	8

The Cronbach's alpha reliability coefficient (.861) was regarded as satisfactory. No problematic items were highlighted in the item statistics. No items were removed.

4.3.2 Item Analysis: Perceived Development Opportunities scale

The *Perceived Development Opportunities* scale developed by Smuts (2011) comprised of four items (see Appendix B). The scale is designed to measure employees' perceptions that

personal developmental opportunities are available to enhance performance and competence in the workplace and these opportunities are accessible (Smuts, 2011). Table 4.3 presents the items statistics for the *Perceived Developmental Opportunities Scale*.

Table 4.3***Item Statistics for the Perceived Developmental Opportunities scale***

	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
	.809	.809	4

	Mean	Std. Deviation	N
PDO1	3.05098	1.200947	255
PDO2	3.20784	1.190488	255
PDO3	3.05490	1.175925	255
PDO4	3.26275	1.176201	255

	PDO1	PDO2	PDO3	PDO4
PDO1	1.000	.527	.539	.372
PDO2	.527	1.000	.656	.459
PDO3	.539	.656	1.000	.533
PDO4	.372	.459	.533	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
PDO1	9.52549	8.778	.573	.347	.785
PDO2	9.36863	8.257	.676	.483	.735
PDO3	9.52157	8.085	.723	.533	.713
PDO4	9.31373	9.106	.537	.309	.801

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.144	3.051	3.263	.212	1.069	.012	4
Item Variances	1.406	1.383	1.442	.059	1.043	.001	4

Inter-Item Correlations	.514	.372	.656	.283	1.761	.008	4
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The Cronbach's alpha reliability coefficient (.809) exceeds the critical cut-off of .80. No problematic items were highlighted in the item statistics. No items were removed.

4.3.3 Item Analysis: Felt Obligation scale

The *Felt Obligation* scale developed by Eisenberger et al. (2001) is comprised of seven items, which measures employees' felt obligation to care about the organisation, and help the organisation attain its goals. Item seven is reversed score. This item was reflected before proceeding with the item analysis. Table 4.4 presents the item statistics for the *Felt Obligation Scale*.

Table 4.4

Item Statistics for the Felt Obligation scale

	Cronbach's Alpha Based on		
	Cronbach's Alpha	Standardised Items	N of Items
	.786	.815	7

	Mean	Std. Deviation	N
FO1	5.82745	1.201062	255
FO2	5.81176	1.480802	255
FO3	5.96863	1.267009	255
FO4	6.14510	1.107653	255
FO5	5.35294	1.739123	255
FO6	5.65882	1.475946	255
FO7R	5.02353	1.929729	255

	FO1	FO2	FO3	FO4	FO5	FO6	FO7R
FO1	1.000	.466	.397	.451	.308	.353	.167
FO2	.466	1.000	.507	.578	.442	.462	.178
FO3	.397	.507	1.000	.713	.441	.478	.156
FO4	.451	.578	.713	1.000	.505	.560	.103

FO5	.308	.442	.441	.505	1.000	.515	.116
FO6	.353	.462	.478	.560	.515	1.000	.199
FO7R	.167	.178	.156	.103	.116	.199	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
FO1	33.96078	38.337	.496	.281	.763
FO2	33.97647	34.196	.622	.429	.737
FO3	33.81961	35.944	.633	.535	.740
FO4	33.64314	36.616	.695	.624	.736
FO5	34.43529	33.263	.542	.354	.754
FO6	34.12941	34.310	.617	.416	.738
FO7R	34.76471	38.527	.205	.065	.837

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	5.684	5.024	6.145	1.122	1.223	.146	7
Item Variances	2.199	1.227	3.724	2.497	3.035	.813	7
Inter-Item Correlations	.386	.103	.713	.610	6.897	.029	7

The analysis revealed a Cronbach coefficient of internal consistency of .786. This finding is contrary to the reliability coefficient value (.90) reported by Lew (2009). The coefficient of internal consistency in additional fell below the critical cut-off value of .80.

Item FO7R was highlighted as a problematic item. The Cronbach alpha would increase from .786 to .837 if the item would be deleted, a low item-total correlation (.205) and a low squared multiple correlation (.029) provided sufficient evidence to justify the removal of item FO7R. In the subsequent item analysis⁸ item FO1 was highlighted as potentially problematic as a low squared multiple correlation (.276) was found. The deletion of item FO1 would, however have reduced the Cronbach alpha from .837 to .830. Consequently, item FO1 was retained, as there was insufficient evidence to justify the decision to remove the item. The *Felt Obligation* scale was therefore reduced from seven items to six items.

⁸ Only the results of the initial analysis are presented in Table 4.4. The results of subsequent analysis are not shown in Table 4.4.

4.3.4 Item Analysis: Affective Commitment Scale

The *Affective Commitment* scale of the three component model (TCM) Employee Commitment Survey (Meyer & Allen, 1991) comprises of eight items (see Appendix B). Four items of the scale are reverse scored. These items were re-coded prior to item analysis being performed. Table 4.5 presents the item statistics for the *Affective Commitment* scale.

Table 4.5

Items Statistics for the Affective Commitment scale

		Cronbach's Alpha Based on		
		Cronbach's Alpha	Standardised Items	N of Items
		.827	.827	8

	Mean	Std. Deviation	N
AC1	4.56863	2.113464	255
AC2	4.18824	2.064858	255
AC3	4.09804	2.020124	255
AC4R	3.80000	2.006682	255
AC5R	4.34510	2.011416	255
AC6R	4.44706	1.999050	255
AC7	4.68627	1.977135	255
AC8R	4.61961	1.990234	255

	AC1	AC2	AC3	AC4R	AC5R	AC6R	AC7	AC8R
AC1	1.000	.512	.360	.296	.321	.398	.441	.339
AC2	.512	1.000	.430	.117	.342	.398	.475	.350
AC3	.360	.430	1.000	.114	.191	.244	.374	.234
AC4R	.296	.117	.114	1.000	.461	.379	.190	.343
AC5R	.321	.342	.191	.461	1.000	.703	.382	.598
AC6R	.398	.398	.244	.379	.703	1.000	.437	.644
AC7	.441	.475	.374	.190	.382	.437	1.000	.420
AC8R	.339	.350	.234	.343	.598	.644	.420	1.000

Scale Mean if Deleted	Scale Variance if Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted

AC1	30.18431	91.395	.562	.374	.806
AC2	30.56471	92.381	.552	.409	.807
AC3	30.65490	98.502	.398	.237	.827
AC4R	30.95294	99.124	.386	.260	.829
AC5R	30.40784	90.187	.637	.570	.795
AC6R	30.30588	88.678	.687	.597	.788
AC7	30.06667	92.787	.574	.364	.804
AC8R	30.13333	91.037	.620	.478	.798

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.344	3.800	4.686	.886	1.233	.091	8
Item Variances	4.094	3.909	4.467	.558	1.143	.034	8
Inter-Item Correlations	.375	.114	.703	.589	6.184	.019	8

The Cronbach alpha reliability coefficient (.827) is considered satisfactory as it is above the critical cut-off (.8). All the corrected item total correlations were larger than .30 indicating that the correlation between each item and the total score calculated from the remaining items was satisfactory and that the items were reflecting the same underlying factor. In addition, the squared multiple correlations were all sufficiently large, except for item AC3 and AC4R. This did not provide sufficient evidence to remove these two items. Additionally, the results revealed that if item AC3 was removed it would not increase the Cronbach alpha, however if item AC4R was deleted the Cronbach's alpha would marginally increase to .829. The decision was taken to remove item AC4R. The *Affective Commitment* scale was consequently reduced from eight items to seven items.

An exploratory factor analysis of the reduced *Affective Commitment* scale utilising principal axis factoring with Direct Oblimin rotation (see paragraph 4.4.4) indicated that two factors were required to adequately explain the observed inter-item correlation matrix. The results indicated that six items loaded onto the first factor, whilst one item cross-loaded (AC3). In an attempt to establish how well the items of the *Affective Commitment* scale reflect a single underlying latent variable exploratory factor analysis was subsequently repeated, by forcing the extraction of a single factor, the results indicated all items have loadings greater than .50, except for item AC3. Based on the basket of evidence the decision was taken to remove item

AC3 for the *Affective Commitment* scale. The *Affective Commitment* scale was consequently further reduced from seven items to six items.

In subsequent item analysis on the reduced *Affective Commitment* scale revealed a Cronbach's coefficient of internal consistency of .830.

4.3.5 Item Analysis: Normative Commitment Scale

The *Normative Commitment* scale of the three component model (TCM) Employee Commitment Survey (Meyer & Allen, 1991) comprises of eight items (see Appendix B). Three items of the scale are reverse scored. These items were re-coded prior to item analysis being performed. Table 4.6 presents the item statistics for the *Normative Commitment* scale.

Table 4.6
Item Statistics for the Normative Commitment scale

				Cronbach's Alpha Based on				
				Cronbach's Alpha	Standardised Items	N of Items		
				.631	.637	8		
				Std.				
				Mean	Deviation	N		
NC1				5.17647	1.793535	255		
NC2R				5.34902	1.871815	255		
NC3R				4.21961	2.054093	255		
NC4				5.24314	1.777955	255		
NC5				3.58824	2.146013	255		
NC6				5.03137	1.822593	255		
NC7				4.89804	1.866983	255		
NC8R				4.24314	1.906191	255		
	NC1	NC2R	NC3R	NC4	NC5	NC6	NC7	NC8R
NC1	1.000	.175	-.013	.227	.180	.268	.212	.097
NC2R	.175	1.000	.299	.203	-.110	.073	.152	.287
NC3R	-.013	.299	1.000	.052	.081	.072	.080	.336
NC4	.227	.203	.052	1.000	.213	.356	.472	.089
NC5	.180	-.110	.081	.213	1.000	.334	.354	.098
NC6	.268	.073	.072	.356	.334	1.000	.413	.048
NC7	.212	.152	.080	.472	.354	.413	1.000	-.013
NC8R	.097	.287	.336	.089	.098	.048	-.013	1.000

NC8R	.097	.287	.336	.089	.098	.048	-.013	1.000
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	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
NC1	32.57255	54.167	.294	.132	.608
NC2R	32.40000	54.076	.274	.230	.613
NC3R	33.52941	53.825	.235	.178	.626
NC4	32.50588	51.117	.427	.282	.574
NC5	34.16078	51.435	.295	.230	.610
NC6	32.71765	50.959	.417	.261	.575
NC7	32.85098	49.860	.447	.351	.566
NC8R	33.50588	54.511	.248	.180	.621

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.719	3.588	5.349	1.761	1.491	.395	8
Item Variances	3.643	3.161	4.605	1.444	1.457	.260	8
Inter-Item Correlations	.180	-.110	.472	.583	-4.290	.020	8

The reliability statistics indicate a highly unsatisfactory Cronbach alpha of .631; this is clearly below the critical cut off value of .80. Only items NC4, NC6 and NC7 had corrected item-total correlations above .30 indicating that the correlation between each of these three items and the total score calculated from the remaining items was satisfactory and that the items were reflecting the same underlying factor. In addition, the results indicate that only item NC7 had a squared multiple correlation above .30 (.351). Furthermore, the results revealed that none of the items, if deleted, would increase the current Cronbach's alpha. The decision was taken to remove items NC1, NC2R, NC3R, NC5, and NC8R based on the pattern of lower inter-item correlations, lower item-total correlations and lower squared multiple correlations. In subsequent item analysis it was revealed that the Cronbach's alpha reliability coefficient improved to .679 following the removal of the aforementioned items. Additionally, it was revealed that none of the remaining three items would increase the Cronbach's alpha, all the items had corrected item-total correlations above .3, whilst none of the items had squared multiple correlations above .3. The internal consistency of the reduced scale nonetheless still raised serious concerns.

4.3.6 Item Analysis: Job Satisfaction Questionnaire

The Minnesota Satisfaction Questionnaire (Weiss, Dawis, & England, 1967) - short form (MSQ-SF). The MSQ-SF is comprised of 20 items (see Appendix B) and consists of three scales, namely: *General Satisfaction*, *Intrinsic Satisfaction* and *Extrinsic Satisfaction*. Tables 4.7, 4.8 and 4.9, present the item statistics for the *General*, *Intrinsic* and *Extrinsic Satisfaction* respectively as part of the *Job Satisfaction Questionnaire*.

As can be seen in Table 4.7 highly satisfactory Cronbach alpha reliability coefficient value (.907) was found for *General Satisfaction*, exceeding the critical cut-off of .80. No problematic items were highlighted in the item statistics. No items were removed.

Table 4.7
Item Statistics for General Satisfaction

	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
	.907	.909	20

	Mean	Std. Deviation	N
JS1	3.80784	.995233	255
JS2	3.32941	1.150709	255
JS3	3.71765	1.022716	255
JS4	3.79216	.992064	255
JS5	3.01961	1.192004	255
JS6	3.14902	1.164327	255
JS7	3.43529	1.137552	255
JS8	3.83137	.991597	255
JS9	4.00784	.963884	255
JS10	3.75686	.969872	255
JS11	3.77255	1.047697	255
JS12	2.74118	1.205169	255
JS13	2.28627	1.216847	255
JS14	2.34510	1.222543	255
JS15	3.11765	1.220673	255
JS16	3.15686	1.216238	255
JS17	2.66667	1.204759	255
JS18	3.18431	1.164327	255
JS19	2.79608	1.205950	255
JS20	3.24314	1.214942	255

	JS1	JS2	JS3	JS4	JS5	JS6	JS7	JS8	JS9	JS10	JS11	JS12	JS13	JS14	JS15	JS16	JS17	JS18	JS19	JS20
JS1	1.0	.458	.469	.482	.249	.215	.349	.410	.412	.416	.437	.149	.114	.106	.330	.402	.232	.272	.269	.407
JS2	.458	1.0	.260	.277	.179	.128	.272	.308	.253	.315	.235	-.023	.025	-.045	.233	.205	.153	.187	.162	.311
JS3	.469	.260	1.0	.590	.286	.313	.299	.337	.418	.498	.473	.241	.154	.091	.326	.362	.236	.289	.256	.382
JS4	.482	.277	.590	1.0	.270	.238	.304	.344	.504	.520	.492	.182	.072	.082	.303	.344	.159	.275	.251	.320
JS5	.249	.179	.286	.270	1.0	.619	.272	.289	.329	.290	.287	.379	.300	.257	.407	.422	.495	.295	.449	.312
JS6	.215	.128	.313	.238	.619	1.0	.346	.247	.297	.207	.263	.331	.287	.301	.334	.325	.443	.264	.353	.303
JS7	.349	.272	.299	.304	.272	.346	1.0	.345	.388	.343	.374	.206	.058	.044	.261	.340	.138	.171	.140	.282
JS8	.410	.308	.337	.344	.289	.247	.345	1.0	.673	.514	.516	.263	.269	.259	.420	.440	.342	.286	.307	.443
JS9	.412	.253	.418	.504	.329	.297	.388	.673	1.0	.663	.641	.368	.179	.205	.414	.442	.338	.304	.252	.432
JS10	.416	.315	.498	.520	.290	.207	.343	.514	.663	1.0	.639	.333	.096	.177	.307	.416	.261	.259	.230	.331
JS11	.437	.235	.473	.492	.287	.263	.374	.516	.641	.639	1.0	.399	.255	.246	.430	.473	.298	.341	.287	.449
JS12	.149	-.023	.241	.182	.379	.331	.206	.263	.368	.333	.399	1.0	.523	.553	.350	.358	.442	.228	.305	.226
JS13	.114	.025	.154	.072	.300	.287	.058	.269	.179	.096	.255	.523	1.0	.590	.407	.369	.500	.249	.402	.262
JS14	.106	-.045	.091	.082	.257	.301	.044	.259	.205	.177	.246	.553	.590	1.0	.413	.398	.471	.215	.366	.251
JS15	.330	.233	.326	.303	.407	.334	.261	.420	.414	.307	.430	.350	.407	.413	1.0	.719	.517	.397	.383	.448
JS16	.402	.205	.362	.344	.422	.325	.340	.440	.442	.416	.473	.358	.369	.398	.719	1.0	.530	.480	.457	.443
JS17	.232	.153	.236	.159	.495	.443	.138	.342	.338	.261	.298	.442	.500	.471	.517	.530	1.0	.426	.503	.389
JS18	.272	.187	.289	.275	.295	.264	.171	.286	.304	.259	.341	.228	.249	.215	.397	.480	.426	1.0	.546	.514
JS19	.269	.162	.256	.251	.449	.353	.140	.307	.252	.230	.287	.305	.402	.366	.383	.457	.503	.546	1.0	.628
JS20	.407	.311	.382	.320	.312	.303	.282	.443	.432	.331	.449	.226	.262	.251	.448	.443	.389	.514	.628	1.0

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
JS1	61.34902	169.787	.526	.441	.903
JS2	61.82745	173.356	.321	.309	.908

JS3	61.43922	169.184	.533	.475	.903
JS4	61.36471	170.343	.505	.493	.904
JS5	62.13725	165.733	.562	.514	.902
JS6	62.00784	167.661	.510	.477	.904
JS7	61.72157	170.792	.414	.321	.906
JS8	61.32549	167.913	.604	.536	.901
JS9	61.14902	167.411	.644	.663	.901
JS10	61.40000	168.902	.578	.601	.902
JS11	61.38431	165.828	.648	.578	.900
JS12	62.41569	167.071	.510	.499	.904
JS13	62.87059	168.523	.456	.494	.905
JS14	62.81176	168.838	.443	.509	.905
JS15	62.03922	162.526	.655	.594	.900
JS16	62.00000	161.260	.702	.639	.898
JS17	62.49020	163.999	.614	.530	.901
JS18	61.97255	167.224	.526	.414	.903
JS19	62.36078	164.932	.582	.581	.902
JS20	61.91373	163.567	.623	.566	.901

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.258	2.286	4.008	1.722	1.753	.261	20
Item Variances	1.275	.929	1.495	.566	1.609	.048	20
Inter-Item Correlations	.332	-.045	.719	.764	-16.079	.018	20

Table 4.8
Item Statistics for Intrinsic Satisfaction

		Cronbach's Alpha Based on		
		Cronbach's Alpha	Standardised Items	N of Items
		.887	.890	12

	Mean	Std. Deviation	N
JS1	3.81	.995	255
JS2	3.33	1.151	255
JS3	3.72	1.023	255
JS4	3.79	.992	255
JS7	3.44	1.138	255
JS8	3.83	.992	255
JS9	4.01	.964	255
JS10	3.76	.970	255
JS11	3.77	1.048	255
JS15	3.12	1.221	255
JS16	3.16	1.216	255
JS20	3.24	1.215	255

	JS1	JS2	JS3	JS4	JS7	JS8	JS9	JS10	JS11	JS15	JS16	JS20
JS1	1.00	.458	.469	.482	.349	.410	.412	.416	.437	.330	.402	.407
JS2	.458	1.00	.260	.277	.272	.308	.253	.315	.235	.233	.205	.311
JS3	.469	.260	1.00	.590	.299	.337	.418	.498	.473	.326	.362	.382
JS4	.482	.277	.590	1.00	.304	.344	.504	.520	.492	.303	.344	.320
JS7	.349	.272	.299	.304	1.00	.345	.388	.343	.374	.261	.340	.282
JS8	.410	.308	.337	.344	.345	1.00	.673	.514	.516	.420	.440	.443
JS9	.412	.253	.418	.504	.388	.673	1.00	.663	.641	.414	.442	.432
JS10	.416	.315	.498	.520	.343	.514	.663	1.00	.639	.307	.416	.331
JS11	.437	.235	.473	.492	.374	.516	.641	.639	1.00	.430	.473	.449
JS15	.330	.233	.326	.303	.261	.420	.414	.307	.430	1.00	.719	.448
JS16	.402	.205	.362	.344	.340	.440	.442	.416	.473	.719	1.00	.443
JS20	.407	.311	.382	.320	.282	.443	.432	.331	.449	.448	.443	1.00

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
JS1	39.16	64.167	.616	.439	.876

JS2	39.64	66.011	.409	.274	.888
JS3	39.25	64.299	.587	.449	.878
JS4	39.18	64.524	.594	.474	.878
JS7	39.53	65.077	.469	.236	.885
JS8	39.14	63.851	.640	.517	.875
JS9	38.96	63.211	.707	.644	.872
JS10	39.21	63.766	.663	.580	.874
JS11	39.20	62.355	.696	.558	.872
JS15	39.85	62.474	.571	.560	.879
JS16	39.81	61.547	.626	.589	.876
JS20	39.73	62.507	.572	.366	.879

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.581	3.118	4.008	.890	1.286	.093	12
Item Variances	1.170	.929	1.490	.561	1.604	.051	12
Inter-Item Correlations	.404	.205	.719	.515	3.512	.012	12

As can be seen in Table 4.8 satisfactory Cronbach alpha reliability coefficient value (.887) was found for *Intrinsic Satisfaction*, exceeding the critical cut-off of .80. The results revealed that if item JS2 was removed from the scale, the current Cronbach alpha would increase to .888. Although, there was insufficient evidence to justify the removal of this item.

Table 4.9
Item Statistics for Extrinsic Satisfaction

	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
	.801	.801	6

	Mean	Std. Deviation	N
JS5	3.02	1.192	255
JS6	3.15	1.164	255
JS12	2.74	1.205	255
JS13	2.29	1.217	255

JS14	2.35	1.223	255
JS19	2.80	1.206	255

	JS5	JS6	JS12	JS13	JS14	JS19
JS5	1.000	.619	.379	.300	.257	.449
JS6	.619	1.000	.331	.287	.301	.353
JS12	.379	.331	1.000	.523	.553	.305
JS13	.300	.287	.523	1.000	.590	.402
JS14	.257	.301	.553	.590	1.000	.366
JS19	.449	.353	.305	.402	.366	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
JS5	13.32	18.887	.552	.468	.771
JS6	13.19	19.366	.518	.408	.779
JS12	13.60	18.509	.585	.407	.763
JS13	14.05	18.395	.589	.434	.762
JS14	13.99	18.465	.578	.449	.765
JS19	13.54	19.147	.514	.298	.780

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.723	2.286	3.149	.863	1.377	.122	6
Item Variances	1.443	1.356	1.495	.139	1.102	.002	6
Inter-Item Correlations	.401	.257	.619	.362	2.405	.013	6

As can be seen in Table 4.9 satisfactory Cronbach alpha reliability coefficient value (.801) was found for *Extrinsic Satisfaction*, marginally exceeding the critical cut-off of .80. No problematic items were highlighted in the item statistics. No items were removed.⁹

⁹It had been considered calculating the composite reliability using the Nunnally formula ($r_{tt} = 1 - ([SS_1 - S_{r_{tt}} S_1^2] / S_1^2)$). However, due to the fact that *General Satisfaction* is not equal to the sum of the other two subscales (i.e. *Intrinsic* and *Extrinsic Satisfaction*) the calculation of the composite reliability was not undertaken.

4.3.7 Item Analysis: Organisational Trust Inventory

The trust in the organisation as a whole subscale of the *Organisational Trust Inventory* (Nyhan & Marlowe, 1997) comprises of four items (see Appendix B). Table 4.10 presents the item statistics for the *Organisational Trust Inventory*.

Table 4.10

Item Statistics for the Organisational Trust Inventory

	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
	.849	.849	4

	Mean	Std. Deviation	N
OT1	3.28627	1.604744	255
OT2	3.24314	1.525280	255
OT3	4.05490	1.556332	255
OT4	3.64706	1.667469	255

	OT1	OT2	OT3	OT4
OT1	1.000	.752	.415	.625
OT2	.752	1.000	.520	.630
OT3	.415	.520	1.000	.569
OT4	.625	.630	.569	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
OT1	10.94510	16.154	.705	.605	.801
OT2	10.98824	16.146	.763	.631	.777
OT3	10.17647	17.910	.569	.370	.857
OT4	10.58431	15.543	.723	.524	.793

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.558	3.243	4.055	.812	1.250	.143	4

Item	2.526	2.326	2.780	.454	1.195	.039	4
Variances							
Inter-Item Correlations	.585	.415	.752	.337	1.813	.012	4

A satisfactory Cronbach alpha reliability coefficient value (.849) was found which exceeded the critical cut-off of .80. Item OT3 was highlighted as potentially problematic as the deletion of this item would increase the Cronbach alpha (.857). However, all the corrected item-total correlations were greater than .569 indicating that the correlation between each item and the total score calculated from the remaining items was satisfactory and that the items were reflecting the same underlying factor. Furthermore, the squared multiple correlations were all sufficiently large. Based on the basket of evidence it was decided to retain item OT3 in the *Organisational Trust* inventory.

4.3.8 Item Analysis: Intention to Quit Scale

The *Intention to Quit* scale comprised of four items (see Appendix B) measuring employees' *Intention to Quit* their organisation. Table 4.11 presents the item statistics for the *Intention to Quit* scale.

Table 4.11

Item Statistics for the Intention to Quit scale

	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
	.902	.903	4

	Mean	Std. Deviation	N
ITQ1	2.86667	1.297282	255
ITQ2	3.28235	1.318659	255
ITQ3	2.80784	1.399640	255
ITQ4	2.46667	1.449228	255

	ITQ1	ITQ2	ITQ3	ITQ4
ITQ1	1.000	.637	.825	.735

ITQ2	.637	1.000	.655	.555
ITQ3	.825	.655	1.000	.784
ITQ4	.735	.555	.784	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
ITQ1	8.55686	13.515	.832	.714	.857
ITQ2	8.14118	14.681	.665	.458	.913
ITQ3	8.61569	12.584	.865	.765	.842
ITQ4	8.95686	12.971	.773	.639	.878

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.856	2.467	3.282	.816	1.331	.112	4
Item Variances	1.870	1.683	2.100	.417	1.248	.038	4
Inter-Item Correlations	.698	.555	.825	.270	1.486	.009	4

A highly satisfactory Cronbach alpha reliability coefficient value (.902) was found which exceeded the critical cut-off of .80. The inter-item correlation matrix revealed that all the items correlated above .50. All the corrected item-total correlations were larger than .665 indicating that the correlation between each item and the total score calculated from the remaining items was satisfactory and that the items were reflecting the same underlying factor. Additionally, the squared multiple correlations were all larger than .458. The results revealed that item ITQ2 was potentially problematic, as the deletion of this item would increase the Cronbach alpha (.913). Item ITQ2 was nonetheless retained, as there was insufficient supporting evidence in the other item statistics to justify the decision to remove the item.

4.3.9 Item Analysis: Displays a Talent Management Mindset Subscale

The *Displays a Talent Management Mindset* subscale of the Talent Management Questionnaire developed by Oehley (2007) is comprised of four items. Table 4.12 presents the item statistics for the subscale.

Table 4.12
Item Statistics for the Displays a Talent Management Mindset subscale

	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
	.767	.816	4

	Mean	Std. Deviation	N
TMM1	4.51373	.692201	255
TMM2	4.45490	.690861	255
TMM3	4.53333	.746294	255
TMM4	3.88235	1.398073	255

	TMM1	TMM2	TMM3	TMM4
TMM1	1.000	.374	.695	.653
TMM2	.374	1.000	.543	.316
TMM3	.695	.543	1.000	.570
TMM4	.653	.316	.570	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
TMM1	12.87059	5.349	.730	.580	.662
TMM2	12.92941	6.160	.446	.295	.772
TMM3	12.85098	5.143	.729	.591	.651
TMM4	13.50196	3.149	.617	.452	.779

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.346	3.882	4.533	.651	1.168	.097	4
Item Variances	.867	.477	1.955	1.477	4.095	.527	4
Inter-Item Correlations	.525	.316	.695	.378	2.194	.021	4

The analysis revealed a Cronbach coefficient of internal consistency of .767, which is below the critical cut-off value of .80¹⁰. This finding is contrary to the reliability coefficient value (.822) reported by Oehley (2007).

All the corrected item-total correlations were larger than .446 indicating that the correlation between each item and the total score calculated from the remaining items was satisfactorily and that the items were reflecting the same underlying factor. However, the squared multiple correlations were all larger than .452, except for item TMM2 (.295) and the results revealed that items TMM2 and TMM4, if deleted, would increase the current Cronbach alpha. Prior to the removal of any items, dimensionality analysis was performed on all the items comprising the *Displays a Talent Management Mindset* subscale, as the latent variable was conceptualised as a unidimensional construct. The factor matrix indicated that the all the items loaded on one factor satisfactorily as all factor loadings were larger than .50 (results not shown).

However, sufficient evidence was derived to justify the removal of item TMM2. Item analysis was subsequently repeated on the remaining three items and item TMM4 was highlighted as problematic as the removal of this item would increase the Cronbach alpha reliability coefficient (.818) which is above the critical cut-off of .80. The decision was taken to also remove item TMM4. The *Displays a Talent Management Mindset* subscale was therefore reduced from four items to two items. The use of only two indicators to represent this latent variable raised the concern that the effective connotative meaning of the latent variable might be restricted due to the limited number of items and the narrow focus of the items.

4.3.10 Item Analysis: Develops Others Subscale

The *Develops Others* subscale of the Talent Management Competency Questionnaire developed by Oehley (2007) is comprised of six items. Table 4.13 presents the item statistics for the *Develops Others* subscale.

¹⁰Nunnally (1978, p. 226) argues that “for basic research, it can be argued that increasing reliabilities beyond .80 is often wasteful. At that level correlations are attenuated very little by measurement error.” He, however, then continues by arguing that “in contrast to the standards in basic research, in many applied settings a reliability of .80 is not nearly enough” (Nunnally, 1978, p. 226).

Table 4.13

Item Statistics for the Develops Other subscale

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.902	.902	6

	Mean	Std. Deviation	N
DO1	4.24706	1.056356	255
DO2	4.10588	.860647	255
DO3	4.01176	.902675	255
DO4	4.31373	.945153	255
DO5	3.89412	1.053941	255
DO6	3.36078	1.095459	255

	DO1	DO2	DO3	DO4	DO5	DO6
DO1	1.000	.824	.451	.837	.770	.586
DO2	.824	1.000	.399	.733	.772	.811
DO3	.451	.399	1.000	.166	.378	.362
DO4	.837	.733	.166	1.000	.690	.632
DO5	.770	.772	.378	.690	1.000	.654
DO6	.586	.811	.362	.632	.654	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
DO1	19.68627	15.413	.856	.884	.864
DO2	19.82745	16.647	.889	.853	.864
DO3	19.92157	19.616	.400	.432	.928
DO4	19.61961	16.906	.750	.807	.882
DO5	20.03922	15.802	.802	.664	.873
DO6	20.57255	16.009	.732	.748	.885

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.989	3.361	4.314	.953	1.284	.118	6
Item Variances	.979	.741	1.200	.459	1.620	.035	6

Inter-Item Correlations	.604	.166	.837	.670	5.030	.041	6
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Visual inspection of the means and standard deviations revealed the absence of extreme means and small standard deviations and therefore the absence of poor items. The mean ranged from 3.361 to 4.314 (on a five-point scale) and the standard deviation ranged from 0.860647 to 1.09459. All the corrected item total correlations were acceptably large indicating that the correlation between each item and the total score calculated from the remaining items was satisfactorily and that the items were reflecting the same underlying factor. In addition, the squared multiple correlations were all sufficiently large. Although, the results revealed that, if item DO3 was deleted, the current Cronbach alpha would increase from .902 to .928. However, there was insufficient supporting evidence in the item statistics to justify the removal of item DO3 and consequently all the items of the *Develops Others* subscale were retained.

An exploratory factor analysis of the *Develops Others* subscale utilising principal axis factoring with Direct Oblimin rotation (see paragraph 4.4.10) indicated that one factor was required to adequately explain the observed inter-item correlation matrix. The results indicated all items have loadings greater than .50, except for item DO3. Based on the basket of evidence the decision was taken to remove item DO3 for the *Develops Others* subscale. The *Develops Others* subscale was consequently reduced from six items to five items.

In subsequent item analysis on the reduced *Develops Others* subscale revealed a Cronbach alpha coefficient of internal consistency of .928.

4.4 DIMENSIONALITY ANALYSIS

Through dimensionality analysis, an attempt was made to confirm the unidimensionality of the scales used to operationalise the latent variables that comprise the expanded talent management structural model (Figure 3.1) and to remove items that have weak factor loadings and/or if need be, to divide the heterogeneous scale into two or more homogeneous sets (De Goede, 2007; Theron, 2011). The items comprising the scales and subscales were designed to illicit behavioural responses from respondents that are primarily an expression of a specific underlying latent variable.

An unrestricted principal axis factor analysis with oblique rotation was performed on the various scales and subscales. The objective of the analyses was to evaluate this assumption and to evaluate the success with which each item, along with the rest of the items in the particular subscale, measures the specific latent variable it was designed to reflect. The items that were removed in the preceding item analyses were not included in the factor analyses. The decision on how many factors are required to adequately explain the observed correlation matrix was based on the Guttman-Kaiser rule of thumb of eigenvalues-greater-than-one and on the scree test (Tabachnick & Fidell, 2001). Factor loadings of items on the factor they were designated to reflect were considered satisfactory if they are greater than .50. 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.

4.4.1 Dimensionality Analysis: Survey of Perceived Organisational Support

From the initial exploratory factor analysis, the correlation matrix indicated all correlations were significant ($p < .05$), although it was noted that not all correlations were greater than .3. A KMO value of .839 was obtained providing evidence that *Perceived Organisational Support* scale was factor analysable ($> .60$). The Bartlett's Test of Sphericity indicated that H_0 could be rejected ($p < .05$) providing further evidence that the matrix was factor analysable.

The Guttman-Kaiser rule of thumb of eigenvalues-greater-than-one and the scree plot suggested that two underlying factors were required to explain the observed correlations between the items of the scale. The pattern matrix is depicted in Table 4.14. The *Perceived Organisational Support* latent variable was conceptualised as a unidimensional construct in this research study, consequently the two-factor solution is in conflict with the original design intention of the scale.

Table 4.14

Factor structure for the Survey of Perceived Organisational Support

	Factor	
	1	2
POS1	.738	-.116
POS2R	-.179	.846

POS3R	.153	.582
POS4	.699	.130
POS5R	.221	.701
POS6	.718	.089
POS7R	.265	.568
POS8	.678	.095

Four items appeared to load onto the first factor and four items onto the second factor. The items loading onto the second factor are all negatively keyed items. Factor 2 is therefore simply a negatively keyed factor. In terms of the constitutive definition of this latent variable and the design of the scale, the factor fission obtained on this scale makes theoretical sense.

However, in the proposed Oehley – Herselman talent management competency model, *Perceived Organisational Support* was treated as a single, undifferentiated latent variable. In an attempt to establish how well the items of the *Survey of Perceived Organisational Support* reflect a single underlying latent variable exploratory factor analysis was subsequently repeated, by forcing the extraction of a single factor. The resultant single-factor factor structure is shown in Table 4.15. Table 4.15 indicates all items have loadings greater than .50.

The residuals correlations were computed for both the 2-factor and the 1-factor solution. For the 2-factor solution only 5 (17%) of non-redundant residuals had absolute values greater than .05 thus suggesting that the rotated factor solution provided a very credible explanation for the observed inter-item correlation matrix. The 1-factor solution, however, failed to provide a credible explanation in that 23 (82%) of the residual correlations were greater than .05.

Table 4.15

Factor matrix when forcing the extraction of a single factor (Perceived Organisational Support)

	Factor 1
POS1	.540
POS2R	.518
POS3R	.625
POS4	.728
POS5R	.783

POS6	.706
POS7R	.721
POS8	.679

4.4.2 Dimensionality Analysis: Perceived Developmental Opportunities scale

The correlation matrix indicated that the matrix was factor analysable in that all the correlations were greater than .3 and all were significant ($p < .05$). A KMO value of .782 was found, indicating that the *Perceived Developmental Opportunities* scale was factor analysable ($> .60$). Additionally, the Bartlett's Test of Sphericity indicated that H_0 could be rejected ($p < .05$) providing further evidence that the matrix was factor analysable.

The Guttman-Kaiser rule of thumb of eigenvalues-greater-than-one and the scree plot suggested that a single underlying factor explained the observed correlations between the items of the scale. The resultant factor structure is depicted in Table 4.16. The *Perceived Developmental Opportunities* latent variable was conceptualised as a unidimensional construct in this research study.

Table 4.16

Factor structure for the Perceived Developmental Opportunities scale

	Factor 1
PDO1	.645
PDO2	.782
PDO3	.849
PDO4	.601

The factor matrix indicated that all four items loaded on one factor satisfactory as all factor loadings were larger than .50. None (0%) of the non-redundant residuals obtained absolute values greater than .05 signifying that the factor solution provided a very credible explanation for the observed inter-item correlation matrix. The results corroborated the unidimensionality assumption of the *Perceived Developmental Opportunities* scale.

4.4.3 Dimensionality Analysis: Felt Obligation Scale

Item FO7R was found to be poor item in the item analysis and was subsequently not included in the dimensionality analysis of the *Felt Obligation* scale.

The correlation matrix indicated that the matrix was factor analysable in that all the correlations were greater than .3 and all were significant ($p < .05$). A KMO value of .857 was found, indicating that the *Felt Obligation* scale was factor analysable ($> .60$). Additionally, the Bartlett's Test of Sphericity indicated that H_0 could be rejected ($p < .05$) providing further evidence that the matrix was factor analysable.

The Guttman-Kaiser rule of thumb of eigenvalues-greater-than-one and the scree plot suggested that a single underlying factor explained the observed correlations between the items of the scale. The resultant factor structure is depicted in Table 4.17. The *Felt Obligation* latent variable was conceptualised as a unidimensional construct in this research study.

Table 4.17

Factor structure for the Felt Obligation scale

	Factor 1
FO1	.547
FO2	.704
FO3	.751
FO4	.853
FO5	.625
FO6	.677

The factor matrix indicated that all the items loaded on one factor satisfactorily as all factor loadings were larger than .50. Only 3 (20%) of the non-redundant residuals obtained absolute values greater than .05 signifying that the factor solution provided a very credible explanation for the observed inter-item correlation matrix.

4.4.4 Dimensionality Analysis: Affective Commitment Scale

Item AC4 was found to be a poor item in the item analysis and was subsequently not included in the dimensionality analysis of the *Affective Commitment* scale.

From the initial exploratory factor analysis, the correlation matrix indicated that all correlations were significant ($p < .05$), although it was highlighted that not all the correlations were greater than .3. A KMO value of .842 was obtained providing evidence that the *Affective Commitment* scale was factor analysable ($> .60$). The Bartlett's Test of Sphericity indicated that H_0 could be rejected ($p < .05$) providing further evidence that the matrix was factor analysable.

The Guttman-Kaiser rule of thumb of eigenvalues-greater-than-one and the scree plot suggested that two underlying factors were required to explain the observed correlations between the items of the scale. The pattern matrix is depicted in Table 4.18. The *Affective Commitment* latent variable was conceptualised as a unidimensional construct in this research study, consequently the two-factor solution is in conflict with the original design intention of the scale.

Table 4.18

Factor structure for the Affective Commitment scale

	Factor	
	1	2
AC1	.600	.260
AC2	.647	.341
AC3	.451	.334
AC5R	.726	-.408
AC6R	.805	-.368
AC7	.638	.166
AC8R	.706	-.288

It appears that six items load onto the first factor, whilst there is also the presence of one complex item (AC3) that only has moderate loadings on both factors. No theoretically meaningful identity could be inferred from the factor loadings of the two factors.

In an attempt to establish how well the items of the *Affective Commitment* scale reflect a single underlying latent variable exploratory factor analysis was subsequently repeated, by forcing the extraction of a single factor. The resultant single-factor factor structure is shown in Table 4.19. Table 4.19 indicates that all items have loadings greater .50, except for item AC3. Item AC3 also had loadings lower than .50 on both of the extracted factors in the two-factor solution. Item AC3 was initially highlighted as a poor item in the item analysis, although it was not removed from the scale, due to insufficient supporting evidence to justify the decision. The results of the factor analysis provided the necessary evidence to justify the removal of item AC3. The results of the item analysis on the reduced *Affective Commitment* scale are depicted in Table 4.20.

Table 4.19

Factor matrix when forcing the extraction of a single factor (Affective Commitment)

	Factor 1
AC1	.595
AC2	.627
AC3	.442
AC5R	.694
AC6R	.779
AC7	.645
AC8R	.700

The residuals correlations were computed for both the 2-factor and the 1-factor solution. For the 2-factor solution none (0%) of the non-redundant residuals had absolute values greater than .05 thus suggesting that the rotated factor solution provided a very credible explanation for the observed inter-item correlation matrix. The 1-factor solution (still containing AC3), however, failed to provide a credible explanation in that 20 (95%) of the residual correlations were greater than .05.

Table 4.20***Item statistics for the reduced Affective Commitment scale***

	Cronbach's Alpha	Standardised Items	N of Items
	.830	.831	6

	Mean	Std. Deviation	N
AC1	4.56863	2.113464	255
AC2	4.18824	2.064858	255
AC5R	4.34510	2.011416	255
AC6R	4.44706	1.999050	255
AC7	4.68627	1.977135	255
AC8R	4.61961	1.990234	255

	AC1	AC2	AC5R	AC6R	AC7	AC8R
AC1	1.000	.512	.321	.398	.441	.339
AC2	.512	1.000	.342	.398	.475	.350
AC5R	.321	.342	1.000	.703	.382	.598
AC6R	.398	.398	.703	1.000	.437	.644
AC7	.441	.475	.382	.437	1.000	.420
AC8R	.339	.350	.598	.644	.420	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
AC1	22.28627	58.418	.529	.336	.818
AC2	22.66667	58.373	.550	.359	.814
AC5R	22.50980	56.897	.628	.533	.797
AC6R	22.40784	55.116	.703	.596	.782
AC7	22.16863	58.716	.573	.345	.809
AC8R	22.23529	57.086	.630	.476	.797

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.476	4.188	4.686	.498	1.119	.035	6

Item	4.107	3.909	4.467	.558	1.143	.046	6
Variiances							
Inter-Item	.451	.321	.703	.381	2.187	.013	6
Correlations							

4.4.5 Dimensionality Analysis: Normative Commitment scale

Items NC1, NC2, NC3R, NC5, and NC8R were found to be poor items in the item analysis and were subsequently not included in the dimensionality analysis of the *Normative Commitment* scale. The *Normative Commitment* scale was conceptualised as a unidimensional scale in this research study.

The correlation matrix indicated that the matrix was factor analysable in that all the correlations were greater than .3 and were all significant ($p < .05$). A KMO value of .655 was found, indicating that the *Normative Commitment* scale was factor analysable ($> .60$). Additionally, the Bartlett's Test of Sphericity indicated that H_0 could be rejected ($p < .05$) providing further evidence that the matrix was factor analysable.

The Guttman-Kaiser rule of thumb of eigenvalues-greater-than-one and the scree plot suggested that a single underlying factor explained the observed correlations between the items of the scale. The resultant factor structure is depicted in Table 4.21.

Table 4.21

Factor structure for the Normative Commitment scale

	Factor 1
NC4	.640
NC6	.558
NC7	.738

The factor matrix indicated that all the items satisfactorily loaded on one factor as all factor loadings were larger than .50. None(0%) of the non-redundant residuals obtained absolute values greater than .05 signifying that the rotated factor solution provides a very credible explanation for the observed inter-item correlation matrix.

4.4.6 Dimensionality Analysis: Job Satisfaction Questionnaire

The *Job Satisfaction* latent variable was conceptualised as a construct comprising of three correlated latent dimensions, namely *Intrinsic*, *Extrinsic*, and *General Satisfaction*. In the proposed Oehley – Herselman talent management competency model, *Job Satisfaction* was treated as a composite construct and does not differentiate the specific latent dimensions of the construct. To this end, exploratory factor analysis was performed on all the items comprising the MSQ-SF.

From the initial exploratory factor analysis, the correlation matrix indicated that not all correlations were significant ($p < .05$) and it was highlighted that not all the correlations were greater than .3. A KMO value of .892 was obtained providing evidence that *Job Satisfaction* questionnaire was factor analysable ($> .60$) and the Bartlett's Test of Sphericity indicated that H_0 could be rejected ($p < .05$) providing further evidence that the matrix was factor analysable.

The Guttman-Kaiser rule of thumb of eigenvalues-greater-than-one and the scree plot suggested that four underlying factors were required to explain the observed correlations between the items of the scale. The pattern matrix is depicted in Table 4.22.

Table 4.22

Factor structure for the Job Satisfaction questionnaire

	Factor			
	1	2	3	4
JS1	.494	-.174	.252	.041
JS2	.301	-.269	.248	.041
JS3	.526	-.098	.091	.154
JS4	.617	-.135	.052	.089
JS5	.006	.069	.091	.699
JS6	-.029	.040	-.032	.831
JS7	.415	-.106	-.038	.259
JS8	.590	.148	.155	-.052
JS9	.804	.148	-.037	.001
JS10	.837	.079	-.090	-.028
JS11	.756	.186	.040	-.059
JS12	.272	.626	-.116	.181
JS13	-.034	.618	.223	.074

JS14	.030	.707	.139	.032
JS15	.225	.275	.390	.084
JS16	.284	.242	.420	.073
JS17	-.025	.373	.378	.272
JS18	.035	.028	.631	.022
JS19	-.133	.115	.717	.147
JS20	.177	-.034	.680	-.012

It appears that six items load onto the first factor, three items load onto the second factor, three items load onto the third factor, two items load onto the fourth factor, and there is the presence of six cross loading items. No theoretically meaningful structure could be made out of the factor loadings of the four-factor structure.

In an attempt to establish how well the items of the *Job Satisfaction* questionnaire reflect the three underlying latent variables (*Intrinsic*, *Extrinsic* and *General Satisfaction*) exploratory factor analysis was subsequently repeated, by forcing the extraction of three factors. The resultant three-factor factor structure is shown in Table 4.23. Table 4.23 indicates all items have loadings greater .50 on the first factor except for items JS2, JS7, JS13, and JS14. Additionally, items JS2 and JS3 did not have loadings greater than .50 on both the second and third factors, whilst items JS13 and JS14 had loadings greater than .50 on the second factor.

The decision was taken to remove the aforementioned four items, as the research study was directed at *General Job Satisfaction* (i.e. factor 1), and the item analysis was performed on the reduced *Job Satisfaction* questionnaire. The results of the item analysis are depicted in Table 4.24.

Table 4.23

Factor matrix when forcing the extraction of three factors (Job Satisfaction)

	Factor		
	1	2	3
JS1	.564	-.335	.134
JS2	.357	-.308	.213
JS3	.575	-.296	.013
JS4	.558	-.390	-.015
JS5	.573	.179	.077
JS6	.516	.170	.047
JS7	.446	-.241	-.020
JS8	.645	-.178	-.104

JS9	.710	-.308	-.249
JS10	.646	-.389	-.252
JS11	.705	-.253	-.217
JS12	.543	.345	-.395
JS13	.476	.522	-.152
JS14	.472	.529	-.252
JS15	.678	.166	.052
JS16	.729	.115	.071
JS17	.635	.404	.068
JS18	.555	.104	.317
JS19	.610	.293	.375
JS20	.659	-.013	.335

The residuals correlations were computed for both the four-factor and the three-factor solution. For the four-factor solution only 20 (10%) of non-redundant residuals had absolute values greater than .05 thus suggesting that the rotated factor solution provides a very credible explanation for the observed inter-item correlation matrix. The three-factor solution, also provided credible explanation for the observed inter-item matrix in that 34 (17%) of the residual correlations were greater than .05.

Table 4.24

Item statistics for the reduced Job Satisfaction questionnaire

	Cronbach's Alpha Based on		
	Cronbach's Alpha	Standardised Items	N of Items
	.905	.906	16

	Mean	Std. Deviation	N
JS1	3.80784	.995233	255
JS3	3.71765	1.022716	255
JS4	3.79216	.992064	255
JS5	3.01961	1.192004	255
JS6	3.14902	1.164327	255
JS8	3.83137	.991597	255
JS9	4.00784	.963884	255
JS10	3.75686	.969872	255
JS11	3.77255	1.047697	255
JS12	2.74118	1.205169	255

JS15	3.11765	1.220673	255
JS16	3.15686	1.216238	255
JS17	2.66667	1.204759	255
JS18	3.18431	1.164327	255
JS19	2.79608	1.205950	255
JS20	3.24314	1.214942	255

	JS1	JS3	JS4	JS5	JS6	JS8	JS9	JS10	JS11	JS12	JS15	JS16	JS17	JS18	JS19	JS20
JS1	1.000	.469	.482	.249	.215	.410	.412	.416	.437	.149	.330	.402	.232	.272	.269	.407
JS3	.469	1.000	.590	.286	.313	.337	.418	.498	.473	.241	.326	.362	.236	.289	.256	.382
JS4	.482	.590	1.000	.270	.238	.344	.504	.520	.492	.182	.303	.344	.159	.275	.251	.320
JS5	.249	.286	.270	1.000	.619	.289	.329	.290	.287	.379	.407	.422	.495	.295	.449	.312
JS6	.215	.313	.238	.619	1.000	.247	.297	.207	.263	.331	.334	.325	.443	.264	.353	.303
JS8	.410	.337	.344	.289	.247	1.000	.673	.514	.516	.263	.420	.440	.342	.286	.307	.443
JS9	.412	.418	.504	.329	.297	.673	1.000	.663	.641	.368	.414	.442	.338	.304	.252	.432
JS10	.416	.498	.520	.290	.207	.514	.663	1.000	.639	.333	.307	.416	.261	.259	.230	.331
JS11	.437	.473	.492	.287	.263	.516	.641	.639	1.000	.399	.430	.473	.298	.341	.287	.449
JS12	.149	.241	.182	.379	.331	.263	.368	.333	.399	1.000	.350	.358	.442	.228	.305	.226
JS15	.330	.326	.303	.407	.334	.420	.414	.307	.430	.350	1.000	.719	.517	.397	.383	.448
JS16	.402	.362	.344	.422	.325	.440	.442	.416	.473	.358	.719	1.000	.530	.480	.457	.443
JS17	.232	.236	.159	.495	.443	.342	.338	.261	.298	.442	.517	.530	1.000	.426	.503	.389
JS18	.272	.289	.275	.295	.264	.286	.304	.259	.341	.228	.397	.480	.426	1.000	.546	.514
JS19	.269	.256	.251	.449	.353	.307	.252	.230	.287	.305	.383	.457	.503	.546	1.000	.628
JS20	.407	.382	.320	.312	.303	.443	.432	.331	.449	.226	.448	.443	.389	.514	.628	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
JS1	49.95294	118.730	.519	.378	.901
JS3	50.04314	117.671	.553	.464	.900
JS4	49.96863	118.605	.527	.492	.900
JS5	50.74118	115.153	.563	.500	.899
JS6	50.61176	117.160	.494	.436	.902
JS8	49.92941	117.239	.594	.516	.898
JS9	49.75294	116.297	.661	.655	.897
JS10	50.00392	117.579	.592	.577	.899
JS11	49.98824	115.138	.656	.571	.896
JS12	51.01961	117.303	.468	.329	.903
JS15	50.64314	112.915	.639	.578	.897
JS16	50.60392	111.618	.696	.623	.895
JS17	51.09412	114.227	.594	.494	.898
JS18	50.57647	116.064	.540	.408	.900
JS19	50.96471	114.593	.578	.561	.899
JS20	50.51765	113.306	.626	.556	.897

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.360	2.667	4.008	1.341	1.503	.198	16
Item Variances	1.244	.929	1.490	.561	1.604	.054	16
Inter-Item Correlations	.376	.149	.719	.571	4.836	.013	16

4.4.7 Dimensionality Analysis: Organisational Trust Inventory

The correlation matrix indicated that the matrix was factor analysable in that all the correlations were greater than .3 and all were significant ($p < .05$). A KMO value of .758 was found, indicating that the *Organisational Trust* inventory was factor analysable ($> .60$). Additionally, the Bartlett's Test of Sphericity indicated that H_0 could be rejected ($p < .05$) providing further evidence that the matrix was factor analysable.

The Guttman-Kaiser rule of thumb of eigenvalues-greater-than-one and the scree plot suggested that a single underlying factor explained the observed correlations between the

items of the scale. The resultant factor structure is depicted in Table 4.25. The *Organisational Trust* latent variable was conceptualised as a unidimensional construct in this research study.

Table 4.25

Factor structure for the Organisational Trust inventory

	Factor 1
OT1	.800
OT2	.864
OT3	.612
OT4	.790

The factor matrix indicated that all the items loaded on one factor satisfactorily as all factor loadings were larger than .50. Four (66%) of the non-redundant residuals obtained absolute values greater than .05 signifying that the single-factor solution failed to provide a credible explanation for the observed inter-item correlation matrix. The high percentage of large residual correlations suggests the presence of additional factors. To investigate this possibility SPSS was subsequently instructed to extract two factors and to rotate the solution to simple structure. The pattern matrix is depicted in Table 4.26.

Table 4.26

Rotated Factor matrix when forcing the extraction of two factors (Organisational Trust)

	Factor	
	1	2
OT1	.991	-.090
OT2	.660	.244
OT3	-.024	.802
OT4	.383	.481

The factor matrix of the two-factor solution indicated that items OT1 and OT2 loaded onto the first factor whilst, OT3 and OT4 loaded onto the second factor. OT1 and OT2 appear to measure employees' level of trust in the organisation and its representatives (i.e. supervisors); whilst OT3 and OT4 appears to measure trust in colleagues (including executives and supervisors). The two themes that emerged following the extraction of two factors do constitute meaningful facets of *Organisational Trust*.

The residuals correlations were computed for both the 2-factor and the 1-factor solution. For the two-factor solution none 5 (0%) of non-redundant residuals had absolute values greater than .05 thus suggesting that the rotated factor solution provided a very credible explanation for the observed inter-item correlation matrix. The 1-factor solution, however, failed to provide a credible explanation in that four (66%) of the residual correlations were greater than .05. However, The factor matrix (one-factor solution) indicated that all the items loaded onto a single factor satisfactorily as all factor loadings were larger than .50 (see Table 4.25).

4.4.8 Dimensionality Analysis: Intention to Quit Scale

The correlation matrix indicated that the matrix was factor analysable in that all the correlations were greater than .3 and all were significant ($p < .05$). A KMO value of .829 was found, indicating that the *Intention to Quit* scale was factor analysable ($> .60$). Additionally, the Bartlett's Test of Sphericity indicated that H_0 could be rejected ($p < .05$) providing further evidence that the matrix was factor analysable.

The Guttman-Kaiser rule of thumb of eigenvalues-greater-than-one and the scree plot suggested that a single underlying factor explained the observed correlations between the items of the scale. The resultant factor structure is depicted in Table 4.27. The *Intention to Quit* latent variable was conceptualised as a unidimensional construct in this research study.

Table 4.27

Factor structure for the Intention to Quit scale

	Factor 1
ITQ1	.892
ITQ2	.697
ITQ3	.938
ITQ4	.823

The factor matrix indicated that all the items loaded on one factor satisfactorily as all factor loadings were larger than .50. None (0%) of the non-redundant residuals obtained absolute values greater than .05 signifying that the rotated factor solution provided a very credible explanation for the observed inter-item correlation matrix.

4.4.9 Dimensionality Analysis: Displays a Talent Management Mindset Subscale

Items TMM2 and TMM4 were found to be poor items in the item analysis and were subsequently not included in the dimensionality analysis of the *Talent Management Mindset* subscale. The *Talent Management Mindset* subscale was conceptualised as a unidimensional scale in this research study.

The correlation matrix indicated that the matrix was factor analysable in that the correlations were greater than .3 and were all significant ($p < .05$). A KMO value of .5 was found, indicating that the *Talent Management Mindset* subscale was not factor analysable ($> .60$). This should be attributed to the small number of items that remained in the subscale after the item analysis. Factor analysing a 2×2 correlation matrix will necessarily result in a KMO of .5 since r^2_{12} necessarily has to be equal to pr^2_{12} since there are no other items to hold constant.

The Guttman-Kaiser rule of thumb of eigenvalues-greater-than-one and the scree plot suggested that a single underlying factor explained the observed correlations between the two items of the scale. The resultant factor structure is depicted in Table 4.28. The *Talent Management Mindset* latent variable was conceptualised as a unidimensional construct in this research study

Table 4.28

Factor structure for the Talent Management Mindset subscale

	Factor 1
TMM1	.833
TMM3	.833

The factor matrix indicated that the two items loaded on one factor satisfactorily as all factor loadings were larger than .50. None (0%) of the non-redundant residuals obtained absolute values greater than .05 signifying that the rotated factor solution provides a very credible explanation for the observed inter-item correlation matrix.

4.4.10 Dimensionality Analysis: Develops Others subscale

From the initial exploratory factor analysis, the correlation matrix indicated that all correlations were significant ($p < .05$), although it was highlighted that not all the correlations were greater than .3. A KMO value of .709 was obtained providing evidence that *Develops Others subscale* was factor analysable ($> .60$) and the Bartlett's Test of Sphericity indicated that H_0 could be rejected ($p < .05$) providing further evidence that the matrix was factor analysable.

The Guttman-Kaiser rule of thumb of eigenvalues-greater-than-one and the scree plot suggested that only one underlying factor was required to explain the observed correlations between the items of the scale. The resultant factor structure is depicted in Table 4.29. The *Develops Others* latent variable was conceptualised as a unidimensional construct in this research study. Table 4.29 indicates all items have loadings greater .50, except for item DO3. Item DO3 was initially highlighted as a poor item in the item analysis, although not removed from the scale, due to insufficient evidence to justify the decision. The results of the factor analysis, however, now provided the necessary evidence to justify the removal of item DO3. The results of the item analysis on the reduced *Develops Others* subscale are depicted in Table 4.30.

Table 4.29

Factor structure for the Develops Others subscale

	Factor 1
DO1	.908
DO2	.940
DO3	.413
DO4	.812
DO5	.844
DO6	.772

The residuals correlations for the 1-factor solution indicated that only 5 (33%) of non-redundant residuals had absolute values greater than .05 thus suggesting that the rotated factor solution provides a reasonably credible explanation for the observed inter-item correlation matrix.

Table 4.30***Item statistics for the reduced Develops Others subscale***

	Cronbach's Alpha	Standardised Items	Cronbach's Alpha Based on		N of Items
	.928	.931			5

	Mean	Std. Deviation	N	
DO1	4.24706	1.056356	255	
DO2	4.10588	.860647	255	
DO4	4.31373	.945153	255	
DO5	3.89412	1.053941	255	
DO6	3.36078	1.095459	255	

	DO1	DO2	DO4	DO5	DO6
DO1	1.000	.824	.837	.770	.586
DO2	.824	1.000	.733	.772	.811
DO4	.837	.733	1.000	.690	.632
DO5	.770	.772	.690	1.000	.654
DO6	.586	.811	.632	.654	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
DO1	15.67451	12.260	.844	.842	.904
DO2	15.81569	13.253	.897	.850	.899
DO4	15.60784	13.176	.808	.736	.912
DO5	16.02745	12.507	.805	.664	.912
DO6	16.56078	12.712	.730	.719	.928

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.984	3.361	4.314	.953	1.284	.147	5
Item Variances	1.012	.741	1.200	.459	1.620	.036	5
Inter-Item Correlations	.731	.586	.837	.251	1.428	.007	5

4.5 CONCLUSION DERIVED FROM ITEM AND DIMENSIONALITY ANALYSIS

Item analysis allowed for the identification and removal of items that failed to contribute to the internally consistent description of the latent variable as measured by a specific scale. The item statistics revealed the presence of various poor items, following the collection of additional information, highlighting these items as poor, nine items were moved across the ten scales. Through item analysis, it was revealed that nine of the ten scales displayed a Cronbach alpha reliability coefficient greater than the critical cut-off value of .80. The *Normative Commitment* scale however, displayed a disconcertingly low level of internal consistency. Table 4.31 provides a summary of the item analysis results.

Table 4.31

Summary of item analysis results (after EFA)

Scale	Mean of final scale	Std. Deviation of final scale	Cronbach's alpha of final scale	Number of items removed	Number of items retained in scale
Perceived Organisational Support	30.21	11.025	.861	0	8
Perceived Development Opportunities	12.58	3.784	.809	0	4
Felt Obligation	34.76	6.207	.837	1	6
Affective Commitment	26.85	8.944	.830	2	6
Normative Commitment	15.17	4.269	.679	5	3
Job Satisfaction	53.76	11.445	.905	4	16
Organisational Trust	14.23	5.275	.849	0	4
Intention to Quit	11.42	4.81	.902	0	4
Displays a Talent Management Mindset	9.05	1.324	.818	2	2
Develops Others	19.92	4.429	.928	1	5

Concerning the dimensionality analysis, for seven of the scales that were designed to reflect a unidimensional latent variable the assumption of unidimensionality was corroborated, whilst for two scales the unidimensionality assumption could not be corroborated. However, the two scales that were unable to satisfy the unidimensionality assumption were successfully forced onto a single factor solution. Additionally, six items were removed across the ten scales

because of inadequate loading (i.e. $< .5$) on the extracted single factor. The *Job Satisfaction* scale was designed to measure three underlying latent satisfaction dimensions (*Intrinsic*, *Extrinsic* and *General Satisfaction*). Initial exploratory factor analysis indicated four underlying factors. In an attempt to establish how well the items of the *Job Satisfaction* questionnaire reflect the three underlying latent variables exploratory factor analysis was subsequently repeated, by forcing the extraction of three factors. The results revealed that all items had loadings greater than $.5$ on the first factor except for items JS2, JS7, JS13, and JS14. Additionally, items JS2 and JS3 did not have loadings greater than $.50$ on both the second and third factors, whilst items JS13 and JS14 had loadings greater than $.50$ on the second factor. The decision was taken to remove the aforementioned four items, as the research study was directed at *General Job Satisfaction* (i.e. factor 1)

4.6 ITEM PARCELLING

The motivation underlying the decision to undertake an item parcelling exercise was described in paragraph 3.8.3.1 based on the various advantages associated with undertaking an item parcelling exercise. Only the items that remained in the scale after the item and dimensionality analyses were utilised in the calculation of indicator variables to represent each latent variable in the structural model.

4.7 DATA SCREENING PRIOR TO CONFIRMATORY FACTOR ANALYSIS AND THE FITTING OF THE OEHLEY-HERSELMAN TALENT MANAGEMENT COMPETENCY MODEL

Multivariate statistics in general and structural equation modelling in particular are based on a number of critical assumptions. Before proceeding with the main analyses it was necessary to examine the extent to which the data complies with these assumptions (Tabachnick & Fidell, 2007). One important assumption in structural equation modelling is that the indicator variable distribution follows a multivariate normal distribution. The solution found is tainted, if the observed variables are not normally distributed. Tabachnick and Fidell (2007) note that normality is comprised of two components namely; skewness and kurtosis. Skewness concerns the symmetry of the distribution, whilst kurtosis concerns the peakedness of the distribution.

The effect of non-normality was considered. The default method of estimation when fitting measurement and structural models to continuous data (maximum likelihood) assumes that the distribution of indicator variables follow a multivariate normal distribution (Mels, 2003). Failure to satisfy this assumption results in incorrect standard errors and chi-square estimates (Du Toit & Du Toit, 2001; Mels, 2003). The univariate and multivariate normality of the composite item parcels were investigated using PRELIS (Jöreskog & Söröbom, 1996b). The results of the tests of univariate and multivariate normality for the univariate and multivariate talent management competency model indicator variable distributions are depicted in Tables 4.32 and 4.33.

Table 4.32

Test of univariate normality for the talent management competency model indicator variables before normalisation

Variable	Skewness		Kurtosis		Skewness and Kurtosis	
	Z-Score	P-Value	Z-Score	P-Value	Chi-Square	P-Value
POS_1	0.065	0.948	-6.714	0.000	45.087	0.000
POS_2	0.794	0.427	-5.003	0.000	25.656	0.000
PDO_1	-1.856	0.063	-4.075	0.000	20.055	0.000
PDO_2	-2.780	0.005	-2.294	0.022	12.990	0.002
FO_1	-6.666	0.000	3.757	0.000	58.550	0.000
FO_2	-8.059	0.000	4.993	0.000	89.884	0.000
AC_1	-3.450	0.001	-1.556	0.120	14.324	0.001
AC_2	-2.328	0.020	-3.592	0.000	18.318	0.000
NC_1	-4.421	0.000	-3.439	0.001	31.369	0.000
NC_2	-4.907	0.000	0.147	0.883	24.100	0.000
JS_1	-2.674	0.008	-0.530	0.596	7.429	0.024
JS_2	-8.914	0.004	-0.643	0.520	8.906	0.012
OT_1	-0.442	0.658	-1.464	0.143	2.340	0.310
OT_2	0.352	0.725	-3.957	0.000	15.779	0.000
ITQ_1	0.574	0.566	-6.002	0.000	36.351	0.000
ITQ_2	1.083	0.279	-5.831	0.000	35.174	0.000
TMM_1	-0.568	0.576	-0.633	0.527	0.723	0.697
TMM_2	-6.618	0.000	-0.157	0.875	43.821	0.000
DO_1	-5.506	0.000	-1.194	0.232	31.742	0.000
DO_2	-2.901	0.004	-12.816	0.000	172.663	0.000

Table 4.33

Test of multivariate normality for the talent management competency model indicator variable distributions before normalisation

Skewness			Kurtosis			Skewness and Kurtosis	
Value	Z-Score	P-Value	Value	Z-Score	P-Value	Chi-Square	P-Value
75.896	19.761	0.000	523.364	8.067	0.000	455.556	0.000

Table 4.32 indicates that eighteen of the twenty indicator variables failed the test of univariate normality ($p < .05$). Additionally, Table 4.33 indicates that the null hypothesis that the data follows a multivariate normal distribution also had to be rejected ($\chi^2 = 455.556$; $p < .05$). Consequently, the indicator variable distribution was normalised through PRELIS (Jöreskog & Sörbom, 1996b). The results of the test for univariate normality on the normalised talent management competency model indicator variable distributions are presented in Table 4.34 and the results of the test for multivariate normality for the talent management competency model indicator variable distributions are presented in Table 4.35.

Table 4.34

Test of univariate normality for the talent management competency models indicator variables after normalisation

Variable	Skewness		Kurtosis		Skewness and Kurtosis	
	Z-Score	P-Value	Z-Score	P-Value	Chi-Square	P-Value
POS_1	0.063	0.950	-0.271	0.787	0.077	0.962
POS_2	0.138	0.890	-0.426	0.670	0.201	0.905
PDO_1	0.080	0.936	-1.055	0.291	1.120	0.571
PDO_2	-0.253	0.800	-0.752	0.452	0.629	0.730
FO_1	-1.167	0.243	-1.335	0.182	3.146	0.207
FO_2	-1.432	0.152	-1.851	0.064	5.477	0.065
AC_1	-0.076	0.939	-0.822	0.411	0.681	0.711
AC_2	-0.101	0.920	-1.055	0.292	1.122	0.571
NC_1	-1.155	0.248	-2.855	0.004	9.486	0.009
NC_2	-0.803	0.422	-1.254	0.210	2.218	0.330
JS_1	-0.080	0.936	-0.078	0.938	0.013	0.994
JS_2	-0.061	0.951	-0.006	0.995	0.004	0.998
OT_1	-0.238	0.812	-0.591	0.555	0.406	0.816
OT_2	0.454	0.650	-0.994	0.320	1.194	0.550

ITQ_1	0.927	0.354	-3.071	0.002	10.291	0.006
ITQ_2	0.198	0.843	-3.144	0.002	9.921	0.007
TMM_1	-0.221	0.825	-0.034	0.973	0.050	0.975
TMM_2	-5.927	0.000	-2.682	0.007	42.320	0.000
DO_1	-1.666	0.096	-1.210	0.000	41.339	0.000
DO_2	-0.798	0.425	-2.658	0.008	7.703	0.021

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

Table 4.35

Test of multivariate normality for the talent management competency model indicator variable distribution after normalisation

Skewness		Kurtosis			Skewness and Kurtosis		
Value	Z-Score	P-Value	Value	Z-Score	P-Value	Chi-Square	P-Value
70.453	17.089	0.000	515.090	6.926	0.000	340.018	0.000

Table 4.34 indicates that the normalisation procedure succeeded in rectifying the univariate normality problem ($p > .05$) of all the indicator variables, except six variables (NC_1, ITQ_1, ITQ_2, TMM_2, DO_1 and DO_2). The attempt to normalise the data succeeded in reducing the chi-square statistic (from 455.566 to 340.018) which indicates that the deviation of the observed indicator variable distribution from the theoretical multivariate normal distribution was reduced. However, as is evident from Table 4.35 despite the attempt to normalise the data the null hypothesis that the data follows a multivariate normal distribution still had to be rejected ($p < .05$).

Maximum likelihood (ML) is the default estimation method when fitting measurement and structural models to continuous data. It however requires that the data follow a multivariate normal distribution (Mels, 2003). As attempts to normalise the data did not have the desired effect alternative and more appropriate parameter estimation methods were considered. Following Mels' (2003) recommendation, the robust maximum likelihood (RML) estimation method was utilised. Through employing the robust maximum likelihood estimation method the calculation of the asymptotic covariance matrices through PRELIS was required (Mels, 2003). As attempts to normalise the data had the effect of reducing the chi-square statistic (from 455.566 to 340.018), indicative of reducing the deviation of the observed indicator

distribution from the theoretical multivariate normal distribution the normalised data set was utilised in subsequent analyses.

4.8 EVALUATING THE FIT OF THE MEASUREMENT MODEL THROUGH CONFIRMATORY FACTOR ANALYSIS IN LISREL

When CFA is performed, the hypothesised measurement model is fitted by finding model parameter estimates that allows the estimation of a fitted/reproduced covariance matrix that would subsequently be compared to the observed covariance matrix (Schreiber et al., 2006). The ideal is to establish that the estimated covariance matrix and the observed covariance matrix coincide (i.e. the hypothesised measurement model provides an exact description of the process that produced the observed covariance matrix).

The fit of the proposed Oehley – Herselman talent management competency model measurement model will be discussed next. The measurement model reflects the hypothesised relationships between the latent variables included in the Oehley – Herselman talent management competency measurement model and the item parcels that were formed to operationalise the latent variables. A decision will follow concerning the credibility of the measurement model parameter estimates of the fitted model. A graphical representation of the fitted Oehley - Herselman talent management competency measurement model is provided in Figure 4.1 and the overall goodness-of-fit statistics as presented in Table 4.36.

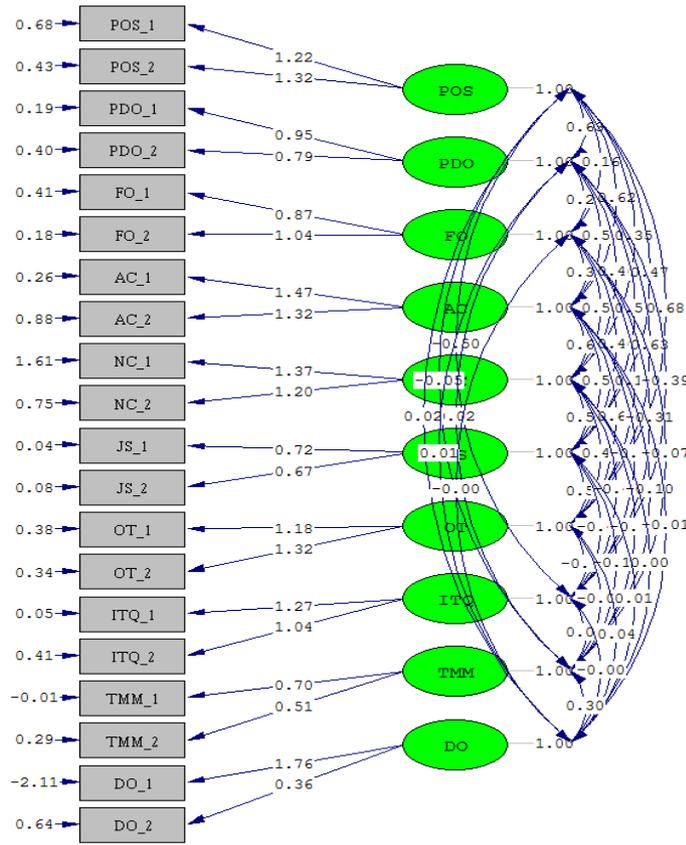


Figure 4.1. Graphical representation of the fitted Oehley-Herselman talent management competency measurement model

Table 4.36

Goodness of fit statistics for the Oehley-Herselman talent management competency measurement model

Degrees of Freedom = 125
Minimum Fit Function Chi-Square = 160.216 (P = 0.0184)
Normal Theory Weighted Least Squares Chi-Square = 151.087 (P = 0.0560)
Satorra-Bentler Scaled Chi-Square = 145.967 (P = 0.0968)
Chi-Square Corrected for Non-Normality = 299.318 (P = 0.00)
Estimated Non-centrality Parameter (NCP) = 20.967
90 Percent Confidence Interval for NCP = (0.0 ; 55.199)
Minimum Fit Function Value = 0.631
Population Discrepancy Function Value (F0) = 0.0825
90 Percent Confidence Interval for F0 = (0.0 ; 0.217)
Root Mean Square Error of Approximation (RMSEA) = 0.0257
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.0417)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.996
Expected Cross-Validation Index (ECVI) = 1.244
90 Percent Confidence Interval for ECVI = (1.161 ; 1.379)

ECVI for Saturated Model = 1.654
ECVI for Independence Model = 23.968
Chi-Square for Independence Model with 190 Degrees of Freedom = 6047.896
Independence AIC = 6087.896
Model AIC = 315.967
Saturated AIC = 420.000
Independence CAIC = 6178.721
Model CAIC = 701.974
Saturated CAIC = 1373.665
Normed Fit Index (NFI) = 0.976
Non-Normed Fit Index (NNFI) = 0.995
Parsimony Normed Fit Index (PNFI) = 0.642
Comparative Fit Index (CFI) = 0.996
Incremental Fit Index (IFI) = 0.996
Relative Fit Index (RFI) = 0.963
Critical N (CN) = 287.588
Root Mean Square Residual (RMR) = 0.0567
Standardised RMR = 0.0488
Goodness of Fit Index (GFI) = 0.944
Adjusted Goodness of Fit Index (AGFI) = 0.906
Parsimony Goodness of Fit Index (PGFI) = 0.562

4.8.1 Measurement Model Fit Indices

The Satorra-Bentler Scaled χ^2 returned a value of 145.967, with a p-value of .0968. The p-value associated with the χ^2 denotes an insignificant test statistics ($p > .05$). Consequently, the null hypothesis of exact measurement model fit (H_{020a} : RMSEA = 0) was not rejected. This means that it is a permissible position to hold that the hypothesised measurement model provides an exact description of the process that produced the observed covariance matrix. The measurement model parameter estimates allowed the observed covariance matrix to be reproduced in the sample to a degree of accuracy can be accounted for by sampling error only. The root mean error of approximation (RMSEA) concerns the discrepancy between Σ and $\Sigma(\Theta)$ taking into account the degrees of freedom of the model (i.e. it takes model complexity into account) (Diamantopoulos & Siguaw, 2000). Diamantopoulos and Siguaw, (2000) further note that the RMSEA is commonly regarded as one of the most informative indices. RMSEA values lower than .05 suggest good fit, values above .05 but less than .08 suggest reasonable, whilst values greater than or equal to .08 but less than .10 suggest mediocre fit and values exceeding .10 suggest poor fit (Diamantopoulos & Siguaw, 2000). The RMSEA value of .0257 suggests that the measurement model displays good model fit in

the sample. Additionally, the upper bound of the confidence interval falls below the critical cut off value of .05 providing evidence not to reject the null hypothesis of close fit. The p-value for close fit ($H_{020b}: RMSEA \leq .05$) was .996. Consequently, the close fit null hypothesis was not rejected ($p > .05$) proving support for the fact that the measurement model shows good fit.

Whilst, RMSEA focuses on error due to approximation, the expected cross-validation index (ECVI) focuses on overall error (Diamantopoulos & Siguaw, 2000). Essentially, it concerns the discrepancy between the population covariance matrix and the model fitted to the sample. The ECVI provides valuable insight into a model's overall fit. In order to assess the ECVI of a model it is necessary to compare it to alternative models namely; the independence model and the saturated model. A small ECVI value indicates good fit. The model ECVI (1.244) is smaller than the values obtained from both the independence model (23.968) and saturated model (1.654). Thus, the fitted model appears to have a higher probability of being replicated in a cross-validation sample as opposed to the saturated and independence models.

The goodness-of-fit index (GFI) provides an indication of the relevant amount of variance and covariance accounted for in the proposed model, consequently providing an indication of how closely the proposed model comes to perfectly replicating the observed covariance matrix (Diamantopoulos & Siguaw, 2000). Values for GFI range from 0 to 1, where values greater than .9 are indicative of acceptable fit. The GFI value (.944) is indicative of good model fit. The adjusted-goodness-of-fit index (AGFI) is essentially the GFI adjusted for the degrees of freedom in the model (Diamantopoulos & Siguaw, 2000). Similarly, the AGFI values range between 0 and 1, with values greater than .9 indicative of acceptable fit, with the AGFI value (.906) suggesting good model fit.

The parsimonious fit indices take into account that model fit can always be improved through specifying additional paths to the model and estimating additional parameters to the point that perfect model fit is achieved in the form of a saturated or just-identified model with no degrees of freedom (Kelloway, 1998). Various indices have been developed to account for the degree of parsimony in a model. The Parsimonious Normed Fit Index (PNFI) is based on the Normed Fit Index (NFI) adjusted for degrees of freedom whilst the Parsimonious Goodness-of-Fit Index (PGFI), is also adjusted from loss of degrees of freedom but is based

on the Goodness-of-Fit Index (GFI) (Mulaik, James, Van Alstine, Bennet, & Stilwell, 1989). Values for both the PNFI (.642) and the PGFI (.562) can range from 0 to 1, while Kelloway (1998) notes that no standard for how high values need to be to be indicative of parsimonious fit. Similarly, Mulaik et al. (1989) note that because no threshold levels have been recommended for these indices, it is advised that parsimony fit indices be utilised in conjunction with other goodness-of-fit indices.

The Akaike Information Criterion (AIC) and Consistent Version of Akaike Information Criterion (CAIC) which is adjusted for sample size effects (Diamantopoulos & Siguaw, 2000) are a second form of parsimony fit measurers and are known as information criteria. The AIC and CAIC models need to be compared to the independence and saturated models, as was the case with EVCI. The model AIC (315.967) is smaller than the values obtained from both the independence model (6087.896) and saturated model (420.0). Additionally, the model CAIC (701.974) also had values lower than the CAIC independence model (6178.721) and CAIC saturated model (1373.665). Thus, the more parsimonious fitted model appears to have a higher probability of being replicated in a cross-validation sample as opposed to the saturated and independence models.

Root Mean Square Residual (RMR) and Standardised Root Mean Residual (SRMR) are the square root difference between the elements of the observed covariance matrix and the estimated covariance model. A RMR value of equal to zero is indicative of perfect model fit, and increasingly higher values are indicative of poor fit (Kline, 2010). An issue with the RMR concerns the fact that it is computed with unstandardised variables, where the range is dependent on the scales of the observed variables. Due to this study employing 5-point, 6-point, and 7-point Likert type scales, the RMR value (.0567) is difficult to interpret. The SRMR is based on transforming both the observed covariance matrix and estimated covariance matrix into correlation matrices, thus SRMR is a measure of mean absolute correlation residual, the overall difference between the observed and estimated correlations (Kline, 2010). Low SRMR values are indicative of good fit whilst higher values are indicative of poor fit. The SRMR value (.0488) is suggestive of good model fit.

The fit indices presented below concern comparative model fit. Essentially, comparative fit concerns the extent to which the Oehley – Herselman talent management competency model, is better than a baseline model, typically the independence or null model (Kline, 2010). The

comparative fit indices include the Normed Fit Index (NFI = .976), the Non-Normed Fit Index (NNFI = .995), the Comparative Fit Index (CFI = .996), the Incremental Fit Index (IFI = .996), and the Relative Fit Index (RFI = .963). All the afore presented comparative indices range from 0 to 1, with the exception of NNFI which could return values in excess of 1, with values close to 1 (or at least greater than .9) indicative of good fit. All the comparative fit indices presented above are above .9, consequently suggesting good model fit. The critical N (CN) statistic provides an indication of the size that a sample needs to be in order to accept the fit of the model on a statistical basis (Diamantopoulos & Siguaw, 2000). The authors suggest that CN value in excess of 200 is indicative that the model is an adequate representation of the data. The CN value (287.588) would consequently suggest that the measurement model provides a satisfactory representation of the data.

4.8.2 Interpretation of the Measurement Model Parameter Estimates

The fact that the measurement model showed close fit warrants the inspection of the parameter estimates obtained for the freed measurement model parameters. Through the investigation of the measurement model, the focus is directed at the relationships between the latent variable and the indicator variables they are meant to represent. Essentially, if a measure X_i is designed to provide a valid reflection of a specific latent variable ξ_i , then the slope of the regression of X_i on ξ_i in the fitted measurement model needs to be statistically significant and substantial (Diamantopoulos & Siguaw, 2000).

The unstandardised factor loading matrix containing Λ_X containing the unstandardised λ_{ij} estimates is presented in Table 4.37. The unstandardised Λ_X matrix provides an indication of the average change expressed in the original scale units in the manifest variable associated with one unit change in the latent variable. The loadings of the manifest variables on the latent variable are significant ($p < .05$) if the t-values are in excess of $|1.96|$. Loadings that are significant, comment favourably on the validity of the indicator variables (Diamantopoulos & Siguaw, 2000).

Table 4.37***Unstandardised Λ_x matrix***

	POS	PDO	FO	AC	NC	JS	OT	ITQ	TMM	DO
POS_1	1.224 (0.083) 14.683									
POS_2	1.321 (0.081) 16.273									
PDO_1		0.9477 (0.058) 16.382								
PDO_2		0.790 (0.055) 14.371								
FO_1			0.873 (0.067) 13.011							
FO_2			1.040 (0.061) 16.946							
AC_1				1.474 (0.074) 19.816						
AC_2				1.317 (0.093) 14.209						
NC_1					1.369 (0.107) 12.789					
NC_2					1.202 (0.085) 14.171					
JS_1						0.718 (0.035) 20.321				
JS_2						0.666 (0.035) 18.894				
OT_1							1.18 (0.070) 16.795			
OT_2							1.319 (0.067) 19.581			
ITQ_1								1.268 (0.053) 23.778		
ITQ_2								1.039 (0.058) 17.776		
TMM_1									0.700 (0.028) 25.443	
TMM_2									0.514 (0.039) 13.284	

DO_1	1.758 (0.456) 3.857 0.357
DO_2	(0.092) 3.883

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others, TMM = Talent Management Mindset

It can be deduced from Table 4.37, all factor loadings in the Λ_X matrix are significant with t-values greater than |1.96|. Diamantopoulos and Siguaw (2000) caution that an issue with relying on the unstandardised loadings and associated t-values is that it could become challenging to compare the validity of different indicators measuring the same construct. The authors advise to inspect that the magnitudes of the standardised loadings. The completely standardised factor loading matrix is presented in Table 4.38. The values presented in Table 4.38 may be interpreted as the regression slopes of the regression of the standardised indicator variable on the standardised latent variable. The completely standardised factor loadings consequently specify the average change expressed in standard deviation units in the indicator variable associated with one standard deviation change in the latent variable. The square of the completely standardised factor loadings indicates the proportion of indicator variance that is explained in terms of the latent variable it is meant to express (Diamantopoulos & Siguaw, 2000). In terms of Hair et al's (2007) recommendation, factor loadings that exceed .71 were considered satisfactory large in that approximately 50.41% of the variance in the indicator variable is accounted for by the latent variable they are assigned to represent. As can be seen from Table 4.38 all factor loadings were in excess of .71, with the exception of TMM_2 on TMM and DO_2 on DO, which may to some extent be regarded as problematic. Especially the DO_2 item parcel raises serious concern. At the same time, however, the inadmissible completely standardised factor loadings that were obtained from TMM_1 and DO_1 erode confidence in the measurement model. Given that each item parcel only reflects a single latent variable (i.e., the regression of X_i on ξ_i is described by a simple linear regression model) the slope of the regression equation reduces to the correlation between X_i and ξ_i when the indicator and latent variables are both standardised. Values of a zero-order correlation can logically not exceed unity.

Table 4.38***Completely standardised Λ_X matrix***

	POS	PDO	FO	AC	NC	JS	OT	ITQ	TMM	DO
POS_1	0.829									
POS_2	0.896									
PDO_1		0.908								
PDO_2		0.782								
FO_1			0.808							
FO_2			0.926							
AC_1				0.945						
AC_2				0.815						
NC_1					0.733					
NC_2					0.815					
JS_1						0.966				
JS_2						0.921				
OT_1							0.887			
OT_2							0.915			
ITQ_1								0.985		
ITQ_2								0.851		
TMM_1									1.011	
TMM_2									0.689	
DO_1										1.771
DO_2										0.408

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others, TMM = Talent Management Mindset

The validity of the indicator variables is investigated through inspection of the square multiple correlations (R^2) for each indicator variable. The R^2 estimates may simultaneously be interpreted as lower bound estimates¹¹ of the reliability coefficients for the item parcels. The R^2 estimate reveals the amount of variance in the indicator variable that is accounted for by the latent variable designated to it in the measurement model. High R^2 estimates are desirable in that they reveal that the indicators assigned to a specific latent variable are highly reliable. Variance that is unaccounted for by the R^2 may be attributed to systematic and random measurement error (Diamantopoulos & Siguaw, 2000). Table 4.39 presents the R^2 results. As can be seen from Table 4.39 TMM_2 and DO_2 report validity coefficients lower than .50 suggesting that a significant amount of item parcel variance is attributable to measurement error. At the same time, however, the inadmissible R^2 values that were obtained for TMM_1

¹¹ If all the measurement error was random error R^2 would provide an estimate of the reliability coefficient. If the indicator variable was to some degree also plagued by systematic measurement error the reliability coefficient would be higher than R^2 .

and DO_1 again erode confidence in the measurement model. R^2 logically cannot exceed unity.

Table 4.39

Squared multiple correlation for item parcels

POS_1	POS_2	PDO_1	PDO_2	FO_1	FO_2	AC_1	AC_2	NC_1	NC_2
0.687	0.803	0.825	0.612	0.652	0.652	0.894	0.664	0.538	0.657
JS_1	JS_2	OT_1	OT_2	ITQ_1	ITQ_2	TMM_1	TMM_2	DO_1	DO_2
0.933	0.849	0.788	0.838	0.97	0.724	1.023	0.475	3.138	0.167

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others, TMM = Talent Management Mindset

The unstandardised Θ_{δ} matrix provides an indication of the statistical significance of the variance in the measurement error terms for the exogenous variables (in the fitted measurement model all the latent variables in the Oehley – Herselman talent management competency model were regarded as exogenous latent variables). The completely standardised Θ_{δ} matrix reflects the proportion of variance in the indicator variable attributable to (random and systematic) measurement error. The completely standardised Θ_{δ} matrix therefore reflects the proportion of indicator variable variance that cannot be accounted for in terms of the latent variable. Table 4.40 presents the completely standardised Θ_{δ} matrix, where TMM_2 and DO_2 are highlighted as problematic indicator variables of their designated latent variables, as more variance were accounted for by measurement error as opposed to the latent variables these indicators were designated to represent. Again, the inadmissible error variance values that were obtained for the TMM_1 and DO_1 erode confidence in the measurement model. Variance terms logically cannot be negative.

Table 4.40

Completely standardised theta-delta matrix

POS_1	POS_2	PDO_1	PDO_2	FO_1	FO_2	AC_1	AC_2	NC_1	NC_2
0.313	0.197	0.175	0.388	0.348	0.142	0.106	0.336	0.462	0.343
JS_1	JS_2	OT_1	OT_2	ITQ_1	ITQ_2	TMM_1	TMM_2	DO_1	DO_2
0.067	0.151	0.212	0.162	0.030	0.276	-0.023	0.525	-2.138	0.833

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others, TMM = Talent Management Mindset

Additionally, Diamantopoulos and Siguaw (2000) recommend the calculation of a composite reliability value for each latent variable. To this end, information concerning the indicator loadings and error variances from the completely standardised solution were utilised (Tables 4.39 and 4.40). The composite reliability value describes the reliability with which the indicator variables of a latent variable measure the specific construct. The following formula was employed to calculate the composite reliability values (Diamantopoulos & Siguaw, 2000, p.90):

$$\rho_c = (\sum\lambda)^2 / [(\sum\lambda)^2 + \sum(\theta)] \dots\dots\dots (12)$$

Where ρ_c = composite reliability

λ = indicator loading

θ = indicator error variances (i.e. variances of the δ 's or ϵ 's)

\sum = summation over the indicators of the latent variable

A value of at least .6 on ρ_c is considered satisfactory (Diamantopoulos & Siguaw, 2000). The composite reliability values for the composite indicators designated to the latent variables are depicted in Table 4.41

Table 4.41
Composite Reliability Values for Composite Indicators

Latent Variable	Composite Reliability Value
Perceived Organisational Support	.854
Perceived Development Opportunities	.835
Felt Obligation	.86
Affective Commitment	.875
Normative Commitment	.748
Job Satisfaction	.942
Organisational Trust	.897
Intention to Quit	.935
Displays a Talent Management Mindset	.852
Develops Others	1.379

As can be seen in Table 4.41 all the composite reliability values calculated for the composite indicator variables exceed the composite reliability benchmark value of .6. The inadmissible value obtained for the *Develops Other* latent variable erodes confidence in the operationalisation of this latent variable. Logically a reliability coefficient cannot exceed unity. The problem with the inadmissible value of the composite reliability coefficient calculated for the composite indicator variables of the *Develops Others* latent variable stems from the inadmissible completely standardised factor loading and error variance estimates obtained for the item parcels. Thus with the exception of DO_1 and DO_2 all composite indicator variables provide a reliable measurement of the latent variables they were designated to represent.

A further measure, complementary to the composite reliability, is the average variance extracted (ρ_v). The ρ_v indicates the proportion of variance in the indicator variables representing a specific latent variable that is explained by the latent variable rather than by measurement error. The following formula was employed to calculate the average variance extracted (Diamantopoulos & Siguaw, 2000, p. 91).

$$\rho_v = (\Sigma\lambda^2)/[\Sigma\lambda^2 + \Sigma(\theta)] \dots\dots\dots(13)$$

Where δ , ε and Σ where defined in equation (12)

A value of at least .5 on ρ_v is considered satisfactory (Diamantopoulos & Siguaw, 2000), in that values less than .5 indicate that the measurement error accounts for a greater portion of the variance in the indicators than does the underlying latent variable (Diamantopoulos & Siguaw, 2000). The average variance extracted values for the composite indicators designated to the latent variables is depicted in Table 4.42.

Table 4.42

Average variance extracted for composite indicators

Latent Variable	Composite Reliability Value
Perceived Organisational Support	.745
Perceived Development Opportunities	.718
Felt Obligation	.755

Affective Commitment	.779
Normative Commitment	.598
Job Satisfaction	.891
Organisational Trust	.813
Intention to Quit	.847
Displays a Talent Management Mindset	.749
Develops Others	1.653

As can be seen in Table 4.42 all the ρ_v values exceed the benchmark value of .5. Thus, a greater proportion of variance in the indicator variable is explained by the latent variable rather than by measurement error. The inadmissible value obtained for the *Develops Others* latent variable yet again erodes confidence in the operationalisation of this latent variable.

4.8.3 Examination of Measurement Model Residuals

The magnitude and distributions of the standardised residuals was investigated and a summary is presented in Table 4.43. Standardised residuals are interpreted as z-scores (i.e. in terms of standard deviation units from the mean). Standardised residuals are considered large if they exceed +/- 2.58 (Diamantopoulos & Sigauw, 2000). Residuals ought to be distributed symmetrically around zero. A large positive residual indicates that the model underestimates the covariance between two variables, while a large negative residual indicates that the model overestimates the covariance between variables. If the model generally underestimates covariance terms, it indicates that additional explanatory paths ought to be added to the model, which could better account for the covariance between the variables. Consequently, if the model tends to overestimate the covariance between indicator variables paths that are associated with the particular covariance terms ought to be removed from the model (Jöreskog & Sörbom, 1993).

Table 4.43

Summary of standardised residuals

Smallest Standardised Residual	-1.995
Median	0
Largest Standardised Residual	26.431

Largest positive standardised residuals		
Residual for	OT_1 and PDO_1	26.431
Residual for	JS_1 and FO_2	9.706
Residual for	ITQ_2 and POS_2	9.202
Residual for	DO_2 and FO_1	4.157
Residual for	DO_2 and FO_2	3.756
Residual for	DO_1 and FO_2	3.360
Residual for	DO_1 and FO_1	3.065
Residual for	TMM_1 and AC_2	2.769
Residual for	NC_2 and PDO_2	2.701
Residual for	TMM_2 and OT_2	2.586

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others, TMM = Talent Management Mindset

Table 4.43 indicates that ten standardised residuals were greater than 2.58, with no standardised residuals less than -2.58. The fact that only ten residuals were above the critical cut-off of 2.58 commented favourably on the fit of the model. Considering that, only 4.76% (10/210) of all the variance-covariance estimates that were derived from the measurement model parameters can be regarded as poor estimates. A stem-leaf plot is depicted in Figure 4.2, which provides a graphical representation of the standardised residual distributions. As is evident from the stem-leaf plot, the median of the distribution is zero, with a positively skewed distribution implying that there is a strong tendency for the model to underestimate the observed covariance terms.

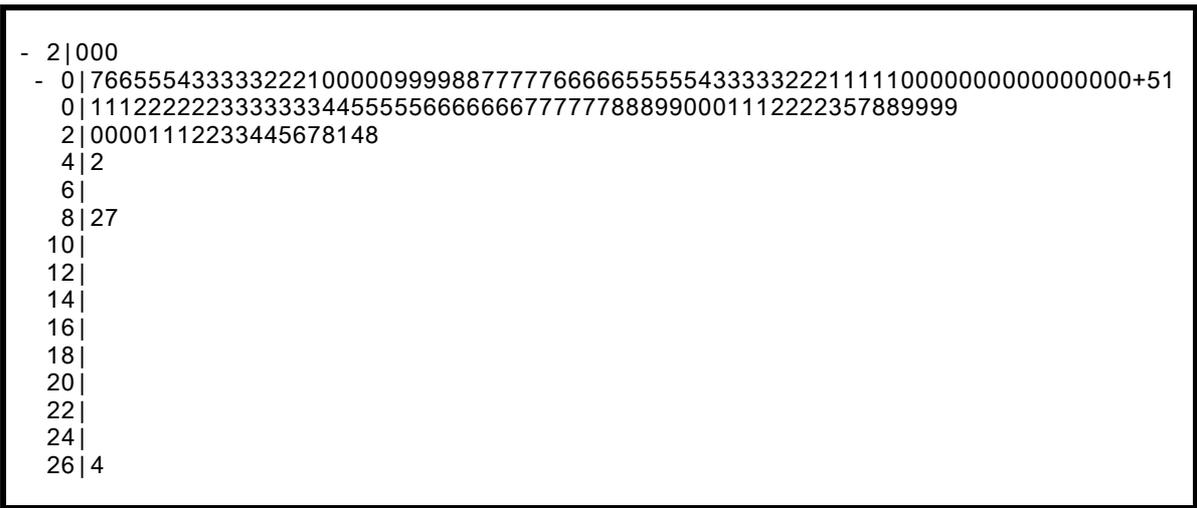


Figure 4.2. Stem-and-leaf plot of the standardised residuals

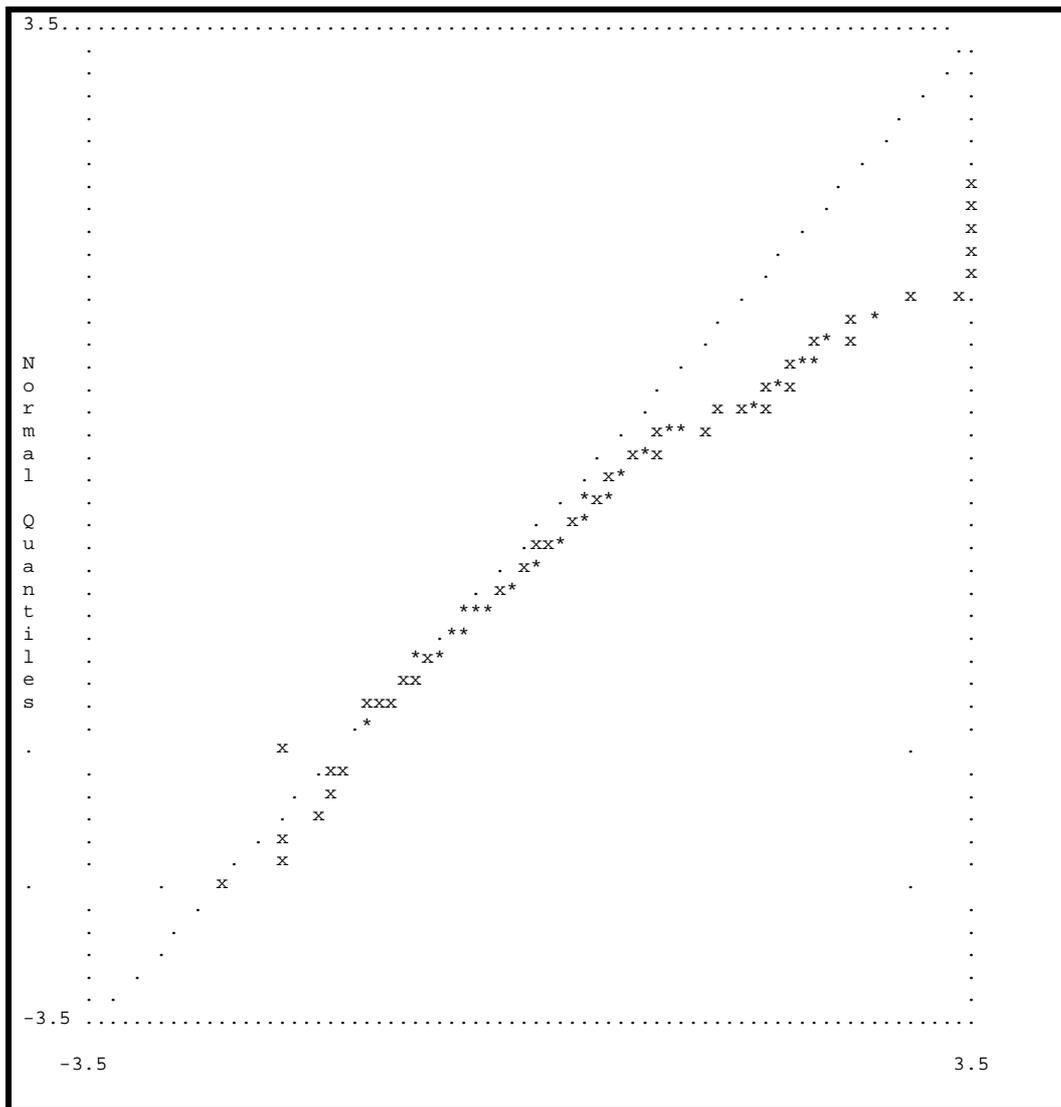


Figure 4.3. Q-plot of standardised residuals

A Q-plot is depicted in Figure 4.3 and provides a further graphical representation of the distribution of the standardised residuals. The Q-plot plots the standardised residuals (horizontal axis) against the quartiles of the normal distribution (Diamantopoulos & Sigauw, 2000). Good model fit would be indicated when the standardised residuals fall on the 45 degrees diagonal line, whereas standardised residuals deviating from the 45 degrees diagonal line would be indicative of worse model fit. As seen in Figure 4.3, some standardised residuals tend to deviate from the 45 degrees diagonal line. This corroborates earlier findings that the model tends to underestimate the observed covariance terms.

4.8.4 Measurement Model Modification Indices

Modification indices reveal the degree to which the χ^2 fit-statistic will decrease if an existing fixed parameter in the model is set free and the model re-examined (Jöreskog & Sörbom, 1996). Modification index (MI) values greater than 6.6349 would be indicative of parameters that, if set free, would improve the fit of the model significantly ($p < .01$) (Diamantopoulos & Siguaw, 2000; Jöreskog & Sörbom, 1993). Parameters ought to only be set free based on MI values if substantive theoretical evidence justifies the decision. The modification indices calculated for the Λ_X and Θ_δ are presented in Tables 4.44 and 4.45 respectively. The modification indices calculated for the Λ_X and Θ_δ were, however, not so much be investigated from the perspective of model modification than from the perspective of further evaluation of the measurement model fit. To the extent that a small percentage of large, statistically significant modification index values would be obtained for Λ_X and Θ_δ it would comment favourable on the fit of the model.

It is apparent from the MI values calculated for the Λ_X matrix (see Table 4.44) that OT_1 and POS_1 loaded onto PDO, POS_1 loaded onto AC, DO_2 loaded onto FO, TMM_1 loaded onto NC and OT. Consequently, this would suggest that if these afore mentioned six paths would be set free, model fit would significantly improve. However, considering that only six of a possible 174 currently fixed paths would result in a statistically significant improvement in model fit (3.45%) comments very favourably on the fit of the model.

Table 4.44

Modification index values calculated for the Λ_X matrix

	POS	PDO	FO	AC	NC	JS	OT	ITQ	TMM	DO
POS_1	--	28.126	0.222	14.220	0.118	0.504	--	1.798	0.947	0.637
POS_2	--	--	0.277	--	0.207	3.451	--	2.361	0.948	0.603
PDO_1	2.765	--	3.509	1.057	4.722	4.302	0.000	0.702	0.471	0.957
PDO_2	2.309	--	3.250	0.830	4.638	3.341	0.000	0.695	0.527	1.115
FO_1	1.648	0.723	--	0.239	0.213	1.094	0.108	0.410	0.606	0.480
FO_2	1.645	0.684	--	0.237	0.158	1.194	0.111	0.408	0.600	0.511
AC_1	0.040	0.031	3.409	--	0.001	--	5.306	0.353	5.287	0.018
AC_2	0.039	0.031	2.786	--	0.001	2.458	2.669	1.652	5.869	0.015
NC_1	0.487	0.538	0.142	1.831	--	0.029	2.441	0.247	0.910	3.857
NC_2	0.470	0.512	0.181	1.409	--	0.27	1.821	0.185	0.838	4.095
JS_1	0.024	0.003	0.055	2.749	0.028	--	0.863	0.085	0.564	0.086
JS_2	0.025	0.003	0.053	1.969	0.027	--	0.852	0.072	0.589	0.088

OT_1	1.402	0.742	--							
OT_2	0.000	0.144	--	--						
ITQ_1	0.534	2.798	2.467	0.043	--					
ITQ_2	0.913	4.824	3.266	0.073	--	--				
TMM_1	1.908	3.357	0.290	1.197	0.158	0.241	--			
TMM_2	1.656	4.260	0.183	1.807	0.029	0.093	--	--		
DO_1	0.176	0.281	2.768	2.442	0.011	0.065	0.001	0.001	--	--
DO_2	0.117	0.788	3.538	2.184	0.349	2.147	0.171	0.472	--	--

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others, TMM = Talent Management Mindset

After interpreting the standardised residuals and the modification indices (see Tables 4.43, 4.44 and 4.45) it can be concluded that very good measurement model fit was attained, due to the limited number of large positive standardised residuals and limited number of large modification indices.

4.8.5 Summary of the Measurement Model Fit and Parameter Estimates

Contrary to expectations, the results of the overall fit assessment showed exact model fit. The null hypothesis of exact model fit (H_{020a} : RMSEA = 0) was not rejected. Additionally, the null hypothesis of close model fit (H_{020b} : RMSEA \leq .05) was also not rejected, and reflected good model fit. The various fit indices presented in Table 3.36 provided further evidence of good measurement model fit. Furthermore, a limited number of large positive standardised residuals were reported (10 of 210). The results further reported only a limited number of large MI values calculated for the Λ_X matrix (6 of 174) and none for the Θ_δ matrix.

All factor loadings in the unstandardised Λ_X matrix were significant (see Table 4.37). Therefore, all measures employed provided a valid reflection of the specific latent variables they were meant to represent. The parameter estimates obtained for TMM_2 and especially DO_2 raised concern about the ability of the item parcels to validly and reliably reflect the two latent variables they earmarked to reflect. At the same time the inadmissible parameter estimates that were obtained for TMM_1 and DO_1 also eroded confidence in the measurement model.

4.9 EVALUATING THE FIT OF THE OEHLEY-HERSELMAN TALENT MANAGEMENT STRUCTURAL MODEL

The structural model proposes specific structural hypotheses concerning the psychological process underlying employees' intention to quit. To this end, the structural model provides a tentative explanation as to why the indicator variables correlate in the manner that they do in the observed covariance matrix. Essentially, the structural model attempts to explain variance in the lagging latent variable *Intention to Quit* as well as in the leading endogenous latent variables that are hypothesised to determine employees' standing on *Intention to Quit*. To determine whether this attempt to explain variance in the various endogenous latent variables is valid the ability of the model to reproduce via its parameter estimates the observed covariance matrix was evaluated (Diamantopoulos & Sigauw, 2000). The intention of evaluating structural model fit is to determine whether the sample data supported the hypothesised structural relationships proposed in the model (Diamantopoulos & Sigauw, 2000). Considering that the measurement model displayed good fit and generally reflected the latent variables they were designated to represent satisfactorily, the hypothesised structural relationships proposed by the structural model represent in Figure 3.1 were investigated through SEM. Schermelleh-Engel et al. (2003) note that in SEM a structural model fits the observed data to the extent that the reproduced covariance matrix is equivalent to the empirical covariance matrix.

In evaluating the fit of the structural model use was made of LISREL 8.8 (Du Toit & Du Toit, 2001). Following Mels' (2003) recommendation, robust maximum likelihood estimation was employed to derive estimates, as the multivariate normality assumption was not substantiated. A permissible final solution of parameter estimates for the proposed Oehley-Herselman talent management competency model was obtained after 86 iterations.

4.9.1 Assessing the Overall Goodness of Fit of the Structural Model

The overall goodness-of-fit statistics for the Oehley - Herselman talent management structural model depicted in Figure 3.1, is presented in Table 4.46.

Table 4.46***Goodness of fit statistics for the Oehley-Herselman talent management structural model***

Degrees of Freedom = 150
Minimum Fit Function Chi-Square = 215.442 (P = 0.000370)
Normal Theory Weighted Least Squares Chi-Square = 214.781 (P = 0.000413)
Satorra-Bentler Scaled Chi-Square = 206.357 (P = 0.00156)
Chi-Square Corrected for Non-Normality = 386.601 (P = 0.0)
Estimated Non-centrality Parameter (NCP) = 56.357
90 Percent Confidence Interval for NCP = (22.632 ; 98.136)
Minimum Fit Function Value = 0.848
Population Discrepancy Function Value (F0) = 0.222
90 Percent Confidence Interval for F0 = (0.0891 ; 0.386)
Root Mean Square Error of Approximation (RMSEA) = 0.0385
90 Percent Confidence Interval for RMSEA = (0.0244 ; 0.0508)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.938
Expected Cross-Validation Index (ECVI) = 1.285
90 Percent Confidence Interval for ECVI = (1.152 ; 1.449)
ECVI for Saturated Model = 1.654
ECVI for Independence Model = 23.968
Chi-Square for Independence Model with 190 Degrees of Freedom = 6047.896
Independence AIC = 6087.896
Model AIC = 326.357
Saturated AIC = 420.000
Independence CAIC = 6178.721
Model CAIC = 598.833
Saturated CAIC = 1373.665
Normed Fit Index (NFI) = 0.966
Non-Normed Fit Index (NNFI) = 0.988
Parsimony Normed Fit Index (PNFI) = 0.763
Comparative Fit Index (CFI) = 0.990
Incremental Fit Index (IFI) = 0.990
Relative Fit Index (RFI) = 0.957
Critical N (CN) = 238.815
Root Mean Square Residual (RMR) = 0.0812
Standardised RMR = 0.0646
Goodness of Fit Index (GFI) = 0.922
Adjusted Goodness of Fit Index (AGFI) = 0.891
Parsimony Goodness of Fit Index (PGFI) = 0.659

The p-value related to the Satorra-Bentler χ^2 value in Table 4.46 is indicative of a significant test statistic. A non-significant χ^2 indicates model fit in that the model can reproduce the observed covariance matrix to a degree of accuracy that can be explained in terms of sampling error only (Kelloway, 1998). In this case, the model is unable to reproduce the observed covariance matrix to the degree of accuracy that could be attributed to sampling error only, consequently, $H_{01a}: \Sigma = \Sigma(\Theta)$ is rejected in favour of $H_{a1a}: \Sigma \neq \Sigma(\Theta)$ (Kelloway, 1998). In other words, the null hypothesis ($H_{01a}: \text{RMSEA} = 0$) is rejected in favour of the alternate hypothesis ($H_{a1a}: \text{RMSEA} > 0$).

The RMSEA value of .0385 is indicative of good model fit, in that values below the critical RMSEA cut-off value of .05 indicative of good fit. The 90 percent confidence interval for RMSEA presented in Table 4.46 (.0244; .0508) included the critical .05 value, indicative of reasonable to good fit. A test of the significance of the obtained RMSEA value is performed by LISREL by testing the close fit null hypothesis (H_{01b} : RMSEA < 0.05) against the close fit alternate hypothesis (H_{a1b} : RMSEA > 0.05). As can be seen from Table 4.46, the RMSEA value of .0385 is not significantly different from the target value of .05 (i.e., H_{01b} is not rejected; $p > .05$) and considering that the confidence interval includes the target value of .05, it can be concluded that the structural model achieved close fit.

The model ECVI (1.285) is smaller than the values obtained from both the independence model (23.968) and saturated model (1.654). Thus, the fitted model appears to have a higher probability of being replicated in a cross-validation sample as opposed to the saturated and independence models. The GIF value (.922) is indicative of good model fit, whilst the AGIF value (.891) indicates reasonable fit. Values greater than .9 are indicative of good fit (Jöreskog & Sörbom, 1993; Kelloway, 1998).

The AIC and CAIC, which are adjusted for sample size effects (Diamantopoulos & Siguaw, 2000), are fit statistics that comment on the parsimony of the model fit. The AIC and CAIC models need to be compared to the independence and saturated models, as was the case with ECVI. The model AIC (326.357) is smaller than the values obtained from both the independence model (6087.896) and saturated model (420.0). Additionally, the model CAIC (598.833) also had values lower than the CAIC independence model (6178.721) and CAIC saturated model (1373.665). Thus, the more parsimonious fitted model appears to have a higher probability of being replicated in a cross-validation sample as opposed to the saturated and independence models. The RMR value of .0812 and SRMR value of .0646 are indicative of reasonable model fit. SRMR values less than .50 are indicative of good model fit (Kelloway, 1998).

The fit of the structural model warrants the interpretation of the structural model parameters estimates.

4.9.2 Interpretation of the Structural Model Parameter Estimates

The unstandardised **B** matrix, which is a (9 × 9) matrix containing the coefficients describing the strength of the hypothesised causal¹² relationships between the endogenous and endogenous latent variables was used to investigate the significance of the causal relationships and is depicted in Table 4.47.

Table 4.47

Oehley - Herselman Talent management structural model unstandardised B matrix

	POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
POS		0.675 (0.087) 7.731							0.037 (0.036) 1.019 -0.002 (0.019) -0.104
PDO									
FO	0.190 (0.070) 2.741								
AC	0.654 (0.202) 3.241		0.722 (0.163) 4.441			-1.262 (0.448) -2.817	0.723 (0.241) 3.002		
NC			0.264 (0.085) 3.112			0.583 (0.095) 6.149			
JS	-0.895 (0.505) -1.771	0.362 (0.255) 1.422		2.269 (0.695) 3.267	-0.920 (0.421) -2.183				
OT	0.726 (0.077) 9.460								
ITQ				-0.475 (0.102) -4.673	-0.085 (0.086) -0.987	0.005 (0.085) 0.058	-0.263 (0.076) -3.439		
DO									

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

As is evident from Table 4.47, six null hypotheses were not rejected in that the t-values associated with the β_{ij} estimates were smaller than $|1.96|$ and the estimates were therefore not

¹²The structural model as a complex overarching substantive hypothesis is explicitly causal in its logic. All the proposed paths are hypothesised causal affects. Thereby it is, however, not claimed that statistically significant γ and β estimates can be interpreted as conclusive support for the hypothesised causal relationships. The absence of significant path coefficients can be interpreted as evidence that no causal relationship exists. A finding of significant path coefficients cannot be interpreted as evidence that no causal relationship exists. It can, however, be interpreted that the hypothesis that causal relations exist survived an opportunity to be falsified.

statistically significant ($p > .05$). The statistical null hypotheses that failed to be rejected, and their associated t-values, were $H_{09}(-1.771)$, $H_{06}(1.422)$, $H_{016}(-0.987)$, $H_{04}(1.019)$, $H_{03}(-.104)$ and $H_{019}(.058)$. Support was therefore not obtained for the corresponding path-specific substantive research hypotheses (hypotheses 3, 4, 6, 9, 16, and 19). These path-specific substantive research hypotheses; *Perceived Organisational Support* positively influences *Job Satisfaction*, *Perceived Development Opportunities* positively influences *Job satisfaction*, *Normative Commitment* negatively influences *Intention to Quit*, *Develops Others* positively influences *Perceived Organisational Support*, *Develops Others* positively influences *Perceived Development Opportunities* and *Job Satisfaction* negatively influences *Intention to Quit*. For all the other hypotheses namely, $H_{02}, H_{05}, H_{07}, H_{08}, H_{010} - H_{015}, H_{017}$ and H_{018} , the t-values were sufficiently large to warrant the rejection of the null hypotheses. However, the signs associated with β_{46} and β_{65} were inconsistent with the nature of the proposed direction of the effects of *Job Satisfaction* on *Affective Commitment* (hypothesis 17) and *Normative Commitment* on *Job Satisfaction* (hypothesis 15) and were consequently not corroborated despite the significant path coefficients found. Consequently, only $H_{05}, H_{07}, H_{08}, H_{010} - H_{014}$ and H_{018} were rejected in favour of $H_{a5}, H_{a7}, H_{a8}, H_{a10} - H_{a14}$, and H_{a18} . Support was however found for the path-specific substantive research hypotheses that *Perceived Development Opportunities* positively influences *Perceived Organisational Support* (hypothesis 5), that *Perceived Organisational Support* positively influences *Organisational Trust* (hypothesis 7), that *Perceived Organisational Support* positively influences *Affective Commitment* (hypothesis 8), that *Perceived Organisational Support* positively influences *Felt Obligation* (hypothesis 10), that *Organisational Trust* positively influences *Affective Commitment* (hypothesis 11), that *Organisational Trust* negatively influences *Intention to Quit* (hypothesis 12), that *Affective Commitment* positively influences *Job Satisfaction* (hypothesis 13), that *Affective Commitment* negatively influences *Intention to Quit* (hypothesis 14), and that *Job Satisfaction* positively influences *Normative Commitment* (hypothesis 18).

The unstandardised Γ matrix, which is a (9×1) matrix containing the coefficients describing the strength of the hypothesised causal relationships between the exogenous and endogenous latent variables was utilised to investigate the significance of the causal relationships and is depicted in Table 4.48.

Table 4.48***Oehley - Herselman talent management structural model unstandardised Γ matrix***

TMM	
POS	
PDO	
FO	
AC	
NC	
JS	
OT	
ITQ	
DO	0.256 (0.032)
	8.041

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others, TMM = Talent Management Mindset

As is evident from Table 4.48, hypothesis H_{02} was supported in that the t-value obtained (8.041) was greater than $|1.96|$ and is consequently statistically significant ($p < .05$). The statistically significant finding resulted in the rejection of H_{02} in favour of H_{a2} . Thus, support was found for hypothesis 2 that hypothesised that a *Talent Management Mindset* in line managers positively influences *Develops Others* of line managers.

4.9.3 Interpretation of the Model Modification Indices

Good model fit was obtained for the hypothesised Oehley - Herselman talent management competency model. Support was in addition obtained for ten of the eighteen path-specific substantive research hypotheses. Eight of the eighteen path-specific substantive research hypotheses were not corroborated.

However, on further inspection of the results, it was revealed that various paths could be added and through this initiative the Oehley – Herselman talent management competency model's fit would be improved. The MI values calculated for the **B** matrix are depicted in Table 4.49.

Table 4.49***Oehley - Herselman talent management competency model modification indices for the B matrix***

	POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
POS	--	--	2.981	6.884	4.738	5.782	6.134	1.093	--
PDO	--	--	3.347	8.897	10.627	6.220	7.160	0.967	--
FO	--	3.105	--	1.399	1.949	8.043	1.339	0.296	0.059
AC	--	2.535	--	--	--	--	--	--	0.207
NC	1.187	2.862	--	5.098	--	--	3.311	0.639	0.351
JS	--	--	10.111	--	--	--	0.522	0.012	2.767
OT	--	16.502	1.543	2.984	3.558	0.544	--	2.362	4.037
ITQ	0.119	1.055	0.492	--	--	--	--	--	0.276
DO	--	0.001	0.113	0.048	2.554	2.714	4.782	0.032	--

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

MI values greater than 6.6349 would be indicative of parameters that, if set free, would improve the fit of the model significantly ($p < .01$) (Diamantopoulos & Siguaaw, 2000; Jöreskog & Sörbom, 1993). As is evident from Table 4.49 seven currently fix parameters, if freed, would improve the fit of the structural model significantly ($p < .01$). The standardised expected change for the **B** matrix (Table 4.50) indicates the standardised **B** coefficient that would be achieved if a currently fixed path would be set free. The standardised expected change values associated with the aforementioned paths are substantive enough and are all in the expected direction, with the exception of a causal relationship between *Affective Commitment* and *Perceived Organisational Support*. Parameters ought to only be set free based on high MI values if substantive theoretical evidence justifies the decision (Diamantopoulos & Siguaaw, 2000; Kelloway, 1998). Concerning the deletion of paths, Diamantopoulos and Siguaaw (2000, pp. 122-123) note that two issues need to be considered before removing paths in a model:

First, as was the case with adding parameters to the model, deletion of parameters must be based primarily on theoretical rather than statistical considerations; after all there are generally some parameters that are definitely required on the basis of past research. Second, a parameter may turn out to be insignificant because of insufficient power, in this case, if the substantive theory suggests that a particular parameter should be included in the model, it is probably better to retain it even though it is not significant, because the sample size may be small to detect its real significance.

Consequently, as the parameters specified in the Oehley - Herselman talent management competency structural model (see Figure 3.1) were based on sound theoretical arguments and findings, no paths were removed from the structural model at this stage.

Table 4.50

Oehley - Herselman talent management competency model standardised expected change for the B matrix

	POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
POS	--	--	-0.134	-0.307	-0.163	-0.181	-0.197	0.085	--
PDO	--	--	0.194	0.422	0.348	0.312	0.327	-0.098	--
FO	--	0.174	--	-0.163	0.322	0.616	0.123	-0.057	0.005
AC	--	0.218	--	--	--	--	--	--	0.012
NC	0.093	0.123	--	0.720	--	--	0.156	-0.96	0.011
JS	--	--	0.799	--	--	--	-0.150	0.034	0.058
OT	--	0.358	0.070	0.258	0.151	0.155	--	-0.228	0.032
ITQ	0.031	0.061	-0.044	--	--	--	--	--	0.007
DO	--	-0.002	0.006	0.006	0.035	0.037	0.070	-0.004	--

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

Jöreskog and Sörbom (1993, p. 127) recommend that modification indices be utilised in the following manner in the process of model evaluation and modification:

If chi-square is large relative to the degrees of freedom, one examines the modification indices and relaxes the parameter with the largest modification index if this parameter can be interpreted substantively. If it does not make substantive sense to relax the parameter with the largest modification index, one considers the second largest modification index etc. If the signs of certain parameters are specified a priori, positive or negative, the expected parameter changes associated with the modification indices for these parameters can be used to exclude models having the wrong sign.

All the MI values calculated for the Γ matrix (results not shown) were smaller than 6.6349, thus none of the parameters, if set free, would improve the fit of the model significantly ($p < .01$).

The largest MI value calculated for **B** suggests a causal relationship between *Perceived Developmental Opportunities* and *Organisational Trust*. This causal relationship does make

substantive theoretical sense, in that employees' who perceive that personal developmental opportunities are available to improve both their competence and performance and that such opportunities are accessible would be more inclined to trust their organisation. Although, it is the author's contention that this causal relationship is essentially more complex and ought to be mediated by *Perceived Organisational Support* as is depicted in the Oehley - Herselman talent management structural model. This is due to employees' firstly needing to perceive their organisation as supportive before they would trust their organisation. Support was found for this mediation hypothesis. The path from *Perceived Developmental Opportunities* to *Perceived Organisational Support* (β_{12}) was statistically significant ($p < .05$) as was the path from *Perceived Organisational Support* to *Organisational Trust* (β_{71}). Consequently, a direct path was not included between *Perceived Developmental Opportunities* and *Organisational Trust* in addition to the mediated path.

The second largest MI value calculated for **B** suggested a causal relationship between *Normative Commitment* and *Perceived Developmental Opportunities*. This causal relationship would suggest that employees' who feel an obligation to remain with their current organisation would perceive personal developmental opportunities to be available and accessible to them. This causal relationship does not make substantive sense. The parameter β_{25} was therefore also not freed.

Additionally, the third largest MI value calculated for **B** suggested a causal relationship between *Felt Obligation* and *Job Satisfaction*. This causal relationship does make substantive sense. It was noted in the literature study, that employees' who receive encouraging treatment from their organisation would be more inclined to reciprocate the organisation's favour with favourable work attitudes, consistent with the norm of reciprocity. As *Job Satisfaction* may be regarded as a favourable work attitude, it does make substantive sense that a positive causal relationship could exist between *Felt Obligation* and *Job Satisfaction*. Furthermore, it was noted in the literature study that *Perceived Organisational Support* ought to contribute to the development of overall employee *Job Satisfaction* through addressing the socio-emotional needs, increasing the performance-reward expectations, and signalling the availability of support when needed (Rhoades & Eisenberger, 2002). This causal relationship was however not supported. None the less, it was also argued that in terms of Maslow's hierarchy of needs that the effect of *Perceived Organisational Support* on *Job Satisfaction* may potentially be

mediated and/or moderated by the relative salient lower-order needs. *Felt Obligation* may be regarded as a relatively salient lower order need that mediates the causal relationship between *Perceived Organisational Support* on *Job Satisfaction*. Support was found for the path from *Perceived Organisational Support* to *Felt Obligation*. Additionally, Table 4.49 indicates that a significant relationship may be obtained if the path between *Felt Obligation* and *Job Satisfaction* would be set free.

Following a review of the results of MI values obtained for the Oehley - Herselman talent management structural model, the decision was taken to include a path from *Felt Obligation* to *Job Satisfaction*. The model was re-fitted without the deletion of the non-significant paths found and paths with signs inconsistent with the nature of the proposed relationship. As, the primary objective of this study is to modify and elaborate the partial talent management competency model proposed by Oehley (2007) concerning line managers talent management, hypotheses 3 and 4 would not be investigated if these paths were to be removed. Additionally, as was previously argued, non-significant paths should be removed from the model only if substantive theoretical evidence would support the decision, as is the case with the inclusion of paths. The parameters specified in the Oehley - Herselman talent management structural model were based on sound theoretical arguments and findings, no paths were removed prior the re-fitting of the structural model.

The fit statistics for the revised Oehley – Herselman talent management structural model (model A) are shown in Table 4.51. The exact null hypothesis is rejected ($p < .05$). The close fit null hypothesis is not rejected ($p > .05$). The sample estimate for RMSEA is .0361 in comparison to the RMSEA value of .0385 obtained for the original model.

Table 4.51

Goodness of fit statistics for the Oehley-Herselman talent management structural model after first modification and with original paths retained (model A)

Degrees of Freedom = 149
Minimum Fit Function Chi-Square = 207.407 (P = 0.00111)
Normal Theory Weighted Least Squares Chi-Square = 205.249 (P = 0.00155)
Satorra-Bentler Scaled Chi-Square = 198.457 (P = 0.00420)
Chi-Square Corrected for Non-Normality = 380.702 (P = 0.0)
Estimated Non-centrality Parameter (NCP) = 49.457
90 Percent Confidence Interval for NCP = (16.825 ; 90.175)
Minimum Fit Function Value = 0.817
Population Discrepancy Function Value (F0) = 0.195

90 Percent Confidence Interval for F0 = (0.0662 ; 0.355)
Root Mean Square Error of Approximation (RMSEA) = 0.0361
90 Percent Confidence Interval for RMSEA = (0.0211 ; 0.0488)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.965
Expected Cross-Validation Index (ECVI) = 1.262
90 Percent Confidence Interval for ECVI = (1.133 ; 1.422)
ECVI for Saturated Model = 1.654
ECVI for Independence Model = 23.968
Chi-Square for Independence Model with 190 Degrees of Freedom = 6047.896
Independence AIC = 6087.896
Model AIC = 320.457
Saturated AIC = 420.000
Independence CAIC = 6178.721
Model CAIC = 597.474
Saturated CAIC = 1373.665
Normed Fit Index (NFI) = 0.967
Non-Normed Fit Index (NNFI) = 0.989
Parsimony Normed Fit Index (PNFI) = 0.758
Comparative Fit Index (CFI) = 0.992
Incremental Fit Index (IFI) = 0.992
Relative Fit Index (RFI) = 0.958
Critical N (CN) = 246.830
Root Mean Square Residual (RMR) = 0.0755
Standardised RMR = 0.0617
Goodness of Fit Index (GFI) = 0.925
Adjusted Goodness of Fit Index (AGFI) = 0.895
Parsimony Goodness of Fit Index (PGFI) = 0.656

The unstandardised **B** matrix for the revised Oehley - Herselman talent management structural model (model A) is shown in Table 4.52. Table 4.52 indicates that the newly added path from *Felt Obligation* to *Job Satisfaction* was statistically significant ($p < .05$). In addition the findings on the significance of all the original paths remained as was reported earlier, with the exception of the path from *Perceived Development Opportunities* to *Job Satisfaction*. It was reported in paragraph 4.9.2 that the path from *Perceived Development Opportunities* to *Job Satisfaction* was not rejected in that the t-value (1.422) associated with β_{62} was smaller than |1.96|. Following the first modification to the Oehley - Herselman talent management structural model (model A) the path from *Perceived Development Opportunities* to *Job Satisfaction* became statistically significant ($p < .05$) in that the t-value (1.994) was greater than |1.96|. Consequently, the statistical null hypothesis H_{06} was rejected in favour of H_{a6} . Support was therefore found for the path-specific substantive research hypothesis that *Perceived Development Opportunities* positively influences *Job Satisfaction* (hypothesis 6).

Table 4.52

Oehley - Herselman talent management structural model unstandardised B matrix (model A)

	POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
POS		0.674 (0.087) 7.736							0.037 (0.036) 1.022 -0.001 (0.019) -0.059
PDO									
FO	0.194 (0.070) 2.797								
AC	0.482 (0.142) 3.382		0.447 (0.116) 3.859			-0.546 (0.254) -2.147	0.507 (0.134) 3.783		
NC			0.217 (0.101) 2.145			0.726 (0.145) 5.025			
JS	-0.345 (0.332) -1.038	0.371 (0.186) 1.994	0.459 (0.216) 2.128	1.382 (0.376) 3.627	-0.958 (0.387) -2.476				
OT	0.720 (0.076) 9.472								
ITQ				-0.463 (0.110) -4.225	-0.092 (0.088) -1.050	-0.002 (0.078) -0.029	-0.258 (0.079) -3.248		
DO									

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

The unstandardised Γ matrix for the revised Oehley - Herselman talent management structural model (model A) is shown in Table 4.53. Table 4.53 indicated that the path between *Talent Management Mindset* and *Develops Others* remained statistically significant ($p < .05$).

Table 4.53

Oehley - Herselman talent management structural model unstandardised Γ matrix (model A)

	TMM
POS	
PDO	
FO	

AC	
NC	
JS	
OT	
ITQ	
DO	0.257
	(0.032)
	8.046

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others, TMM = Talent Management Mindset

Following the first modification, the MI values calculated for the **B** matrix (see Table 4.54) suggested that a path be included between *Perceived Developmental Opportunities* and *Organisational Trust*. The addition of this path has already been considered (see paragraph 4.9.1) but the decision was taken not to include this path because it was felt that the effect of *Perceived Developmental Opportunities* on *Organisational Trust* ought to be mediated by *Perceived Organisational Support*. Although the suggested path does make substantive sense, the relationship would most likely not be direct, but would rather be mediated by *Perceived Organisational Support*.

The parameter with the second highest MI value was considered for possible modification. The MI values calculated for the revised **B** matrix (see Table 4.54) suggests that a path be included between *Job Satisfaction* and *Organisational Trust*. A path between these two latent variables does not make substantive sense. It suggests that employees' with higher levels of job satisfaction would be more inclined to trust their organisation. As was argued previously in paragraph 2.8.1 trust develops through a social exchange process, where the actions of management are interpreted and are reciprocated with favourable work attitudes and behaviour. Considering that *Job Satisfaction* is neither an action nor behaviour on the part of management, it is highly doubtful that *Job Satisfaction* would causally relate to *Organisational Trust*. Consequently, a path was not included between *Job Satisfaction* and *Organisational Trust*.

The parameter with the third highest MI value was subsequently considered for possible modification. The third largest MI value calculated for the revised **B** matrix suggested that a path be included between *Organisational Trust* and *Perceived Developmental Opportunities*. This would essentially imply a feedback loop existing, where employees' *Perceive Developmental Opportunities* to be available and accessible which has influenced their

perceptions of organisational support consequently resulting in employees' trusting their organisation. It would make substantive sense, in that the exchange relationship has not been altered and employees would continue to *Perceived Developmental Opportunities* to be available and accessible to them. Consequently, a path was included between *Organisational Trust* and *Perceived Developmental Opportunities*.

All the MI values calculated for the Γ matrix (results not shown) were smaller than 6.6349, thus none of the parameters, if set free, would improve the fit of the model significantly ($p < .01$).

Table 4.54

Oehley - Herselman talent management structural model modification indices calculated for the B matrix after first modification (model A)

	POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
POS	--	--	2.636	5.846	5.849	3.049	6.849	1.106	--
PDO	--	--	2.923	7.174	6.258	4.661	8.036	0.761	--
FO	--	2.703	--	0.173	0.669	--	1.201	1.350	0.069
AC	--	1.485	--	--	--	--	--	--	0.001
NC	0.289	0.766	--	--	--	--	0.184	0.287	0.056
JS	--	--	--	--	--	--	3.620	0.239	3.966
OT	--	18.757	1.386	--	3.932	8.726	--	0.243	3.880
ITQ	0.049	1.056	0.707	--	--	--	--	--	0.273
DO	--	0.001	0.130	0.083	2.573	2.726	4.550	0.045	--

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

4.9.4 Assessing the Overall Goodness of Fit of the Structural Model After Second Modification and with Original Paths Retained (model B).

Table 4.55 presents the results of the goodness-of-fit statistics of the Oehley - Herselman talent management competency model (model B) following the inclusion of a path between *Organisational Trust* and *Perceived Developmental Opportunities*, with all original paths retained.

Table 4.55

Goodness of fit statistics for the Oehley-Herselman talent management structural model after second modification and with original paths retained (model B)

Degrees of Freedom = 148
Minimum Fit Function Chi-Square = 189.481 (P = 0.0121)
Normal Theory Weighted Least Squares Chi-Square = 180.556 (P = 0.0354)
Satorra-Bentler Scaled Chi-Square = 174.753 (P = 0.0657)
Chi-Square Corrected for Non-Normality = 388.656 (P = 0.0)
Estimated Non-centrality Parameter (NCP) = 26.753
90 Percent Confidence Interval for NCP = (0.0 ; 63.940)
Minimum Fit Function Value = 0.746
Population Discrepancy Function Value (F0) = 0.105
90 Percent Confidence Interval for F0 = (0.0 ; 0.252)
Root Mean Square Error of Approximation (RMSEA) = 0.0267
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.0412)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.998
Expected Cross-Validation Index (ECVI) = 1.176
90 Percent Confidence Interval for ECVI = (1.071 ; 1.323)
ECVI for Saturated Model = 1.654
ECVI for Independence Model = 23.968
Chi-Square for Independence Model with 190 Degrees of Freedom = 6047.896
Independence AIC = 6087.896
Model AIC = 298.753
Saturated AIC = 420.000
Independence CAIC = 6178.721
Model CAIC = 580.311
Saturated CAIC = 1373.665
Normed Fit Index (NFI) = 0.971
Non-Normed Fit Index (NNFI) = 0.994
Parsimony Normed Fit Index (PNFI) = 0.756
Comparative Fit Index (CFI) = 0.995
Incremental Fit Index (IFI) = 0.995
Relative Fit Index (RFI) = 0.963
Critical N (CN) = 278.525
Root Mean Square Residual (RMR) = 0.0677
Standardised RMR = 0.0577
Goodness of Fit Index (GFI) = 0.934
Adjusted Goodness of Fit Index (AGFI) = 0.906
Parsimony Goodness of Fit Index (PGFI) = 0.658

As is evident from Table 4.55, the model achieved a Satorra-Bentler Scaled χ^2 -value of 174.753 with 148 degrees of freedom. The p-value associated with the sample χ^2 (.0657) is indicative of an insignificant test statistic ($p > .05$). Consequently, the model is able to reproduce the observed covariance matrix to the degree of accuracy that could be attributed to sampling error only and consequently, $H_{01a}: \Sigma = \Sigma(\Theta)$ is not rejected in favour of $H_{a1a}: \Sigma \neq \Sigma(\Theta)$ (Kelloway, 1998). In other words, the null hypothesis ($H_{01a}: \text{RMSEA} = 0$) is not rejected

in favour of the alternate hypothesis (H_{a1a} : RMSEA >0). The exact fit null hypothesis was rejected in the original structural model.

The RMSEA value of .0267 is indicative of good model fit, in that values below .05 indicate good fit (Kelloway, 1998). The RMSEA sample estimate for the original model was .0385. The upper bound of the 90 percent confidence interval for RMSEA presented in Table 4.55 (.0; .0412) fell below the critical value of .05, providing further evidence of good model fit. A test of the significance of the obtained sample RMSEA value is performed by LISREL by testing the close fit null hypothesis (H_{01b} : RMSEA <.05) against the close fit alternate hypothesis (H_{a1b} : RMSEA >.05). As can be seen from Table 4.55, the probability of observing a sample RMSEA value of .0267 if H_{01b} would have been true in the parameter is sufficiently large not to question the close fit hypothesis in that the parameter (i.e., H_{01b} is not rejected; $p > .05$) is not significantly different from the target value of .05 (i.e., H_{01b} is not rejected; $p > .05$).

The model ECVI (1.176) is smaller than the values obtained from both the independence model (23.968) and saturated model (1.654). Thus, the fitted model appears to have a higher probability of being replicated in a cross-validation sample as opposed to the saturated and independence models.

The GIF value (.934) is also indicative of good model fit, whilst the AGIF value (.906) further indicates good fit. Values greater than .9 are indicative of good fit (Jöreskog & Sörbom, 1993; Kelloway, 1998).

The AIC and CAIC, which is adjusted for sample size effects (Diamantopoulos & Siguaw, 2000) are fit statistics that comment on the parsimony, fit of the fitted model. The AIC and CAIC models need to be compared to the independence and saturated models, as was the case with EVCI. The model AIC (298.753) is smaller than the values obtained from both the independence model (6087.896) and saturated model (420.0). Additionally, the model CAIC (580.311) also had values lower than the CAIC independence model (6178.721) and CAIC saturated model (1373.665). Thus, a more parsimonious fitted model appears to have a higher probability of being replicated in a cross-validation sample as opposed to the saturated and independence models.

The RMR value of .0677 and SRMR value of .0577 are indicative of reasonable model fit. SRMR values less than .5 are indicative of good model fit (Kelloway, 1998).

4.9.5 Parameter Estimates Obtained for the Revised Structural Model (model B)

The unstandardised **B** matrix for the revised Oehley - Herselman talent management structural model (model B) is shown in Table 4.56. Table 4.56 indicates that the newly added path from *Organisational Trust* to *Perceived Development Opportunities* was statistically significant ($p < .05$).

Table 4.56

Oehley - Herselman talent management structural model unstandardised B matrix (model B)

	POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
POS		0.450 (0.108) 4.188							0.035 (0.035) 0.997
PDO							0.461 (0.087) 5.264		-0.020 (0.024) -0.823
FO	0.183 (0.070) 2.612								
AC	0.429 (0.117) 3.672		0.447 (0.116) 3.859			-0.504 (0.215) -2.340	0.546 (0.139) 3.942		
NC			0.210 (0.098) 2.137			0.743 (0.139) 5.329			
JS	-0.304 (0.225) -1.355	0.376 (0.145) 2.599	0.436 (0.107) 4.081	1.303 (0.317) 4.111	-0.956 (0.387) -2.471				
OT	0.554 (0.077) 7.200								
ITQ				-0.467 (0.105) -4.463	-0.089 (0.087) -1.024	-0.002 (0.079) -0.026	-0.254 (0.077) -3.316		
DO									

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

The unstandardised **Γ** matrix for the revised Oehley - Herselman talent management structural model (model B) is shown in Table 4.57. Table 4.57 indicated that the path

between *Talent Management Mindset* and *Develops Others* remained statistically significant ($p < .05$).

Table 4.57

Oehley - Herselman talent management structural model unstandardised Γ matrix (model B)

	TMM
POS	
PDO	
FO	
AC	
NC	
JS	
OT	
ITQ	
DO	0.254 (0.032)
	8.038

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others, TMM = Talent Management Mindset

4.9.6 Structural Model Modification Indices Following Second Modification

The fit statistics obtained for the revised Oehley - Herselman talent management structural model (model B) depicted in Figure 4.4 suggests that it fits the data quite well. Modification indices calculated for the Γ and \mathbf{B} matrices are depicted in Table 4.58 and Table 4.59.

Table 4.58 revealed that none of the MI values calculated for the Γ matrix were large (>6.64). Thus, no currently fixed parameters were considered to be set free. However, Table 4.59 revealed two MI values calculated for the \mathbf{B} matrix of the model B that were large (>6.64) and ought to be considered for possible modification. Following the procedure recommended by Jöreskog and Sörbom (1993), Table 4.59 suggests that a path be included between *Organisational Trust* and *Job Satisfaction* (highest MI value of 31.235). A path between these two latent variables at first glance does make substantive sense. It would suggest that employees' with higher levels of *Organisational Trust* would be more satisfied with their job. Although, it is the author's contention that employees trusting their organisation would not necessarily result in improved *Job Satisfaction*. Additionally,

Organisational Trust ought to be related to other variables that benefit the organisation, as opposed to *Job Satisfaction*, which essentially benefits the employee. Thus, other latent variables not included in the Oehley - Herselman talent management model would mediate the relationship between *Organisational Trust* and *Job Satisfaction*. A path between *Organisational Trust* and *Job Satisfaction* was consequently not added and the next modification was considered.

Furthermore, Table 4.59 suggests that a path be included between *Job Satisfaction* and *Felt Obligation*. A path between these two latent variables does not make substantive theoretical sense. It is the author's contention that employees level of *Job Satisfaction* would not necessary encourage employees to care about their organisations well being. Consequently no additional paths were included to the Oehley - Herselman talent management competency model, at this stage of the analysis.

Table 4.58

Oehley - Herselman talent management competency model modification indices calculated for the I matrix after second modification (model B)

	TMM
POS	1.727
PDO	0.475
FO	1.089
AC	2.530
NC	0.842
JS	1.479
OT	0.141
ITQ	0.001
DO	--

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

Table 4.59

Oehley - Herselman talent management competency model modification indices calculated for the B matrix after second modification (model B)

	POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
POS	--	--	3.277	1.552	3.420	0.664	0.060	0.002	--
PDO	0.029	--	2.337	3.139	3.223	1.092	--	0.138	--
FO	--	3.953	--	0.526	1.151	6.961	2.134	1.867	1.06

AC	--	1.396	--	--	--	--	--	--	0.003
NC	0.477	0.682	--	--	--	--	0.088	0.353	0.050
JS	--	--	--	--	--	--	31.235	0.224	3.922
OT	--	--	2.324	1.091	2.773	--	--	0.510	3.366
ITQ	0.010	1.753	0.718	--	--	--	--	--	0.287
DO	4.071	1.364	0.225	0.368	3.310	3.449	3.673	0.156	--

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

The Oehley - Herselman talent management competency model was fitted under the assumption that structural error terms were uncorrelated. The MI values calculated for the PSI (Ψ) matrix are presented in Table 4.60.

Table 4.60

Oehley - Herselman talent management competency model modification indices calculated for the Ψ matrix after second modification (model B)

	POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
POS	--	--	3.141	0.973	0.970	--	0.139	0.526	0.302
PDO	--	--	2.235	1.541	0.424	--	--	1.829	0.010
FO	--	--	--	--	--	--	2.290	0.740	0.165
AC	--	--	--	--	0.043	--	--	0.598	0.031
NC	--	--	--	--	--	--	0.302	--	0.086
JS	4.203	0.066	--	0.442	--	--	8.595	--	4.324
OT	--	--	--	--	--	--	--	0.011	3.494
ITQ	--	--	--	--	--	--	--	--	0.291
DO	--	--	--	--	--	--	--	--	--

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

Table 4.60 reveals that if the assumption that the structural error terms were uncorrelated was relaxed and if ζ_6 and ζ_7 were allowed to correlate, the fit of the structural model would increase significantly ($p < .01$). Essentially, this would allow that the structural error terms concerning *Job Satisfaction* (ζ_6) and *Organisational Trust* (ζ_7) to correlate. The structural error terms in the structural model acknowledge that the role of latent variables excluded from the model that produce variance in the endogenous latent variables. Structural error terms would either correlate because a currently excluded latent variable that affects η_6 affects an excluded latent variable that affects η_7 (or vice versa) or because a common

excluded latent variable affects both η_6 and η_7 . In the absence of any theoretically convincing argument as why the structural errors associated with η_6 and η_7 should be allowed to correlate, the path correlation ψ_{67} was not set free.

4.9.7 Squared Multiple Correlation of Structural Model Following Second Modification (model B)

The R^2 values for the structural equations were also investigated and are shown in Table 4.61. The R^2 estimates represent the proportion of variance that the structural model accounts for in each of the endogenous latent variables. Large R^2 estimates are desirable in that they reveal that the structural model account for a significant portion of the variance in each of the endogenous latent variables, whilst small R^2 estimates reveal that the structural model requires further elaboration. As can be seen in Table 4.61 the Oehley - Herselman talent management structural model successfully accounted for the variance in *Organisational Trust* and *Intention to Quit*. However, the Oehley - Herselman talent management structural model was less successful in its attempt to account for the variance in *Normative Commitment*, *Affective Commitment*, *Develops Others*, *Felt Obligation*, *Perceived Organisational Support* and *Perceived Developmental Opportunities*. The structural model's failure to account for the variance in the aforementioned endogenous latent variables is somewhat disappointing. Additionally, the negative R^2 associated with *Job Satisfaction* is inadmissible, erodes confidence in the model, and may possibly be attributed to multicollinearity, which consequently erodes confidence in the Oehley – Herselman talent management competency model. This, necessitated that non-significant and/or paths with incorrect signs attributed to the causal relationship, be removed from the structural model in an attempt to address the occurrence of multicollinearity. The causal relationship between *Perceived Organisational Support* and *Job Satisfaction* (β_{61}) as well as the causal relationship between *Normative Commitment* and *Job Satisfaction* (β_{65}) were consequently removed, and the model (model C) re-fitted.

Table 4.61

Squared multiple correlation values for endogenous latent variables included in Oehley - Herselman talent management competency model (model B)

POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
0.368	0.375	0.033	0.308	0.326	-0.387	0.450	0.513	0.065

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

4.9.8 Assessing the Overall Goodness of fit of the Structural Model After the Third Modification (model C)

Table 4.62 presents the results of the goodness-of-fit statistics of the Oehley - Herselman talent management competency model following the removal of two paths (β_{61} and β_{65}) suspected of possibly contributing to the inadmissible negative R^2 for *Job Satisfaction*, whilst all other original paths were retained.

Table 4.62

Goodness of fit statistics for the Oehley-Herselman talent management competency structural model after third modification (model C)

Degrees of Freedom = 150
Minimum Fit Function Chi-Square = 218.517 (P = 0.000221)
Normal Theory Weighted Least Squares Chi-Square = 209.066 (P = 0.00103)
Satorra-Bentler Scaled Chi-Square = 201.489 (P = 0.00321)
Chi-Square Corrected for Non-Normality = 464.062 (P = 0.0)
Estimated Non-centrality Parameter (NCP) = 51.489
90 Percent Confidence Interval for NCP = (18.482 ; 92.575)
Minimum Fit Function Value = 0.860
Population Discrepancy Function Value (F0) = 0.203
90 Percent Confidence Interval for F0 = (0.0728 ; 0.364)
Root Mean Square Error of Approximation (RMSEA) = 0.0368
90 Percent Confidence Interval for RMSEA = (0.0220 ; 0.0493)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.960
Expected Cross-Validation Index (ECVI) = 1.266
90 Percent Confidence Interval for ECVI = (1.136 ; 1.427)
ECVI for Saturated Model = 1.654
ECVI for Independence Model = 23.968
Chi-Square for Independence Model with 190 Degrees of Freedom = 6047.896
Independence AIC = 6087.896
Model AIC = 321.489
Saturated AIC = 420.000
Independence CAIC = 6178.721
Model CAIC = 593.965
Saturated CAIC = 1373.665

Normed Fit Index (NFI) = 0.967
Non-Normed Fit Index (NNFI) = 0.989
Parsimony Normed Fit Index (PNFI) = 0.763
Comparative Fit Index (CFI) = 0.991
Incremental Fit Index (IFI) = 0.991
Relative Fit Index (RFI) = 0.958
Critical N (CN) = 244.561
Root Mean Square Residual (RMR) = 0.106
Standardised RMR = 0.0689
Goodness of Fit Index (GFI) = 0.924
Adjusted Goodness of Fit Index (AGFI) = 0.894
Parsimony Goodness of Fit Index (PGFI) = 0.660

As is evident from Table 4.62, the model achieved a Satorra-Bentler Scaled χ^2 value of 201.489, with 150 degrees of freedom. The p-value concerning associated with the sample χ^2 (.00321) is indicative of a significant test statistic ($p < .05$). Consequently, the model is unable to reproduce the observed covariance matrix to the degree of accuracy that could be attributed to sampling error only, consequently, $H_{01a}: \Sigma = \Sigma(\Theta)$ is rejected in favour of $H_{a1a}: \Sigma \neq \Sigma(\Theta)$ (Kelloway, 1998). In other words, the null hypothesis ($H_{01a}: \text{RMSEA} = 0$) is rejected in favour of the alternate hypothesis ($H_{a1a}: \text{RMSEA} > 0$).

The RMSEA value of .0368 is indicative of good model fit, in that values below .05 indicate good fit (Kelloway, 1998). The upper bound of the 90 percent confidence interval for RMSEA presented in Table 4.62 (.0220; .0493) is below the critical value of .05, providing further evidence of good model fit. A test of the significance of the obtained RMSEA value is performed by LISREL by testing the close fit null hypothesis ($H_{01b}: \text{RMSEA} < 0.05$) against the close fit alternate hypothesis ($H_{a1b}: \text{RMSEA} > 0.05$). As can be seen from Table 4.62, the probability of observing the sample RMSEA value of .0368 under the close fit null hypothesis is sufficiently large not to reject the close fit null hypothesis (i.e., H_{01b} is not rejected; $p > .05$).

The model ECVI (1.266) is smaller than the values obtained from both the independence model (23.968) and saturated model (1.654). Thus, the fitted model appears to have a higher probability of being replicated in a cross-validation sample as opposed to the saturated and independence models.

AC	0.402 (0.111) 3.627	0.389 (0.092) 4.227			-0.342 (0.157) -2.173	0.482 (0.115) 4.202
NC		0.372 (0.082) 4.524			0.417 (0.075) 5.533	
JS		0.170 (0.081) 2.103	0.191 (0.079) 2.399	0.590 (0.122) 4.848		
OT	0.559 (0.077) 7.256					
ITQ				-0.474 (0.092) -5.159	-0.120 (0.072) -1.677	0.020 (0.093) 0.211
DO						-0.260 (0.078) -3.339

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

The unstandardised Γ matrix for the revised Oehley - Herselman talent management structural model (model C) is shown in Table 4.64. Table 4.64 indicated that the path between *Talent Management Mindset* and *Develops Others* remained statistically significant ($p < .05$).

Table 4.64

Oehley - Herselman talent management structural model unstandardised Γ matrix (model C)

	TMM
POS	
PDO	
FO	
AC	
NC	
JS	
OT	
ITQ	
DO	0.252 (0.031) 8.042

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others, TMM = Talent Management Mindset

4.9.10 Squared Multiple Correlation of Structural Model Following Third Modification (model C)

As can be deduced from Table 4.65 the inadmissible negative R^2 associated with *Job Satisfaction* found previously (see paragraph 4.9.4), which had eroded confidence in the model, was successfully addressed through the removal of two paths, namely; the causal relationship between *Perceived Organisational Support* and *Job Satisfaction* (β_{61}) and, the causal relationship between *Normative Commitment* and *Job Satisfaction* (β_{65}).

Table 4.65

Squared multiple correlation values for endogenous latent variables included in Oehley - Herselman talent management competency model following third modification (model C)

POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
0.364	0.370	0.035	0.415	0.447	0.391	0.453	0.505	0.064

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

4.9.11 Structural Model Modification Indices Following Third Modification

Modification indices calculated for the Γ and B matrices are depicted in Table 4.66 and Table 4.67 where again investigated for possible further modification of the Oehley - Herselman talent management competency model.

Table 4.66 reveals that none of the MI values calculated for the Γ matrix were large (>6.64). Thus, no currently fixed parameters in the Γ matrix were set free. However, Table 4.67 denoted that a causal relationship between *Normative Commitment* and *Affective Commitment* should be included in the Oehley - Herselman talent management competency model based on MI values calculated for B . This causal relationship does not make substantive sense. This relationship would suggest that employees who experience higher levels of obligation to remain with an organisation would have a positive linear effect on employees' affective attachment to their organisation. As a result, this path was not added to the Oehley – Herselman talent management competency model.

The parameter with the second highest MI value was considered for possible modification. The second largest MI values calculated for the B matrix (see Table 4.67) suggests that a path

be included between *Normative Commitment* and *Job Satisfaction*. A path between these two latent variables does make substantive sense, and was initially proposed in the original Oehley – Herselman talent management model (see Figure 3.1), although it was previously revealed (see paragraph 4.9.4) that this causal relationship contributed to the inadmissible negative R^2 value for *Job Satisfaction*. As a result, this path was not again included to the Oehley – Herselman talent management competency model.

The parameter with the third highest MI value was subsequently considered for possible modification. The third highest MI value calculated for the **B** matrix suggested that a path be included between *Perceived Organisational Support* and *Job Satisfaction*. This causal relationship does make substantive sense although, it was also found (see paragraph 4.9.4) that this causal relationship contributed to the inadmissible negative R^2 value for *Job Satisfaction*. As a result, this path was also not again reintroduced into the Oehley – Herselman talent management competency model.

Consequently, the parameter with the fourth highest MI value was considered for possible modification. The MI values calculated for the **B** matrix (see Table 4.67) suggested that a path be included between *Affective Commitment* and *Normative Commitment*. This causal relationship does make substantive sense. This causal relationship would denote that as employees' exhibit increased *Affective Commitment*, their *Normative Commitment* (i.e. their obligation to their organisation) would increase. Meta-analytic findings by Meyer et al. (2002) provide support for a positive causal relationship between *Affective Commitment* and *Normative Commitment*.

Table 4.66

Oehley - Herselman talent management competency model modification indices calculated for the Γ matrix after third modification (model C)

	TMM
POS	1.854
PDO	0.497
FO	1.174
AC	1.949
NC	2.811
JS	0.520
OT	0.114

ITQ	0.001
DO	--

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

Table 4.67

Oehley - Herselman talent management competency model modification indices calculated for the B matrix after third modification (model C)

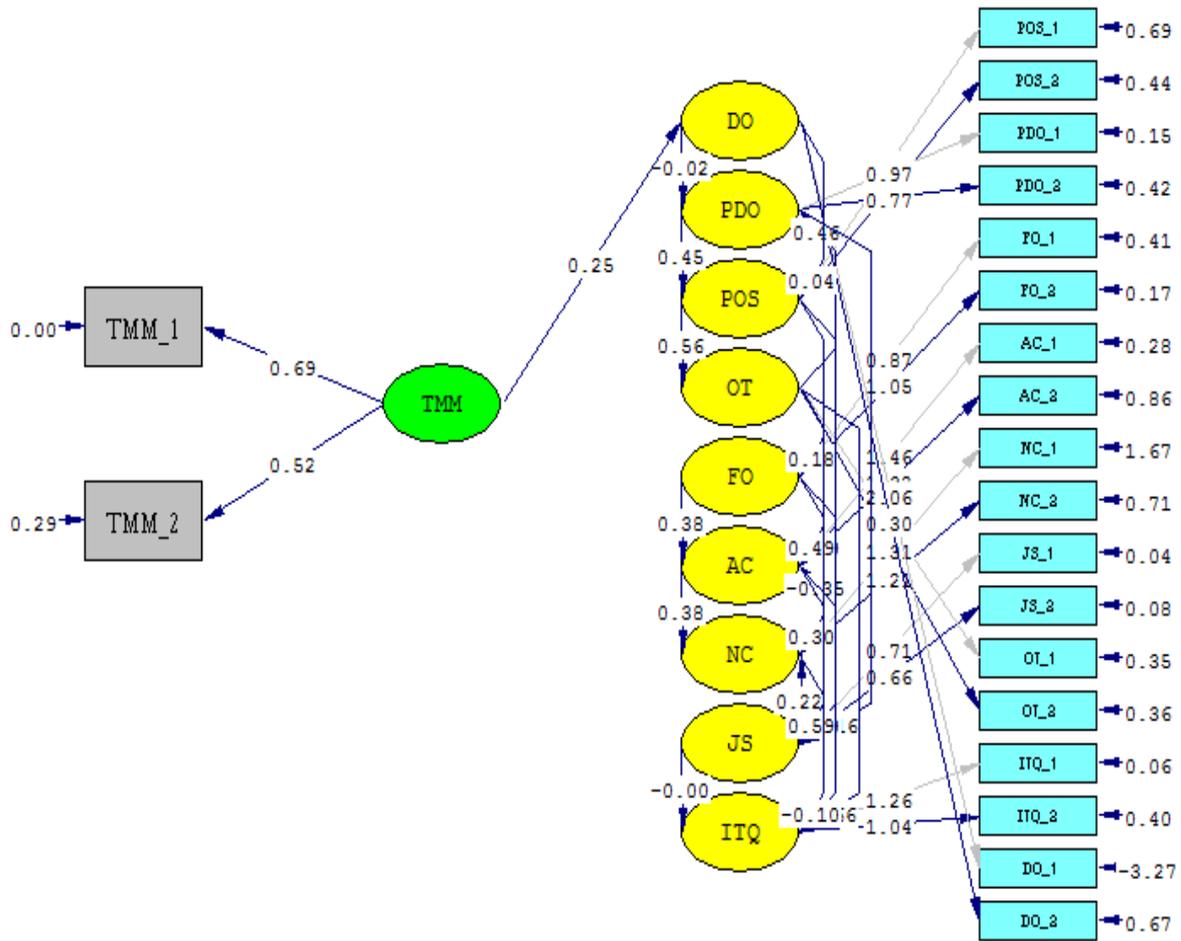
	POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
POS	--	--	3.412	0.375	0.139	2.406	0.060	0.104	--
PDO	0.028	--	2.416	1.797	6.694	1.750	--	0.111	--
FO	--	4.171	--	0.748	0.002	13.899	2.407	1.444	0.114
AC	--	0.776	--	--	103.498	--	--	--	0.041
NC	5.821	8.954	--	25.090	--	--	11.110	12.435	1.520
JS	31.561	--	--	--	39.414	--	--	--	2.269
OT	--	--	2.626	0.297	11.393	6.907	--	0.876	3.113
ITQ	0.004	1.795	0.367	--	--	--	--	--	0.309
DO	3.464	1.223	0.237	0.251	3.596	3.394	3.395	0.131	--

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

Consequently, the Oehley-Herselman talent management competency model was modified further through inserting a causal path from *Affective Commitment* to *Normative Commitment*. No further paths were removed at this stage of the analysis. Following the aforementioned modification, the Oehley - Herselman talent management competency model (model D) was re-fitted.

4.10 ASSESSING THE OVERALL GOODNESS OF FIT OF THE FINAL OEHLEY - HERSELMAN TALENT MANAGEMENT COMPETENCY MODEL (Model D)

An admissible final solution of parameter estimates for the modified talent management competency structural model was obtained after 54 iterations. The completely standardised solution from the comprehensive LISREL model is portrayed in Figure 4.4, while the full spectrum of fit indices provided by LISREL to investigate the absolute fit of the model is presented in Table 4.68.



Chi-Square=178.94, df=149, P-value=0.04764, RMSEA=0.028

Figure 4.4. Representation of the modified Oehley - Herselman talent management structural model (model D)

Table 4.68 presents the results of the goodness-of-fit statistics of the modified Oehley - Herselman talent management competency model following the inclusion of a path between *Affective Commitment* and *Normative Commitment*, with all the model C paths retained.

Table 4.68

Goodness of fit statistics for the Oehley-Herselman talent management competency model after second modification and with the model C paths retained (model D)

Degrees of Freedom = 149
Minimum Fit Function Chi-Square = 194.531 (P = 0.00722)
Normal Theory Weighted Least Squares Chi-Square = 184.966 (P = 0.0242)
Satorra-Bentler Scaled Chi-Square = 178.940 (P = 0.0476)
Chi-Square Corrected for Non-Normality = 399.301 (P = 0.0)
Estimated Non-centrality Parameter (NCP) = 29.940
90 Percent Confidence Interval for NCP = (0.379 ; 67.713)
Minimum Fit Function Value = 0.766

Population Discrepancy Function Value (F0) = 0.118
90 Percent Confidence Interval for F0 = (0.0149 ; 0.267)
Root Mean Square Error of Approximation (RMSEA) = 0.0281
90 Percent Confidence Interval for RMSEA = (0.00317 ; 0.0423)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.996
Expected Cross-Validation Index (ECVI) = 1.185
90 Percent Confidence Interval for ECVI = (1.068 ; 1.334)
ECVI for Saturated Model = 1.654
ECVI for Independence Model = 23.968
Chi-Square for Independence Model with 190 Degrees of Freedom = 6047.896
Independence AIC = 6087.896
Model AIC = 300.940
Saturated AIC = 420.000
Independence CAIC = 6178.721
Model CAIC = 577.957
Saturated CAIC = 1373.665
Normed Fit Index (NFI) = 0.970
Non-Normed Fit Index (NNFI) = 0.993
Parsimony Normed Fit Index (PNFI) = 0.761
Comparative Fit Index (CFI) = 0.995
Incremental Fit Index (IFI) = 0.995
Relative Fit Index (RFI) = 0.962
Critical N (CN) = 273.643
Root Mean Square Residual (RMR) = 0.0711
Standardised RMR = 0.0592
Goodness of Fit Index (GFI) = 0.932
Adjusted Goodness of Fit Index (AGFI) = 0.904
Parsimony Goodness of Fit Index (PGFI) = 0.661

As is evident from Table 4.68, the model achieved a Satorra-Bentler Scaled χ^2 value of 178.940, with 149 degrees of freedom. The p-value associated with the sample χ^2 (.0476) is indicative of a significant test statistic ($p < .05$). Consequently, the model is unable to reproduce the observed covariance matrix to the degree of accuracy that could be attributed to sampling error only, consequently, $H_{01a}: \Sigma = \Sigma(\Theta)$ is rejected in favour of $H_{a1a}: \Sigma \neq \Sigma(\Theta)$ (Kelloway, 1998). In other words, the null hypothesis ($H_{01a}: \text{RMSEA} = 0$) is rejected in favour of the alternate hypothesis ($H_{a1a}: \text{RMSEA} > 0$).

The RMSEA value of .0281 is indicative of good model fit, in that values below .05 indicate good fit (Kelloway, 1998). The upper bound of the 90 percent confidence interval for RMSEA presented in Table 4.68 (.00317; .0423) is below the critical value of .05, providing further evidence of good model fit. A test of the significance of the obtained RMSEA value is performed by LISREL by testing the close fit null hypothesis ($H_{01b}: \text{RMSEA} < 0.05$) against the close fit alternate hypothesis ($H_{a1b}: \text{RMSEA} > 0.05$). As can be seen from Table 4.68, the

probability of obtaining the sample RMSEA value of .0281 if the model would have shown close fit in the parameter is sufficiently large not to reject the close fit assumption in the parameter (i.e., H_{01b} is not rejected; $p > .05$).

The model ECVI (1.185) is smaller than the values obtained from both the independence model (23.968) and saturated model (1.654). Thus, the fitted model appears to have a higher probability of being replicated in a cross-validation sample as opposed to the saturated and independence models.

The GIF value (.932) is also indicative of good model fit, whilst the AGIF value (.904) further indicates good fit. Values greater than .9 are indicative of good fit (Jöreskog & Sörbom, 1993; Kelloway, 1998).

The AIC and CAIC, which is adjusted for sample size effects (Diamantopoulos & Siguaw, 2000), are fit statistics that comment on the parsimony of the fitted model. The AIC and CAIC models need to be compared to the independence and saturated models, as was the case with EVCI. The model AIC (300.940) is smaller than the values obtained from both the independence model (6087.896) and saturated model (420.0). Additionally, the model CAIC (577.957) also had values lower than the CAIC independence model (6178.721) and CAIC saturated model (1373.665). Thus, a more parsimonious fitted model appears to have a higher probability of being replicated in a cross-validation sample as opposed to the saturated and independence models.

The RMR value of .0711 and SRMR value of .0592 are indicative of reasonable model fit. SRMR values less than .5 are indicative of good model fit (Kelloway, 1998).

4.10.1 Examination of the Modified Oehley - Herselman Talent Management Competency Model Residuals (model D)

Standardised residuals are interpreted as z-scores (i.e. in terms of standard deviation units from the mean). Standardised residuals are considered large if they exceed +/- 2.58 (Diamantopoulos & Siguaw, 2000). Residuals ought to be distributed symmetrically around zero. A large positive residual indicates that the model underestimates the covariance between two variables, while a large negative residual indicates that the model overestimates

the covariance between variables. If the model generally underestimates covariance terms, it indicates that additional explanatory paths ought to be added to the model, which could better account for the covariance between the variables. Consequently, if the model tends to overestimate the covariance between indicator variables paths that are associated with the particular covariance terms ought to be removed from the model (Jöreskog & Sörbom, 1993). The standardised residuals resulting from the covariance estimates derived from the estimated model parameters obtained for the modified model is presented in Table 4.69.

Table 4.69

Modified Oehley - Herselman Talent Management structural model standardised residuals (model D)

	POS_1	POS_2	PDO_1	PDO_2	FO_1	FO_2	AC_1	AC_2	NC_1	NC_2
POS_1	--									
POS_2	--	--								
PDO_1	--	--	--							
PDO_2	--	--	--	--						
FO_1	-0.965	-1.630	0.709	1.757	--					
FO_2	0.327	-0.262	1.556	2.427	-0.038	--				
AC_1	0.450	--	1.584	2.418	-0.081	0.469	--			
AC_2	0.786	-0.396	0.670	1.149	0.576	2.069	--	--		
NC_1	-0.603	-1.162	1.457	1.750	0.349	1.020	-0.176	-0.793	--	
NC_2	-0.828	-0.732	2.017	3.447	0.806	-0.385	1.028	0.777	--	--
JS_1	-1.053	--	0.920	3.043	-0.029	1.779	0.603	0.928	0.626	0.335
JS_2	--	-3.476	0.702	2.054	0.222	1.358	-0.532	0.654	0.429	0.400
OT_1	--	--	--	0.839	0.656	1.338	--	-1.092	-0.287	1.330
OT_2	--	--	--	--	0.919	1.002	--	-0.416	0.432	2.400
ITQ_1	-1.135	0.448	0.747	-0.700	-1.693	-1.563	--	0.044	-0.541	-1.205
ITQ_2	0.870	1.967	-0.002	-0.845	-1.358	-0.056	--	1.027	0.083	0.783
TMM_1	-1.253	-0.596	0.230	0.689	-1.252	-0.821	-2.023	-0.151	-2.420	-1.722
TMM_2	0.341	0.813	1.814	1.834	-2.199	-0.880	-0.384	1.038	-1.124	0.349
DO_1	-1.815	-1.199	1.101	2.074	2.058	1.831	-1.160	-0.180	1.372	-0.153
DO_2	-1.480	-1.507	1.156	1.961	4.053	3.635	-0.433	-0.225	2.016	0.534
	JS_1	JS_2	OT_1	OT_2	ITQ_1	ITQ_2	DO_1	DO_2	TMM_1	TMM_2
JS_1	--									
JS_2	--	4.125								
OT_1	0.529	1.017	--							
OT_2	1.581	1.938	--							
ITQ_1	-0.970	-0.709	--	--	--					
ITQ_2	0.599	1.493	-1.671	-1.801	--	--				
TMM_1	-1.593	-1.182	-0.711	-0.460	1.061	0.440	--	0.709	--	

TMM_2	-0.603	-0.972	0.841	1.490	-0.123	-0.347	2.090	2.181	--	--
DO_1	1.304	1.572	0.577	1.112	-0.286	-1.138	--	--	--	--
DO_2	1.975	2.156	0.834	0.471	-0.984	-1.935	--	--	--	--

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

As can be seen in Table 4.69 and as summarised in Table 4.70 five standardised residuals are greater than 2.58, with one standardised residuals less than -2.58. Consequently, there is a tendency for the model to underestimate observed covariance terms. The fact that only six residuals were above and/or below the critical cut-off of +/- 2.58 comments favourably on the fit of the model. Considering that, only 2.857% (6/210) of all the variance-covariance estimates that were derived from the measurement model parameters can be regarded as poor estimates.

Table 4.70

Summary statistics for standardised residuals

Smallest Standardised Residual	-3.476
Median	0.000
Largest Standardised Residual	4.125
Large negative standardised residuals	
Residual for JS_2 and POS_2	-3.476
Largest positive standardised residuals	
Residual for DO_2 and FO_1	4.054
Residual for DO_2 and FO_2	3.635
Residual for NC_2 and PDO_2	3.210
Residual for JS_2 and JS_1	2.843
Residual for AC_1 and PDO_2	2.691
Residual for JS_1 and PDO_2	2.608

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, DO = Develops Others

A stem-leaf plot is depicted in Figure 4.5, which provides a graphical representation of the standardised residual distributions. As is evident from the stem-leaf plot, the median of the distribution is zero, with a slight positively skewed distribution implying that the model tends to underestimate the observed covariance terms.

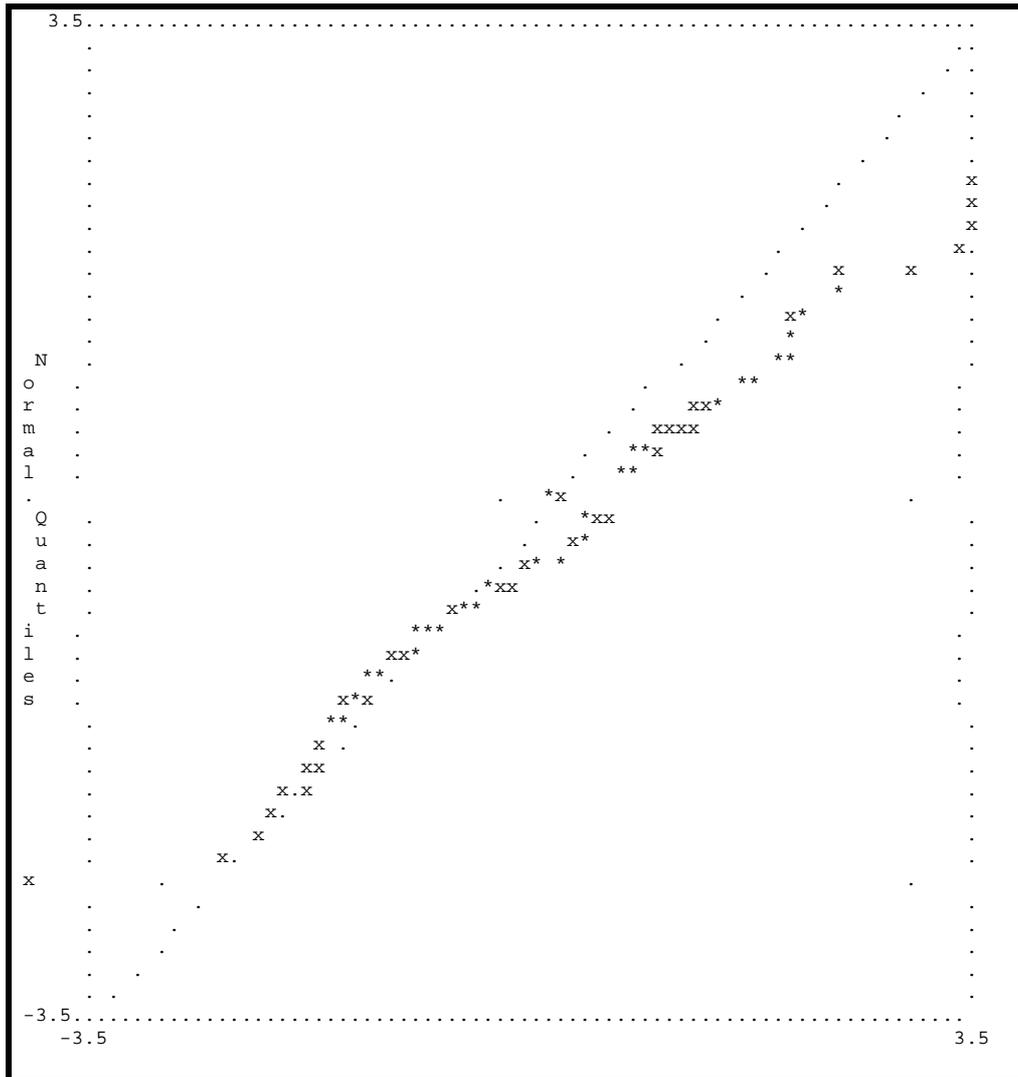


Figure 4.6. Modified Oehley - Herselman talent management competency structural model Q-plot of standardised residuals (model D)

4.10.2 Examination of the Parameter Estimates Obtained for the Modified Oehley - Herselman Talent Management Competency Model (model D)

The unstandardised **B** and **Γ** matrices were again examined to determine whether previous findings (see paragraph 4.9.2 and 4.9.3) were supported following the modification of the original Oehley - Herselman talent management model. The unstandardised **B** and **Γ** matrices are depicted in Tables 4.71 and 4.72 respectively.

Table 4.71***Modified Oehley - Herselman talent management competency model unstandardised B matrix (model D)***

	POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
POS		0.448 (0.107) 4.178							0.036 (0.036) 0.997
PDO							0.456 (0.087) 5.218		-0.020 (0.025) -0.828
FO	0.182 (0.070) 2.593								
AC	0.399 (0.112) 3.573		0.381 (0.091) 4.171			-0.354 (0.158) -2.240	0.493 (0.116) 4.248		
NC			0.303 (0.079) 3.845	0.381 (0.088) 4.313		0.222 (0.086) 2.587			
JS		0.163 (0.081) 2.008	0.201 (0.079) 2.565	0.590 (0.22) 4.837					
OT	0.559 (0.077) 7.244								
ITQ				-0.458 (0.107) -4.266	-0.097 (0.087) -1.125	-0.002 (0.079) -0.031	-0.256 (0.078) -3.305		
DO									

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

As is evident from Table 4.71, four null hypotheses were not rejected in that the t-values associated with the β_{ij} estimates were smaller than $|1.96|$ and the estimates were therefore not statistically significant ($p > .05$). The statistical null hypotheses that failed to be rejected, and their associated t-values, were $H_{03}(-0.828)$, $H_{04}(0.997)$, $H_{016}(-1.125)$ and $H_{019}(-0.031)$. Support was therefore not obtained for the corresponding path-specific substantive research hypotheses (hypotheses 3, 4, 16, and 19). These path-specific substantive research hypotheses; *Develops Others* positively influences *Perceived Development Opportunities*, *Develops Others* positively influences *Perceived Organisational Support*, *Normative Commitment* negatively influences *Intention to Quit* and *Job Satisfaction* negatively influences *Intention to Quit*. The aforementioned path-specific substantive research hypotheses found to be insignificant were also originally found to be insignificant in the original Oehley - Herselman talent management model (see paragraph 4.9.2).

For all the other hypotheses namely; H_{05} - H_{08} , H_{010} - H_{014} , H_{017} and H_{018} the t-values were sufficiently large to warrant the rejection of the null hypotheses. However, the sign associated with β_{46} was inconsistent with the nature of the proposed direction of the effects of *Job Satisfaction* on *Affective Commitment* (hypothesis 17) and was consequently not corroborated despite the significant path coefficient found. This finding was consistent with the original findings (see paragraph 4.9.2).

Additionally, the path-specific substantive research hypotheses; *Perceived Organisational Support* positively influences *Job Satisfaction* (hypothesis 9) and *Normative Commitment* positively influences *Job Satisfaction* (hypothesis 15), were not formally investigated. The aforementioned paths had been removed from the modified Oehley - Herselman talent management competency model (model C), as these two paths had contributed to an inadmissible negative R^2 associated with *Job Satisfaction* (see paragraph 4.9.7).

Consequently only H_{05} - H_{08} , H_{010} - H_{014} and H_{018} were rejected in favour of H_{a5} - H_{a8} , H_{a10} - H_{a14} , and H_{a18} . Support was however found for the following path-specific substantive research hypotheses.

That *Perceived Development Opportunities* positively influences *Perceived Organisational Support* (hypothesis 5). This finding would consequently denote that employees' whom perceive developmental opportunities to be both accessible and available to them would have a favourable influence on their perceptions of *Organisational Support*.

That *Perceived Development Opportunities* positively influences *Job Satisfaction* (hypothesis 6), This finding would denote that employees who perceive development opportunities to be both available and accessible, to improve their competence, would have a positive influence on their level of *Job Satisfaction*.

That *Perceived Organisational Support* positively influences *Organisational Trust* (hypothesis 7) this finding would denote that employees' whom perceive their organisation to be supportive of them would be more trusting of their organisations. This finding is consistent with findings of Armstrong-Stassen (1998), Dirks and Ferrin (2002).

That *Perceived Organisational Support* positively influences *Affective Commitment* (hypothesis 8), this finding in terms of the social exchange theory proposed by Blau (1964), would denote that employees who perceive their organisation as supportive of them (i.e. their developmental needs) would create feelings of obligation among employees to reciprocate this commitment to them through their commitment to their organisation (*Affective Commitment*). This finding is consistent with other research findings (Eisenberger et al., 1990; Hutchison, 1997; Nasurdin et al., 2008; Rhoades et al., 2001; Wayne et al., 1997).

That *Perceived Organisational Support* positively influences *Felt Obligation* (hypothesis 10), this finding would denote that in terms of the organisational support theory (Eisenberger et al., 1986) employees' who perceive to have received high levels of support from their organisation, would feel an obligation to reciprocate their organisations support.

That *Organisational Trust* positively influences *Affective Commitment* (hypothesis 11), this finding would denote that employees' who perceive their organisation as trustworthy, would have a positive influence on their emotional attachment to their organisation. This finding is consistent with other research findings (Albrecht & Travaglione, 2003).

That *Organisational Trust* negatively influences *Intention to Quit* (hypothesis 12). This finding would denote that employees' who consider their organisation as trustworthy would have a favourable influence on employees' intentions to continue membership with their organisation. This finding is consistent with Whitener's (2001) suggestion that employees' interpret the actions of management (organisational representatives) and reciprocates with favourable work attitudes (i.e. continued organisational membership).

That *Affective Commitment* positively influences *Job Satisfaction* (hypothesis 13). This would denote that employees' emotional attachment to their organisation would favourably influence their level of *Job Satisfaction*. This finding is consistent with other research findings (Salancik & Pfeffer, 1978; Tett & Meyer, 1993).

That *Affective Commitment* negatively influences *Intention to Quit* (hypothesis 14). This finding would denote that employees', who are emotionally attached to their organisation, would have a favourable influence on employees' to continue membership with their

organisation. This finding is consistent with previous research findings (Barauch, 1998; Meyer & Allen, 1997; Oehley, 2007).

That *Job Satisfaction* positively influences *Normative Commitment* (hypothesis 18). This finding denotes that employees' level of *Job Satisfaction* has a favourable influence on employees' moral obligation to remain with their current organisation. This finding is consistent with other research findings (Colquitt et al., 2010; Meyer et al., 2002, Meyer & Allen, 1997).

The newly included path from *Affective Commitment* to *Normative Commitment*, was found to be statistically significant ($p < .05$). The two previously included paths namely; the path from *Felt Obligation* to *Job Satisfaction* (included in first modification) and the path from *Organisational Trust* to *Perceived Development Opportunities* (included in second modification) remained significant in the Oehley - Herselman talent management competency model.

Table 4.72

Modified Oehley - Herselman talent management competency model unstandardised Γ matrix (model D)

	TMM
POS	
PDO	
FO	
AC	
NC	
JS	
OT	
ITQ	0.252
DO	(0.031)
	8.042

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

As is evident from Table 4.72, hypothesis H_{02} was again rejected in that the t-value obtained (8.042) was greater than 1.96 and γ_{91} was consequently statistically significant ($p < .05$). Thus,

support was found for hypothesis 2 that *Talent Management Mindset* positively influences *Develops Others*.

Additionally, the MI values calculated for the **B** and **Γ** matrices were investigated to determine whether additional paths ought to be included in the model. The MI values calculated for the **B** matrix revealed one parameter with a large MI value (> 6.64), however, no sound theoretical grounding and justification could be found to support the inclusion of the path. Consequently, no additional paths were included at this stage of the analysis. The modification indices calculated for **B** and **Γ** concerning this model will be discussed in paragraph 4.10.3

The inter - latent variable correlation matrix presented in Table 4.73 for the modified structural model (Model D) suggested that the latent variables included in this model correlate low to moderate with each other.

Table 4.73

Inter - latent variable correlation matrix for the Oehley - Herselman talent management competency structural model

	POS	PDO	FO	AC	NC	JS	OT	ITQ	DO	TMM
POS	1.000									
PDO	0.630	1.000								
FO	0.182	0.114	1.000							
AC	0.626	0.448	0.362	1.000						
NC	0.407	0.306	0.538	0.614	1.000					
JS	0.509	0.451	0.434	0.556	0.565	1.000				
OT	0.685	0.634	0.124	0.636	0.392	0.504	1.000			
ITQ	-0.503	-0.399	-0.251	-0.683	-0.481	-0.441	-0.587	1.000		
DO	0.031	-0.013	0.006	0.019	0.011	0.010	0.017	-0.014	1.000	
TMM	0.008	-0.003	0.001	0.005	0.003	0.003	0.004	-0.004	0.252	1.000

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others, TMM = Talent Management Mindset

The R^2 for the structural equations were also investigated and is shown in Table 4.74. The R^2 estimates represent the proportion of variance that the structural model accounts for in each of the endogenous latent variables. Large R^2 estimates are desirable in that they reveal that the structural model account for a significant portion of the variance in each of the endogenous

latent variables, whilst small R^2 estimates reveal that the structural model requires further elaboration. As can be seen in Table 4.74 the modified Oehley - Herselman talent management structural model quite successfully accounted for the variance in *Organisational Trust*, *Normative Commitment*, *Affective Commitment* and *Intention to Quit*. The fact that the model succeeded in explaining approximately 51% of the variance in the focal endogenous latent variable is especially gratifying. However, the Oehley - Herselman talent management structural model was less successful in its attempt to account for the variance in *Job Satisfaction*, *Develops Others*, *Felt Obligation*, *Perceived Organisational Support* and *Perceived Developmental Opportunities*. The structural model failure to account for the variance in the aforementioned endogenous latent variables is somewhat disappointing.

Table 4.74

Squared multiple correlation values for endogenous latent variables included in the modified Oehley - Herselman talent management competency model (model D)

POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
0.365	0.371	0.033	0.402	0.523	0.382	0.453	0.511	0.063

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

4.10.3 Structural Model Modification Indices

The Oehley - Herselman talent management structural model depicted in Figure 4.4 suggests that it fits the data quite well. Modification indices calculated for the Γ and \mathbf{B} matrices are depicted in Table 4.75 and Table 4.76.

Table 4.75 reveals that none of the MI values calculated for the Γ matrix were large (>6.64). Thus, none of the currently fixed parameters in Γ were considered to be set free. However, Table 4.76 reveals one MI value calculated for the \mathbf{B} matrix was large (> 6.64) and ought to be considered for possible modification. Following the procedure recommended by Jöreskog and Sörbom (1993), Table 4.76 suggests that a path be included between *Job Satisfaction* and *Felt Obligation* (MI value of 15.38). This path had previously been considered (see paragraph 4.9.3) although no convincing substantive theoretical argument could be marshalled to support the inclusion of this path. Consequently, no further modifications were made to the revised Oehley - Herselman talent management competency model (model D).

Table 4.75

Modified Oehley - Herselman talent management competency model modification indices calculated for the Γ matrix after fourth modification (model D)

TMM	
POS	1.878
PDO	0.507
FO	1.083
AC	2.353
NC	2.218
JS	0.386
OT	0.119
ITQ	0.002
DO	--

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others, TMM = Talent Management Mindset

Table 4.76

Modified Oehley - Herselman talent management competency model modification indices calculated for the B matrix after fourth modification (model D)

	POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
POS	--	--	3.322	0.468	5.879	2.391	0.061	0.016	--
PDO	0.028	--	2.415	2.049	5.193	2.049	--	0.142	--
FO	--	3.953	--	0.721	0.584	15.38	2.134	1.775	0.101
AC	--	1.396	--	--	--	--	--	--	0.017
NC	0.306	0.682	--	--	--	--	0.761	0.025	1.91
JS	--	--	--	--	--	--	--	--	2.099
OT	--	--	2.455	0.219	4.491	6.416	--	0.288	3.132
ITQ	0.002	1.753	0.640	--	--	--	--	--	0.306
DO	3.444	1.229	0.212	0.312	3.119	3.311	3.444	0.126	--

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

The Oehley - Herselman talent management competency model was fitted under the assumption that structural error terms were uncorrelated. The MI values calculated for the ψ matrix is presented in Table 4.77.

Table 4.77

Modified Oehley - Herselman talent management competency model modification indices calculated for the Ψ matrix (model D)

	POS	PDO	FO	AC	NC	JS	OT	ITQ	DO
POS	--	--	--	--	--	--	--	--	0.291
PDO	--	--	--	--	--	--	--	--	0.011
FO	3.198	2.313	--	--	--	--	2.419	--	0.157
AC	0.711	1.052	--	--	--	--	--	--	0.000
NC	3.595	2.273	--	0.081	--	--	1.815	--	2.241
JS	2.698	--	--	0.417	--	--	2.552	--	2.247
OT	0.147	--	--	--	--	--	--	--	3.244
ITQ	0.605	1.860	0.635	0.812	1.424	--	0.001	--	0.312
DO	--	--	--	--	--	--	--	--	--

POS = Perceived Organisational Support, PDO = Perceived Development Opportunities, FO = Felt Obligation, AC = Affective Commitment, NC = Normative Commitment, JS = Job Satisfaction, OT = Organisational Trust, ITQ = Intention to Quit, DO = Develops Others

Table 4.76 reveals that if the assumption that the structural error terms were uncorrelated was relaxed the fit of the structural model would not increase significantly ($p < .01$).

4.11 SUMMARY

The objective of this chapter was to report on the results obtained from the analysis of the research data. The forthcoming chapter will summarise the results and will discuss the overall conclusions derived from this study. Additionally, the practical implications and the limitations of this research endeavour will be addressed. This chapter will conclude with recommendations for possible future research.

CHAPTER 5

DISCUSSION OF RESEARCH RESULTS AND RECOMMENDATIONS FOR FUTURE RESEARCH

5.1 INTRODUCTION

The primary objective of this research study was to investigate the psychological process underlying employees' intention to remain with their current organisation as a consequence of their perceptions of training and development initiatives. Previous research has investigated and show that line managers talent management competencies and related human resource management strategies contribute towards furthering the understanding of employees' intention to remain as a consequence of development initiatives. Consequently, the decision was taken to elaborate on the talent management study undertaken by Oehley (2007).

In the study undertaken by Oehley (2007) she sought to investigate the nature of the causal linkages between eight latent talent management competency variables and the latent outcomes variables of *Job Satisfaction*, *Affective Commitment* and *Intention to Quit*. She proposed that specific latent line management talent management competencies would result in the retention of skilled employees. Oehley (2007) failed to find support for various linkages between the latent talent management competency variables and the latent outcomes variables. Of particular interest for the purposes of this research study Oehley (2007) suggested, although was unable to empirically prove, a relationship between the latent line management talent management competency *Talent Management Mindset* and the latent line manager talent management competency *Develops Others*. However, she notes that this could possibly be the result of the omission of various moderator and/or mediator variables.

In an attempt to further the understanding of the psychological process underlying employees' intention to remain with their current organisation as a consequence of their perceptions of training and development initiatives the objective of this research initiative was to modify and elaborate on the partial talent management competency model proposed by Oehley (2007) and empirically validate the expanded model.

Oehley (2007) proposed various recommendations that were to some extent addressed in this research endeavour. She proposed that an alternate measure to the Job Descriptive Index should be employed to measure the construct of *Job Satisfaction*. As such, the MSQ-SF was employed in the current study to measure the construct of *Job Satisfaction*. Oehley (2007) further recommended that conceptualisation of the construct of *Organisational Commitment* be extended beyond focusing solely of *Affective Commitment*, but rather to include all three components of Allen and Meyer's (1990) three-component model of organisational commitment (*Affective, Normative and Continuance Commitment*) when investigating the model in future research studies. Guided by the nature and research objectives of this study, only *Affective Commitment* and *Normative Commitment* were included in the current research endeavour.

Furthermore, Oehley (2007) failed to find support for various linkages between the latent talent management competency variables and the latent outcomes variables, and attributed this due to the omission of various moderator and/or mediator latent variables. She consequently recommended the inclusion of various moderator and/or mediator latent variables in future research investigations on the model.

Smuts (2011) argued that managerial actions in and by themselves will probably not directly determine the prevailing levels of satisfaction and commitment in followers. Rather the level of competence that line managers exhibit on the talent management competencies shapes the nature of the work environment in which the followers of the line manager functions. The talent management actions of management bring about material changes to the work environment, where followers respond to these material changes. The response is, however, not directly determined by the objectively created reality created by management. It is not the objective reality that directly affects employee behaviour. The work environment created by managers is cognitively assessed (Chan & Taylor as cited in Smuts, 2011) and psychologically interpreted by the followers. It is fundamentally this psychological interpretation of the work environment, rather than the objective reality itself, that expresses itself in organisation and job attitudes like *Job Satisfaction* and *Organisational Commitment* (Castro, Perifan & Bueno as cited in Smuts, 2011). Smuts (2011) thereby, however, does not deny that the managerial competencies might also be psychologically interpreted (amongst others in terms of its intention) by the employee and that these interpretations could also explain variance in *Job Satisfaction* and *Organisational Commitment*. Smuts (2011)

acknowledges that it is at the same time also possible that a certain (ideal) work environment can be created by the talent management competencies but that the behaviour that creates the environment is either not noticed by employees and/or that the ideal environment is not psychologically registered.

The argument presented by Smuts (2011) highlights a deficit in the original Oehley (2007) model and provides a possible explanation why Oehley (2007) failed to find support for the causal paths she proposed between specific latent talent management competencies and *Job Satisfaction*, *Organisational Commitment*, and *Turnover Intention*.

Considering, the argument proposed by Smuts (2011), the Oehley - Herselman talent management competency model made provision for specific organisational outcomes brought about by the latent talent management competency *Develops Others* and for the mediating role of the psychological interpretation of these features of the work environment created through this talent management competency. The latent construct of *Perceived Organisational Support* was added to the proposed Oehley - Herselman talent management competency model as a mediator between the latent talent management competency *Develops Others* and the latent outcome variables *Job Satisfaction*, *Organisation Commitment* and *Intention to Quit*.

It was further argued in the paragraph 2.7 that the latent line manager competency *Develops Others* has an influence in the development of employees' *Perceived Organisational Support* and that this influence is most likely both direct and indirect in nature. Considering that line managers facilitate the development of an organisational environment that is perceived by employees to denote that their organisation is supportive of their developmental needs, but also that the actions of line managers are interpreted as signals of the extent to which their organisation is supportive of them. Furthermore, in terms of the behavioural indicators as described by (Oehley, 2007) concerning the latent line manager competency *Develops Others*, their level of competence on the construct would have an influence on the extent to which developmental opportunities are actually available to employees, which ought to correlate positively with employees' perceptions of developmental opportunities, being available. To the extent that these development opportunities are perceived to be valuable, the perceived availability of developmental opportunities should result in *Perceived Organisational Support*. The foregoing arguments were put forward in support of a causal

relationship between the latent line manager competency *Develops Others* and the latent construct of *Perceived Organisational Support*.

Following the inclusion of the latent variable of *Perceived Organisational Support*, to the proposed Oehley - Herselman talent management competency model, a number of latent outcome variables related to *Perceived Organisational Support* were also included to the model. These latent outcome variables included; *Organisational Trust*, *Felt Obligation* and *Normative Commitment*. Other latent outcome variables related to *Perceived Organisation Support* had been retained from the original partial talent management competency model proposed by Oehley (2007). They included; *Job Satisfaction*, *Organisational Commitment (Affective Commitment)*, and *Intention to Quit*.

The current study sought to contribute to the work of Oehley (2007) and Smuts (2011), through utilising the partial talent management competency model developed by Oehley (2007) as a foundation, where additional latent variables were added to the model, in an attempt to investigate how employees' perceptions of developmental initiatives, as a result of line managers' competence on the talent management competency *Develops Others* causally relate to their *Intention to Quit* their current employer. The Oehley - Herselman talent management competency model was subsequently developed and empirically investigated.

5.2 RESULTS

5.2.1 Evaluation of Measurement Model

To examine the extent to which the indicator variables were successful in operationalising the latent variables that comprised the Oehley - Herselman talent management competency model, the fit of the Oehley - Herselman talent management competency measurement model was investigated. To this end, the overall goodness-of-fit of the measurement was tested by means of structural equation modelling (SEM). Numerous indices were interpreted to assess the goodness-of-fit of the measurement model and it was determined that the measurement model fitted the data very well, in that the both the null hypotheses of exact fit and close fit were not rejected ($p > .05$).

All the item parcels loaded statistically significantly on the latent variables they were designed to represent. Additionally, the squared multiple correlation values for the parcel indicator variables were overall quite high and measurement error variances generally quite low (TMM_2 and DO_2 were the only two exceptions). Therefore, all measures employed provided a valid reflection of the specific latent variables they were meant to represent, and thereby legitimising the use of the proposed operationalisation of the latent variables to empirically investigate the Oehley - Herselman talent management competency structural model.

It should, however, be noted that concern was raised regarding the success with which the second item parcel of the *Displays a Talent Management Mindset* latent variable and the second item parcel of the *Develops Others* latent variable reflect the latent variables they were earmarked to represent. The inadmissible parameter estimates obtained for TMM_1 and DO_1 also eroded confidence in the measurement model.

The aforementioned findings consequently, allowed the causal relationships hypothesised in the Oehley - Herselman talent management competency model to be investigated through SEM.

5.2.2 Evaluation of Structural Model

The original Oehley - Herselman talent management competency structural model (Figure 3.1) did not display exact fit, although good close fit was displayed.

Analysis of the Γ matrix revealed that the causal relationship between *Displays a Talent Management Mindset* and *Develops Others* was significant. Analysis of the \mathbf{B} matrix of the original Oehley - Herselman talent management structural model indicated that six path specific substantive research hypotheses were not supported. These hypotheses included; *Perceived Organisational Support* positively influences *Job Satisfaction*, *Perceived Development Opportunities* positively influences *Job Satisfaction*, *Normative Commitment* negatively influences *Intention to Quit*, *Develops Others* positively influences *Perceived Organisational Support*, *Develops Others* positively influences *Perceived Development Opportunities* and *Job Satisfaction* negatively influences *Intention to Quit*. Additionally, two

hypotheses had signs that were inconsistent with the nature of the proposed direction of the effects of *Job Satisfaction* on *Affective Commitment* and *Normative Commitment* on *Job Satisfaction* and consequently these hypotheses were not supported, although significant path coefficients were found.

The modification indices calculated for the Γ matrix did not suggest the inclusion of any additional paths. The modification indices calculated for the \mathbf{B} matrix suggested a causal relationship between *Felt Obligation* and *Job Satisfaction* should be included in the structural model. This causal relationship did make substantive sense. It was noted in the literature study, that employees' who receive encouraging treatments from their organisation would be more inclined to reciprocate the organisations favour with favourable work attitudes, consistent with the norm of reciprocity. As *Job Satisfaction* may be regarded as a favourable work attitude, it did make substantive sense that a positive causal relationship could exist between *Felt Obligation* and *Job Satisfaction* and consequently this path was added to the Oehley - Herselman talent management structural model.

Following the inclusion of a path between *Felt Obligation* and *Job Satisfaction*, whilst retaining all the non-significant paths and paths with inconsistent signs, the model was re-fitted and the output was again analysed. The model fit improved and the newly added path was statistically significant. Additionally, the path *Perceived Development Opportunities* to *Job Satisfaction*, originally found to be non-significant, was statistically significant ($p < .05$) following the modification to the model through the inclusion of a path between *Felt Obligation* and *Job Satisfaction*.

The modification indices calculated for the \mathbf{B} matrix subsequently suggested that a path should be included between *Organisational Trust* and *Perceived Developmental Opportunities*. This would essentially imply a feedback loop existing, where employees' *Perceive Developmental Opportunities* to be available and accessible which has influenced their perceptions of organisational support consequently resulting in employees' trusting their organisation. It made substantive sense, in that the exchange relationship has not been altered and employees would continue to *Perceived Developmental Opportunities* to be available and accessible to them. Consequently, this path was included to the structural model.

Following the inclusion of a path between *Organisational Trust* and *Perceived Developmental Opportunities*, whilst retaining all the non-significant paths and paths with inconsistent signs, the model was re-fitted and the output was again analysed. The model fit again improved and the newly added path was found to be statistically significant.

The modification indices for the Γ and \mathbf{B} matrix were investigated for further possible modifications. Although, parameters with large modification index values were present, the decision was taken not to include any additional paths to the Oehley - Herselman talent management competency structural model. However on further inspection of the results, it was revealed that a negative R^2 value was associated with *Job Satisfaction*, which eroded confidence in the modified Oehley - Herselman talent management competency model. Negative R^2 values were also found for *Job Satisfaction* and *Affective Commitment* during the initial fitting of the Oehley - Herselman talent management competency model (results not shown). Following the first and second modifications the negative R^2 value associated with *Affective Commitment* was successfully addressed, whilst the negative R^2 value associated with *Job Satisfaction* persisted. This situation was addressed through the deletion of the path from *Perceived Organisational Support* to *Job Satisfaction* (found to be non-significant) and the path from *Normative Commitment* to *Job Satisfaction* (found to have a sign inconsistent with the nature of the proposed effect).

Following the decision to remove the aforementioned paths, the model was re-fitted and the output was once again analysed. The model fit slightly deteriorated but the problem with the inadmissible R^2 value associated with *Job Satisfaction* was solved. The modification indices calculated for the \mathbf{B} matrix subsequently suggested a path between *Affective Commitment* and *Normative Commitment*. This causal relationship did make substantive sense. This causal relationship would denote that as employees' exhibit increased *Affective Commitment*, their *Normative Commitment* (i.e. their obligation to their organisation) would increase. Meta-analytic findings by Meyer et al. (2002) provide support for a positive causal relationship between *Affective Commitment* and *Normative Commitment*. Consequently, path from *Affective Commitment* to *Normative Commitment* was included to the structural model.

Following the inclusion of a path from *Affective Commitment* to *Normative Commitment*, whilst retaining all other non-significant paths and the path with inconsistent sign (path from *Job Satisfaction* to *Affective Commitment*), the model was re-fitted and the output was again

analysed. The modification indices for the Γ and B matrix were investigated for further possible modifications. Although, the B matrix suggested that a path be included from *Job Satisfaction* to *Felt Obligation* as a large modification index value was present, but no convincing substantive theoretical argument could be marshalled to support the inclusion of this path. A full analysis of the modified Oehley - Herselman talent management competency model was subsequently undertaken.

Following the modifications to the model, investigation of the overall goodness-of-fit statistics revealed that the final Oehley - Herselman talent management competency model fitted the data very well. Although the null hypothesis of exact fit was rejected ($p < .05$) the close fit null hypothesis was not rejected ($p > .05$). It should be noted that in SEM it is acceptable to postulate causal relationships between variables, although based on SEM literature, the empirical findings of the causal relationships through utilizing SEM cannot be justified because the results are based on correlations.

A significant positive relationship¹³ was found to exist between the level of competence of line managers on the *Display a Talent Management Mindset* competency and the level of competence achieved on the *Develops Others* competency. This finding is unique, in that both Oehley (2007) and Smuts (2011) were unable to find empirical support for the relationship. The significance of the positive relationship between *Displays a Talent Management Mindset* and *Develops Others* provides empirical evidence for the first time that of the importance of instilling a *Talent Management Mindset* among line managers and the significant influence that it has on the competency *Develops Others*.

The lack of support for the positive relationship between the level of competence line managers achieved on the *Develops Others* competency and the two outcome latent variables of *Perceived Development Opportunities* and *Perceived Organisational Support* was somewhat disappointing, despite the sound theoretical arguments put forward in support of the relationships. A possible explanation of this finding may be that the effect of *Develops Others* on *Perceived Organisational Support* is indirect in that its effect is mediated by *Perceived Development Opportunities*. This line of reasoning is partially supported by the

¹³The theorizing that resulted in the explanatory structural model was explicitly causal. The *ex post facto* nature of the research design, however, precludes the possibility of making definitive causal inferences from statistically significant path coefficients. When considering the practical implications the assumption, however, still is that the paths represent causal influences.

data. The lack of support for the hypothesis that the level of competence that line managers achieve on the *Develops Others* competency affects employees' perceptions of *Perceived Development Opportunities* is difficult to explain. It is possible that employees see development opportunities as an organisational outcome independent of the manager. It is possible that managers are seen as instruments that affect access to development opportunities rather than create opportunities as such. This implies that the latent variable *Perceived Development Opportunities* will have to be redefined in future research studies with stronger emphasis on facilitating access to existing development opportunities.

As indicated above, it was found that a significant positive relationship exists between *Perceived Developmental Opportunities* and *Perceived Organisational Support*. Therefore, employees who perceived developmental opportunities to be both available and accessible to them, would perceive their organisation to be supportive of them and their developmental needs. This causal relationship does make substantive sense and is in congruence with the theorising of this study.

It was found that a significant positive relationship exists between *Perceived Development Opportunities* and *Job Satisfaction*. Consequently, employees' who perceived developmental opportunities to be both accessible and available to them, tend to experience higher levels of *Job Satisfaction*. This suggests that development and growth is intrinsically satisfying. It could, however, also be that exposure to development holds promises of improvements in future job performance with anticipated associated rewards.

It was empirically shown that *Perceived Organisational Support* had a significant positive effect on three outcome latent variables in the Oehley - Herselman talent management competency model namely; *Organisational Trust*, *Affective Commitment* and *Felt Obligation*. Thus, employees who perceive their respective organisation to be supportive of them would be more inclined to reciprocate (based on the norm of reciprocity) the organisation's support, through favourable work attitudes that are beneficial to the organisation. The relationship between *Perceived Organisational Support* and the outcome latent variables of *Organisational Trust*, *Affective Commitment* and *Felt Obligation* makes substantive sense and is strongly supported within literature (Armstron-Stassen, 1998; Dirks & Ferrin, 2002; Eisenberger *et al.*, 1990; Eisenberger *et al* 2001; Hutchison, 1997; Lew, 2009; Nasurdin *et al.*, 2008; Rhoades & Eisenberger, 2002; Wayne *et al.*, 1997).

Although, it was originally hypothesised that a positive causal relationship ought to exist between *Perceived Organisational Support* and employee *Job Satisfaction*, this relationship was however not empirically supported.

It has furthermore been empirically shown that a significant positive relationship exists between *Organisational Trust* and *Affective Commitment*. Consequently, employees' who are more trusting of their organisation would additionally be more affectively committed to their organisation. This causal relation does make substantive sense and is consistent with other research findings (Albrecht & Travaglione, 2003 and Dirks & Ferrin, 2002).

Organisational Trust was found to have a significant negative influence on *Intention to Quit*. It makes sense that employees who trust their organisation and/or the organisation's representatives would be more inclined to continue their membership with their respective organisations. This negative causal relationship between *Organisational Trust* and *Intention to Quit* is widely supported throughout organisational behavioural literature (Costigan et al., 1998; Davis et al., 2000; Konovsky & Cropanzano, 1991; Mishra & Morrissey, 1990).

It has also been empirically shown that a significant positive relationship exists between *Affective Commitment* and employee *Job Satisfaction*. However, the results were unable to support the hypothesised positive causal relationship between *Job Satisfaction* and *Affective Commitment*. The hypothesised positive causal relationship between *Normative Commitment* and *Job Satisfaction* was also not support. However, the hypothesised positive causal relationship between *Job Satisfaction* and *Normative Commitment* was supported.

Consequently, the dual positive causal relationship hypothesised between the latent variables of *Job Satisfaction* and *Organisational Commitment* (*Affective Commitment* and *Normative Commitment*) was not fully supported. It was discussed in paragraph 2.8.5 that there were three perspectives concerning the relative contributions of *Job Satisfaction* and *Organisational Commitment* to employee *Turnover Intentions*. The first perspective holds that *Commitment* to an organisation develops from *Job Satisfaction* such that *Commitment* mediates the effect of *Satisfaction* on the *Turnover Intention* (Mathieu & Zajak 1990; Tett & Meyer, 1993). Thus, the *Satisfaction-to-Commitment* mediation model reflects Porter et al. (1974) argument that *Commitment* takes longer to develop and is more enduring than *Satisfaction* (Tett & Meyer, 1993). Although, the relationship between *Job Satisfaction* and

Affective Commitment was found to be significant, the direction of the influence was negative, and thus no support could be concluded for the hypothesised relationship. However, the positive relationship between *Job Satisfaction* and *Normative Commitment* was found to be significant.

The second perspective holds the opposite view where *Job Satisfaction* develops from *Organisational Commitment* (Vandenberg & Lance, 1992; Salancik & Pfeffer, 1978). The *Commitment-to-Satisfaction* model suggests that *Commitment* to an organisation engenders a positive attitude towards the job and that employee's stay based on how they feel about their jobs (Tett & Meyer 1993; Salancik & Pfeffer, 1978). Whilst, the positive relationship between *Job Satisfaction* and *Affective Commitment* was found to be significant, the relationship between *Job Satisfaction* and *Normative Commitment* was also found to be significant although the direction of the influence was negative and contrary to initial theorising.

The final perspective holds that both *Job Satisfaction* and *Organisational Commitment* (*Affective Commitment* and *Normative Commitment*) make an equal contribution to the turnover process (Tett & Meyer, 1993). It was found, in this research study that a significant negative relationship exists between *Affective Commitment* and *Intention to Quit*. However, the negative relationship between *Normative Commitment* and *Intention to Quit*, as well as the negative relationship between *Job Satisfaction* and *Intention to Quit*, were both not supported in this research study. The non-significant relationship found between *Job Satisfaction* and *Intention to Quit* may be attributed to the sector wherein the sampled employees' in this research endeavour function in. Despite strong literature support for a significant negative relationship between *Job Satisfaction* and *Intention to Quit* (Arnold & Feldman, 1982; Chiu et al., 2005) employees with a high need for job security could result in lower turnover. Consequently, dissatisfaction among employees within the public sector, may have a lesser impact on their *Intention to Quit* as a result of their greater need for job security (Wang, Yang, & Wang, 2012).

Although, the positive relationship between *Felt Obligation* and *Job Satisfaction* was not originally hypothesised to exist in the original Oehley - Herselman talent management competency model, it was nonetheless argued that, in terms of Maslow's hierarchy of needs, the effect of *Perceived Organisational Support* on *Job Satisfaction* may potentially be

mediated and/or moderated by the relative salient lower-order needs. Consequently, *Felt Obligation* was argued to be a relatively salient lower order need that mediates the relationship between *Perceived Organisational Support* on *Job Satisfaction*. The path between *Felt Obligation* and *Job Satisfaction* was consequently found to be significant and positive, and thus providing support for the argument that a salient lower-order need mediates the relationship between *Perceived Organisational Support* and *Job Satisfaction*.

Furthermore, the positive relationship between *Organisational Trust* and *Perceived Developmental Opportunities* was also not originally hypothesised to exist in the original Oehley - Herselman talent management competency model. It was argued that a feedback loop may exist between the two constructs, as employees who have previously *Perceive Developmental Opportunities* to be available and accessible to them, which in turn has influenced their perceptions of organisational support, consequently resulting in employees' trusting their organisation. It would make substantive sense in that the exchange relationship has not been altered and employees would continue to *Perceived Developmental Opportunities* to be available and accessible to them. The path between *Organisational Trust* and *Perceived Developmental Opportunities* was found to be significant and positive.

Finally, a positive relationship from *Affective Commitment* to *Normative Commitment* was also not originally hypothesised to exist in the original Oehley - Herselman talent management competency model. However, a causal relationship from *Affective Commitment* to *Normative Commitment* did make substantive sense. It would denote that employees whom experience a high desire to continue membership with their respective organisation will have a positive effect on their obligation to remain with their organisation. This finding is consistent with previous findings by Meyer et al. (2002).

Figure 5.1 provides a graphical representation of the findings of the modified Oehley - Herselman talent management model.

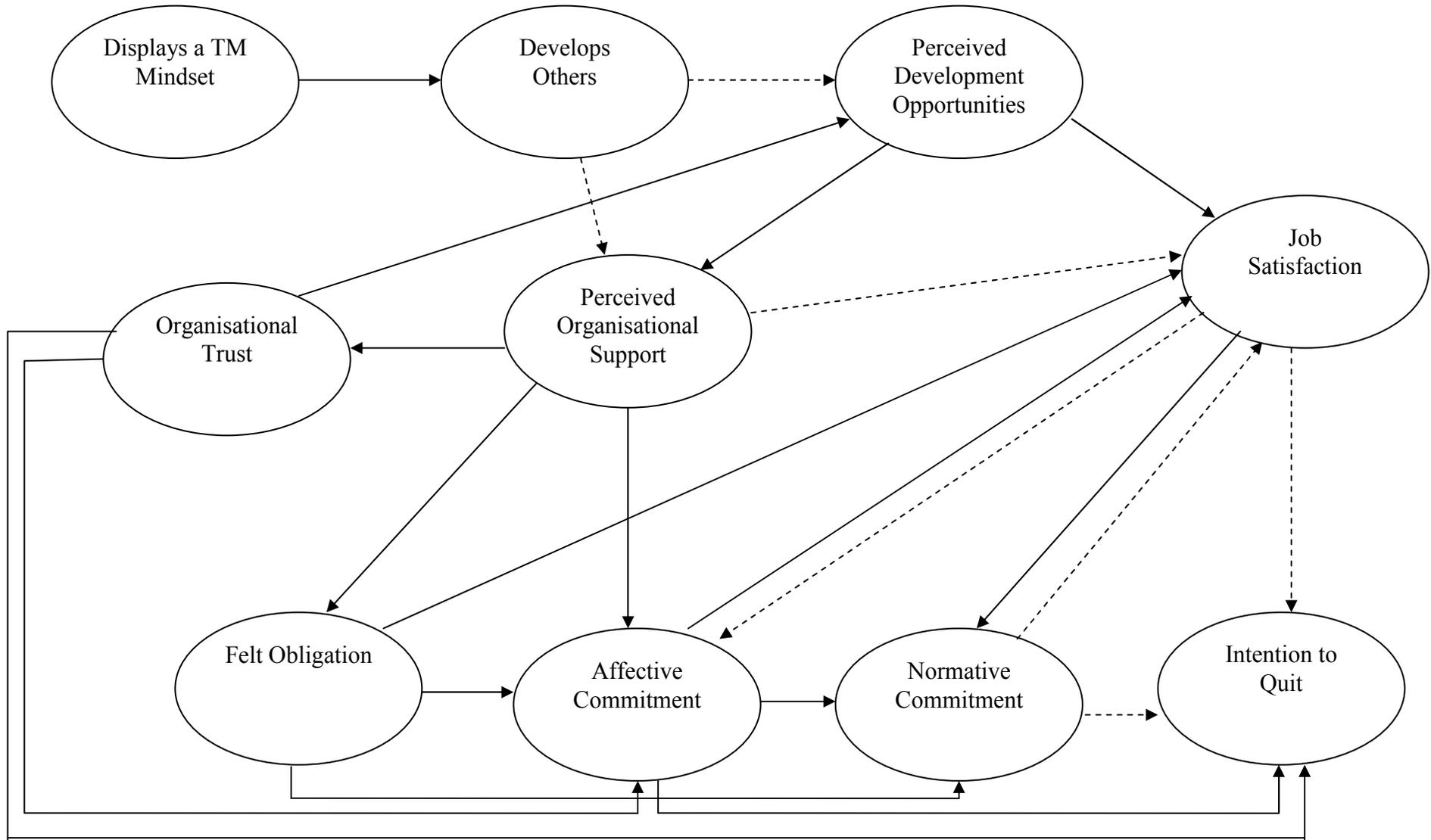
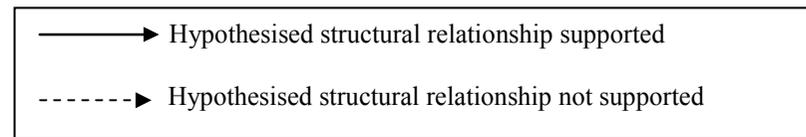


Figure 5.1. Graphical representation of final Oehley - Herselman talent management competency model



5.3 LIMITATIONS TO THE RESEARCH METHODOLOGY

Sixteen primary sampling units (PSU's i.e. police stations) were selected from the four strata (Boland, East Metropole, Southern Cape, and Western Metropole) where a minimum of thirteen detectives (FSU's) were sampled from each police station. Ahmed (2009) notes that there are various limitations concerning the use of cluster sampling including; the FSU may not reflect the diversity in the target population, other elements in the same strata may share similar characteristics, cluster sampling may provide less information per FSU than simple random sampling, and standard errors of the estimate are higher as compared to other sampling methods.

Additionally, the present research investigation took place within the Western Cape Province of South Africa utilising a probability two-stage cluster sampling procedure of SAPS detectives and consequently generalisations to other SAPS detectives in other provinces of South Africa is not advised. Rather it is strongly recommended that the current research investigation be carried out among SAPS detectives in all other provinces and among all SAPS personnel in all components of the organisation. A further limitation to this research study concerns the use of three potentially poor measures namely; Talent Management Mindset scale, Normative Commitment scale and the Develops Others scale.

Additionally, this study employed the use of self-report measures to assess the outcomes component of the Oehley - Herselman talent management competency model. Smuts (2011) notes that through utilising self-report measures there is increased risk of social desirability, where social desirability refers to the increased risk of respondents to respond in a manner that that creates a more favourable impressions. Due to the sensitive nature of this research (i.e. investigation of employees' turnover intentions) social desirability may possibly be high, and could impact on the reported levels the latent constructs being investigated, and consequently influence findings (Elmes, Kantowitz & Roediger in Smuts, 2011).

It should also be acknowledged that some of the scales used in this study (e.g., the talent management Mindset scale, the Normative Commitment scale and the Develops Others scale) displayed somewhat marginal psychometric properties, which could have negatively affected the parameter estimates obtained for the comprehensive LISREL model.

5.4 PRACTICAL IMPLICATIONS

This research study forms part of an ongoing series of research studies (Oehley, 2007; Smuts, 2011) that attempt to accumulate a comprehensive, integrated understanding of the psychological processes shaping employees' *Intention to Quit*. The core assumption underlying these studies is that line managers have a pivotal role to play in the retention of talented employees. More specifically the core assumption is that the competence of line managers on an array of line manager talent management competencies determines the *Intention to Quit* of their followers. The hypothesis moreover is that the competence of line managers on these competencies do not impact directly on the level of turnover intention but rather propagate through a network of outcome variables to affect turnover intention. The current research study has focused on two line manager talent management competencies that is hypothesised would influence the perceived availability of development opportunities and the psychological process through which this perception influences turnover intention. Finding empirical support for the hypothesis that these line managers' talent management competencies affect *Intention to Quit*, albeit indirectly via a network of outcome variables, has been surprisingly difficult to achieve. This study failed to demonstrate that *Develops Others* influences *Perceived Development Opportunities* and *Perceived Organisational Support* or any other latent outcome variable. Smuts (2011) for technical reasons did not provide any empirical support for this hypothesis either. The Oehley (2007) provided limited support. This limits the practical recommendations and managerial implications that can currently be derived from the study.

Furthermore, the findings concerning the outcome component of the Oehley - Herselman talent management competency model, provides preliminary evidence of the psychological processes underling employees' intention to remain in the employment of their current organisation as a result of their perceptions of training and development initiatives. These results can make a meaningful contribution to the talent management retention strategy of an organisation. The results of this study indicate that key to employee retention lies in increasing *Organisational Trust* and *Affective Commitment*, whilst the studies of Oehley (2007) and Smuts (2011) indicate that *Organisational Commitment* and *Job Satisfaction* are key to retaining employees. This study indicates that increasing *Perceived Developmental Opportunities*, *Perceived Organisational Support*, *Organisational Trust* and *Felt Obligation* will help to increase *Job Satisfaction* and *Organisational Commitment*. The results point to

the important role that development opportunities play in the retention of employees. Consequently, the aforementioned findings can enable organisations to develop specific interventions to improve their retention strategy.

5.5 SUGGESTIONS FOR FUTURE RESEARCH

The final Oehley - Herselman talent management competency model should firstly be cross-validated and preferably on a larger sample.

Future research will have to place strong emphasis on the manner in which line manager talent management competencies map onto the latent outcome variables. In this process, the possibility should be considered to add a latent variable *Access to Development Opportunities* in addition to *Perceived Development Opportunities*.

A further suggestion for future research endeavours in this area would be to investigate the degree to which the talent management competencies identified by Oehley (2007) influence employees' perceptions of *Perceived Organisational Reputation*, and how this latent construct causally relates to the various outcome latent variables that comprise the Oehley - Herselman talent management competency model. Hall (1993) notes that a positive *Organisational Reputation* provides organisations with a significant competitive advantage, where a favourable *Organisational Reputation* will assist in the retention and attraction of talented employees (Alniacik, Cigerim, Akcin & Bayram, 2011). Various researchers have argued and found, that a favourable *Organisational Reputation* has a significantly positive influence on favourable employee behaviours, including; *Commitment*, *Satisfaction*, and *Intention to Remain* (Alniacik et al., 2011; Brammer, Millington & Rayton, 2007; Herrbach, Mignonac & Gatignon, 2004; Riordan, Gatewood & Bill, 1997).

It is further recommended that *Continuance Commitment* as part of the TCM commitment profile be included to the Oehley - Herselman talent management competency model. Although initially conceptualised as a unidimensional construct by Meyer and Allen, (1991) research has consistently shown a two-dimensional factor structure, comprised of a factor reflecting perceived social and economic costs of discontinuing membership to an organisation, and a second factor reflecting employees' perceived lack of employment alternatives (Culpepper, 2011). It is suggested that *Continuance Commitment* be dissected

into its two factor structure and investigate the influence of the two factors on employees' withdrawal behaviours (i.e. *Intention to Quit*) and other employee behaviours (i.e. *Job Satisfaction*).

A further suggestion would be to investigate whether employees' *Need for Job Security* would either mediate and/or moderate the causal relationship between *Job Satisfaction* and *Intention to Quit* as part of the Oehley - Herselman talent management competency model. It is further advised that in addressing the aforementioned suggestion in future research endeavours that employees from the public sector be sampled as a review by Baldwin (1991) found that employees in the public sector have a greater *Need for Job Security* as opposed to their private sector counterparts.

It is also suggested that in future research endeavours that the relationship between line managers and their subordinates be investigated, as trust is the foundation of both organisational and interpersonal relationships (McAllister, 1995). Although, the current study investigated employees' perceptions of *Organisational Trust*, investigation into employees' perceptions into *Supervisory Trust* has been largely neglected. Through not investigating the relationship between line managers (i.e. supervisors) and subordinates could serve as a possible reason as to why a significant causal relationship was not found between the line manager competency *Develops Others* and the outcome variables of *Perceived Development Opportunities* and *Perceived Organisational Support*. Muliki, Jaramillo and Locander (2006) found that *Supervisory Trust* was a significant predictor of *Job Satisfaction* and turnover intentions (i.e. *Intention to Quit*). In order to obtain a comprehensive understanding of the influence of line managers' talent management competencies on employees' turnover intentions' it would be of great empirical value to investigate the supervisor-employee relationship further, with a focus on *Supervisory Trust*.

5.6 CONCLUDING REMARKS

Organisations in South Africa are currently experiencing numerous challenges including, a major skills shortages within both the private and public sectors and this challenge is having a detrimental impact on the economy and on service delivery. The retention of talented employees will continue to be a critical priority for organisations for the foreseeable future. The current research endeavour attempted and to a large extent succeeded to contribute to the

empirical understanding of the psychological processes underlying employees' *Intention to Quit* their current organisations. The failure of the current study to find support for a relationship between the talent management competency *Develops Others* and the outcome variables of *Perceived Development Opportunities* and *Perceived Organisational Support* was disappointing. Future research investigations should, however, not abandon investigating the relationship between talent management competencies and the outcome component of the Oehley - Herselman talent management competency model but rather intensify research efforts to uncover the manner in which the talent management competencies of line managers influence turnover intention of their subordinates.

It would serve the epistemic ideal of science to continue with empirical investigations into the talent management competencies and the psychological processes governing employees' turnover cognitions. Only, through compounded empirical research investigations will meaningful progress be made towards an understanding of the dynamic relationship between talent management competencies and employees' turnover intention. This will allow organisations to develop specific organisational talent management development interventions aimed at improving the talent management competence of their line managers as part of their talent management retention strategy. Through addressing the turnover intentions of talented employees based on empirical findings, organisations will develop a competitive advantage that will have numerous favourable implications for the economy and society of South Africa.

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APPENDIX A:

**EMPLOYEE RETENTION SURVEY FOR
SAPS DETECTIVE HEADS**



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**STELLENBOSCHUNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH**

**A FURTHER ELABORATION AND EMPERICAL EVALUATION OF THE
OEHLEY PARTIAL TALENT MANAGEMENT COMPETENCY MODEL**

You are asked to participate in a research study conducted by Trevor Herselman (MComm), from the Department of Industrial Psychology at Stellenbosch University. The results of this study will contribute towards my completion of my master's thesis. You were selected as a possible participant in this study because you are an employee of the SAPS Detective Service, which is considered a critical component of the SAPS in their fight against crime, and consequently the retention of employees in this paragraph of the SAPS, is of critical importance.

1. PURPOSE OF THE STUDY

The primary objective of this study is to modify and elaborate the Partial Talent Management Competency Model proposed by Oehley (2007) concerning line managers talent management competencies. Specifically, this research project is directed at understanding the impact of the Talent Management Competency *Develops Others* on SAPS Detectives' turnover intentions.

2. PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following things:

You will be requested to complete a short questionnaire that will take about 5-10 minutes. You will be required to rate your subordinate commanders on their competence on two talent management competencies, namely; *Displays a Talent Management Mindset* and *Develops Others*.

3. POTENTIAL RISKS AND DISCOMFORTS

A Possible risk associated with this research study is the fact that data will be gathered regarding "intention to quit". The data will be kept confidential and only my masters' supervisor and I will have access to the data. Individual results of the study will in no manner be made available to any management employee of the SAPS.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

Participation in the research will not directly benefit you. The elaboration of a Talent Management Competency structural model will, however, assist the SAPS in the development of interventions directed at the retention of SAPS personnel.

5. PAYMENT FOR PARTICIPATION

Participants in this study will not receive payment for their participation.

6. CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of storing the data on a password-protected computer, where only my masters' supervisor and I will have access.

The results of the study will be disseminated by means of an unrestricted electronic thesis and by means of an article published in an accredited scientific journal. In none of these instances will the identity of any research participant be revealed. Only aggregated statistics reflecting the proposed structural model's fit will be reported. The identity of the Police Station will not be revealed in any of the publications.

7. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you do not want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact Trevor Herselman (cell number: 0722992843 or 15040844@sun.ac.za) and/or Prof Callie Theron (0218083009; ccth@sun.ac.za) both from the Department of Industrial Psychology of Stellenbosch University.

9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.



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I have read and understood the information provided above and **voluntarily consent** to participate in the research under the stipulated conditions"

Yes	NO
-----	----

I have read and understood the information provided above and **do not consent** to participate in the research under the stipulated conditions

Yes	NO
-----	----



For the following statements, please indicate the FREQUENCY that the behaviour listed below has been displayed by yourself in the last six months. Indicate your response by placing a cross (x) in the relevant column. If you are unable to rate your behaviour, please mark the UNABLE TO RATE column, but please use this sparingly.		Never	Rarely	Some-times	Often	Always	Unable to rate
A	Displays a Talent Management mindset						
	I remind team members of the importance of retaining high calibre employees.						
	I prioritize issues which concern the development of employees.						
	I remind team members of the importance of recognizing exceptional performance.						
	I ensure that all team members have an understanding approach towards the personal and family needs of others.						
B	Develops others						
	I possess a genuine interest to foster the learning and development of people.						
	I make an objective assessment of individuals' development needs.						
	I coach staff one-on-one.						
	I give honest feedback for developmental purposes.						
	I actively create developmental opportunities for subordinates.						
	I meet with team members for formal career planning sessions.						

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE. YOUR PARTICIPATION IS APPRECIATED.

APPENDIX B:

**EMPLOYEE RETENTION SURVEY FOR
SAPS DETECTIVES**



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**STELLENBOSCH UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH**

**A FURTHER ELABORATION AND EMPERICAL EVALUATION OF THE
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The primary objective of this study is to modify and elaborate the Partial Talent Management Competency Model proposed by Oehley (2007) concerning line managers talent management competencies. Specifically, this research project is directed at understanding the impact of the Talent Management Competency *Develops Others* on SAPS Detectives' turnover intentions.

2. PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following things:

You will be requested to complete a short questionnaire that will take about 10-15 minutes. You will be required to rate your relative standing on various nine latent constructs; namely; Perceived Organisational Support, Organisational Trust, Perceived Developmental Opportunities, Felt Obligation, Affective Commitment, Normative Commitment, Job Satisfaction, Organisational Trust and Intention to Quit.

3. POTENTIAL RISKS AND DISCOMFORTS

A Possible risk associated with this research study is the fact that data will be gathered regarding "intention to quit". The data will be kept confidential and only my masters' supervisor and I will have access to the data. Individual results of the study will in no manner be made available to any management employee of the SAPS.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

Participation in the research will not directly benefit you. The elaboration of a Talent Management Competency structural model will, however, assist the SAPS in the development of interventions directed at the retention of SAPS personnel.

5. PAYMENT FOR PARTICIPATION

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6. CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of storing the data on a password-protected computer, where only my masters' supervisor and I will have access.

The results of the study will be disseminated by means of an unrestricted electronic thesis and by means of an article published in an accredited scientific journal. In none of these instances will the identity of any research participant be revealed. Only aggregated statistics reflecting the proposed structural model's fit will be reported. The identity of the Police Station will not be revealed in any of the publications.

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You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you do not want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

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I have read and understood the information provided above and **voluntarily consent** to participate in the research under the stipulated conditions

Yes	NO
------------	-----------

I have read and understood the information provided above and **do not consent** to participate in the research under the stipulated conditions

Yes	NO
------------	-----------

I feel a personal obligation to do whatever I can to help the Organisation achieve its goals.							
I owe it to the organisation to give 100% of my energy to the organisation's goals while I am at work.							
I have an obligation to the organisation to ensure that I produce high-quality work.							
I owe it to the organisation to do what I can to ensure that the public are well-served and satisfied.							
I would feel an obligation to take time from my personal schedule to help the organisation if it needed my help.							
I would feel guilty if I did not meet the organisation's performance standards.							
I feel that the only obligation I have to the organisation is to fulfil the minimum requirements of my job.							

AFFECTIVE COMMITMENT							
For the following statements, please indicate your AGREEMENT with the statement by placing a cross (X) in the relevant column. Please indicate all of the statements.	Strongly Disagree	Disagree	Slightly disagree	undecided	Slightly agree	Agree	Strongly Agree
I would be very happy to spend the rest of my career with this organisation.							
I enjoy discussing my organization with people outside it.							
I really feel as if this organization's problems are my own.							
I think that I could easily become as attached to another organization as I am to this one							
I do not feel like 'part of the family' at my organisation.							
I do not feel 'emotionally attached' to this organisation.							
This organization has a great deal of personal meaning for me.							
I do not feel a strong sense of belonging to my organisation.							

NORMATIVE COMMITMENT							
For the following statements, please indicate your AGREEMENT with the statement by placing a cross (X) in the relevant column. Please indicate all of the statements.	Strongly Disagree	Disagree	Slightly disagree	undecided	Slightly agree	Agree	Strongly Agree
I think that people these days move from company to company too often.							
I do not believe that a person must always be loyal to his or her organization.							

ORGANISATIONAL TRUST							
For the following statements refer to your organisation and please indicate your OPINION from the scale provided. Indicate your response by placing a cross (X) in the relevant column. Please respond to all of the statements	Nearly zero	Very low	Low	Undecided	High	Very High	Nearly 100%
My level of confidence that this organisation will treat me fairly							
The level of trust between supervisors and employees' in this organisation							
The level of trust among my colleagues with whom I work with on a regular basis							
The degree to which we can depend on each other in this organisation							

INTENTION TO QUIT					
For the following statements, please indicate How Frequently you consider the following: Indicate your response by placing a cross (X) in the relevant column. Please indicate all of the statements.	Never	Rarely	Some-times	Often	Always
Wanting to leave this organisation.					
Searching for another position					
Planning to leave this organisation					
Actually leaving this organisation within the next year					

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE. YOUR PARTICIPATION IS MUCH APPRECIATED.