The Influence of Diversity Complexity and Emotional Intelligence on the Attitude towards Diversity in Organisations

by

Jenna May Kamps

Thesis presented in partial fulfilment of the requirements for the degree of Master of Commerce

at

Stellenbosch University

Department of Industrial Psychology

Faculty of Economic and Management Sciences

Supervisor: Prof AS Engelbrecht

Date: December 2009

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 owner of the copyright thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

Date: December 2009

ABSTRACT

The plethora of differences that characterise the South Africa population has become a definite concern for organisational management and is of significant importance to the industrial world itself. The need to critically assess people's perception and attitude towards diversity within the organisation, and ultimately serving to inform management seeking to build an ethically diverse, healthy and productive workforce, served as a prime motivation for this study. The objective was to demonstrate that humans are complex beings and that attempts to minimise the complexity by simply containing that complexity within the bounds of a unidimensional solution are guaranteed to fail. It is for this reason that diversity management within an organisation requires the need to manage an infinite and changing variety of social variables which to varying degrees, impacts on social interaction and people's attitude towards diversity.

Having completed a literature study concerning the possible antecedents of attitude towards diversity, and taking into account various suggested future directions for diversity research, it was decided that the present study would focus on three specific variables: attitude towards diversity, emotional intelligence and diversity complexity. The primary goal was to design and conduct a scientific investigation into the relationships between the latent variables; in hope of ultimately informing management seeking to build an ethically diverse, healthy and productive workforce who value the individuality of others. Available literature was studied in order to understand and comprehend whether any relationships could be theoretically drawn between the constructs. Several hypotheses were proposed and a conceptual model, explaining the relationships between these constructs, was developed. Thereafter, both the postulated relationships and the conceptual model were empirically tested using various statistical methods.

Existing measuring instruments were utilised in this study, and included the Cultural Diversity Belief Scale (Rentsch, Turban, Hissong, Jenkins & Marrs, 1995), the Genos Emotional Intelligence Inventory (Palmer, Stough & Gignac, 2008), and the Reaction-To-Diversity-Inventory (De Meuse & Hostager, 2001). The sample consisted of 237

selected individuals from various South African organisations. The content and structure of the constructs that were measured by the instruments were investigated by means of confirmatory and exploratory factor analyses. The results indicated that in all cases, the refined measurement models achieved good fit. Subsequently, Structural Equation Modeling (SEM) was used to determine the extent to which the conceptual model fitted the data obtained from the sample and to test the relationships between the constructs when taking the complete conceptual model into account. Overall, it was found that good model fit was indicated for the structural model. Regression analyses also found some support for the stated hypotheses. Eight of the ten stated hypotheses in this study were corroborated.

Although several significant links were established between the latent variables, a notable unique result of this research presented itself in the significant positive relationships uncovered between the exogenous latent variable, emotional intelligence, and the endogenous latent variables of valuing individual differences and positive perceptual depth. These significant positive relationships provide empirical evidence of the significant relationships between emotions, attitudes and perceptions. Moreover, the analysis of the modification indices for the structural model, suggested that the addition of one path to the existing structural model would probably improve the fit of the model. Recommendations are made in terms of possible avenues for future research.

OPSOMMING

Die uiteenlopende verskille, wat 'n kenmerk van die Suid-Afrika bevolking geword het, is 'n definitiewe uitdaging vir organisatoriese bestuur en is ook van groot belang vir die sakewêreld. Die behoefte om mense se persepsies en houdings teenoor die diversiteit binne die organisasie krities te evalueer, wat uiteindelik ook dien om bestuur, wat op soek is na die bou van 'n etiese, gesonde en produktiewe arbeidsmag, te help, het as die primêre motivering vir hierdie studie gedien. Die doel was om aan te toon dat die mens 'n komplekse wese is en dat pogings om dit gering te skat deur kompleksiteit net binne die grense van 'n een-dimensionele oplossing te ontleed, gewaarborg is om te misluk. Dit is om hierdie rede dat diversiteitsbestuur binne 'n organisasie die bestuur van 'n oneindige en veranderende verskeidenheid van sosiale veranderlikes noodsaak, wat, sosiale interaksie en mense se houdings teenoor diversiteit verskillend kan beinvloed.

Na die voltooiing van 'n literatuurstudie oor die moontlike determinante ~~antecedenten~~ van die houding teenoor diversiteit, en met inagneming van die toekomstige rigtings vir diversiteitsnavorsing, is daar besluit dat die huidige studie op drie spesifieke veranderlikes sal fokus: houding teenoor diversiteit, emosionele intelligensie en diversiteitskompleksiteit. Die primêre doel was om 'n wetenskaplike ondersoek te ontwerp en uit te voer rakende die verwantskappe tussen die latente veranderlikes; in die hoop om bestuur te help om 'n gesonde en produktiewe arbeidsmag te bou wat ook die individualiteit van ander waardeer. Beskikbare literatuur is bestudeer ten einde te verstaan of enige verbande tussen die teoretiese konstrukte gevind kan word. Verskeie hipoteses is geformuleer en 'n konseptuele model, waarin die verband tussen hierdie konstrukte verduidelik word, is ontwikkel. Daarna, is die gepostuleerde verwantskappe en die konseptuele model empiries met behulp van verskeie statistiese metodes getoets.

Bestaande meetinstrumente is in hierdie studie gebruik en sluit in die 'Cultural Diversity Belief Scale,' (Rentsch, Tulband, Hissong, Jenkins & Marrs, 1995), die 'Genos Emotional Intelligence Inventory,' (Palmer, Stough & Gignac, 2008), en die 'Reaction-To-Diversity-Inventory,' (De Meuse & Hostager, 2001). Die steekproef het

bestaan uit 237 gekose individue uit verskillende Suid-Afrikaanse organisasies. Die inhoud en die struktuur van die konstrukte wat deur die instrumente gemeet is, is deur middel van bevestigende en verkennende faktorontledings ondersoek. Die resultate dui daarop dat in al die gevalle, die verfynde metingsmodelle goeie passings getoon het. Daarna is Structural Equation Modeling (SEM) gebruik om te bepaal tot watter mate die konseptuele model die data pas, en om die verwantskappe tussen die konstrukte te toets wanneer die volledige konseptuele model in ag geneem is. Algeheel is daar goeie passing vir die strukturele model gevind. Regressie-analises het ook 'n mate van bevestiging vir die gestelde hipoteses gevind. Agt van die tien hipoteses is ~~was~~ in hierdie studie bevestig.

Alhoewel verskeie belangrike verwantskappe tussen die latente veranderlikes gevind is, is daar 'n unieke resultaat gevind met betrekking tot die positiewe verband tussen die eksogene latente veranderlike, emosionele intelligensie, en die endogene latente veranderlikes van waardering van individuele verskille en positiewe perseptuele diepte. Hierdie positiewe verwantskappe verskaf empiriese bewyse vir die beduidende verband tussen emosies, houdings en persepsies. Verder, het die analise van die modifikasie indekse vir die strukturele model aangedui dat die byvoeging van 'n addisionele roete waarskynlik die bestaande strukturele model se passing kan verbeter. Aanbevelings word ten slotte gemaak in terme van moontlike rigtings vir toekomstige navorsing.

ACKNOWLEDGEMENTS

The numerous times when I felt despondent, discouraged and disinterested in the quest to complete a study of this nature, could have easily derailed my efforts if it wasn't for my incredibly loyal and supportive network. As such, I would like to express my gratitude to the following individuals who stood by me during this period of my life:

Firstly, to my dearest mother Lesley, and father Frans, for your lifelong and unconditional love, constant support and encouragement. Without your subtle guidance and exceptional faith in the decisions I have made in my life thus far, I highly doubt whether I would have gotten to the point of writing this acknowledgement. I love you both dearly.

Secondly, to my promoter, Professor Amos Engelbrecht, for your exceptional willingness to open your wings and guide me throughout this study, continually encouraging me to achieve new heights, and for the 'fatherly' advice you provided me with in all areas of my life. I feel honoured to have had you as my mentor.

Thirdly, to Professor Martin Kidd, for your kindness and willingness to share your statistical knowledge.

Lastly, to my little Daisy. Thank you for sitting next to me and keeping me company for the countless hours I sat alone at my desk. I will forever look back on this experience and think of you.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Page

CHAPTER 1

INTRODUCTION, RESEARCH OBJECTIVES AND OVERVIEW OF THE STUDY

1.1   INTRODUCTION TO THE STUDY

It appears that the face of the modern workforce has changed dramatically. Changes not only in the demographic composition of the South African workforce, but also in the situational variables that comprise the social context within which the individual operates, has largely amplified the extremity of diversity both internal and external to the organisation (Nyambegera, 2002). The concept of human resource management (HRM), although well documented in management literature, has only recently embraced the notion of diversity management as a successful means of increasing employee awareness, developing human capital and attaining a competitive advantage. Evidently, in the available HRM literature, diversity is usually conceptualised in terms of demographic differences, such as age, race and gender. Moreover, most research has focused on either determining the origin and pervasiveness of bias against relevant identities or underrepresented groups (Cohen & Swim, 1995), or understanding the pressures and hardships endured by members of such groups (Cohen & Garcia, 2005).

Although this research has been invaluable in illuminating key problems, it has become imperative to acknowledge that individual demographic variables, by themselves, may not adequately reflect the full meaning and impact of diversity within a work setting. Situational variables that comprise the social context within which the individual operates has been shown to affect the individual's work related attitudes and behaviours (Riordan & Shore, 1997). Paralleling the importance of situational variables, has been an increased need to better understand how organisational members make sense of diversity because such interpretations, according to Roberson and Stevens (2006), and the manner in which they evolve, are thought to provide valuable insights into the sources of conflict as well as the levers for conflict resolution. Moreover, organisations are thought to be conceived of

"networks of intersubjectively shared meanings" that are constructed and sustained through social interaction (Walsh & Ungson, 1991, p. 60). Thus, it would seem only logical that if organisations are going to succeed on any level, the social interactions between two or more organisational members, who vary in terms of a number of specific dimensions, will need to be managed successfully.

One concern is that because people tend to notice and rely on visually prominent or physical characteristics, diversity for some, is perceived as no more than race and gender, as these variables are more likely than nonphenotypical characteristics such as education, tenure, religion or company experience, to draw attention and serve as a basis for spontaneous categorisation (Riordan & Shore, 1997). According to Human (1996a), falling into the trap of stereotyping on the basis of race or gender, in the absence of a superior understanding of the myriad sociological and psychological variables which impact social interaction, has in essence, detracted from our ability to truly understand and manage the concept of diversity on a practical level.

The problem, of course, is that humans are complex beings, comprising a variety of changing and dynamic identities and personality factors (Human, 1996b). The various social identities one maintains inevitably moulds the respective attitudes towards, and stereotypes of, diverse people. Moreover, an individual's perception of diversity can be represented along a continuum of complexity and inclusiveness, reflecting the degree to which different identities are both differentiated and integrated in the individual's cognitive representation of his or her group memberships (Brewer & Pierce, 2005). This in turn implies that individual social identity, in it's own right, is a highly complex concept and that attempts to minimise the complexity by simply containing that complexity within the bounds of a unidimensional solution are guaranteed to fail. It is for this reason that diversity management within an organisation requires the need to manage an infinite and changing variety of social variables which, to varying degrees, impact on social interaction and people's attitude towards diversity. In turn, any attempt to uncover the factors influencing and shaping people's attitude towards diversity, requires a sound understanding and acceptance of individual differences (Roodt, 1999).

Ashkanasy and Hooper (1999) propose that affective commitment towards other people is a necessary component of social interaction and that showing positive emotions towards others will potentially increase the likelihood of successful interaction. According to Wright and Staw (1999), positive emotions tend to have positive consequences not only because of their association with individual differences, such as productivity and persistence, but because they appear to positively affect employee's relationship with colleagues. Similarly, Elfenbein and Ambady (2002, p. 965) contend that feeling and expressing positive emotions on the job can result in "smoother social interactions, more helping behaviours, and a "halo effect" that leads to evaluations that are more favorable". Thus if affective commitment towards organisational members is a necessary component of successful social interaction, emotional intelligence (EI) should play a fundamental role in the establishment and maintenance of employee relationships and social interactions. In fact, Bagshaw (2000) argues that individual's high on EI tend to notice and respond appropriately to the emotions of other people. Similarly, Harvey and Allard (2005, p. 47) contend that "emotional intelligence is one key to developing the ability to manage and appreciate individual differences".

In light of the above argument, the current endeavour will make important theoretical and practical contributions to literature. From a theoretical perspective, it is hoped that this study will contribute knowledge to the field of diversity, by shedding light on the individual and group level variables that relate to people's attitude toward others from diverse backgrounds. From a practical perspective, this study is anticipated to provide implications for an organisation's human resource strategy. If one can identify the positive and negative aspects spanning the realms of emotion, cognition and behaviour, that constitutes antecedents of attitudes towards diverse others, organisations can effectively assist their employees in developing skills that are vital to successful interactions and thereby improve organisational outcomes. Diversity is a growing reality and practitioners need to be able to manage this phenomenon successfully with a systematic approach to mitigate the possible negative outcomes originating from diversity within the workplace, because the truth is, diversity is a phenomenon that is increasingly becoming more complex.

1.2   RESEARCH INITIATING QUESTION

Given the South African history of discrimination, problems and predicaments with regards to diversity management in organisations has meant that workplace diversity is perhaps one of the most critical challenges facing South African organisations today. When individuals join organisations they bring with them a 'baggage' of perceptions, attitudes and values, inherent in their identity and which is later reflected in their social interactions and work behaviours (Nyambegera, 2002). The fact that an organisation's performance is seen to increasingly depend more on the effective utilisation of human capital, rather than on physical capital, implies that human behaviour is perhaps one of the most fundamental variables in any organisation. The relationship between both visible and perceived dissimilarity-related effects among organisational members may vary between negative, neutral and positive, depending on the extent to which employee's social identities are built around their visible and perceived characteristics (Chattopadhyay, Tluchowska & George, 2004). However, managing the social interactions between two or more individuals who vary in terms of a number of social variables, involves far more than simply a heightened awareness, acceptance and tolerance of others.

The need for answers regarding how and why some individuals are more able to accept and understand others who are dissimilar to themselves, appears to be a relevant research challenge. Given the background and demarcation of the study that has been provided above, the research initiating question driving this investigation is:

- *Does emotional intelligence and diversity complexity provide a valid and permissible account of the attitude towards diversity people maintain in the workplace?*

1.3   RESEARCH OBJECTIVES

Given the introductory argument unfolded above, the first specific objective of this research consequently is:

> ➢ *To determine whether the measurement models of the various construct dimensions display acceptable fit on the data when fitted in separate, independent confirmatory factor analyses.*

This research objective was motivated by the fact that the reliability and validity of each of the instruments had to be established within the South African organisational context, for the simple reason that none of the measures used within this study had been developed or standardised in South Africa. Consequently, the quest to asses the factorial configuration or dimensional nature and factorial validity/stability of each of the instruments would be performed first. According to Nunnally (1978), only once an instrument has proven its factorial validity and internal reliability and assurance has been obtained that it is able to 'capture' as much of the construct and its variance as possible, could it be used with confidence to study the various relationships between the constructs and to further test the proposed integrated model. Specific hypotheses were subsequently postulated for the expected outcome of this process. The second research objective therefore is:

> ➢ *To explicate the underlying structural model, upon which the study was based, and to test the model's absolute fit.*

After reviewing the literature and formulating the research initiating question and subsequent objectives underlying the initiating question, a conceptual model that could be tested empirically, by analysing the patterns of correlations found within the empirical data was proposed. The fit of the structural model to the data would be indicated by a number of goodness-of-fit indices that would be obtained using Structural Equation Modelling. This research objective thus concerned the validity of the proposed integrated model. Various hypotheses were formulated regarding the postulated relationships that exist between the latent variables relevant to this study.

The interrelationships proposed were formulated on the basis of the literature review. Thus, the third research objective of the present study is:

> ➢ *To establish what direct relationships exist between the various latent variables identified in this study and to evaluate the significance of the hypothesised paths in the model.*

1.4   STUDY OUTLINE

The literature study follows in Chapter 2, wherein the main concepts of the study are discussed in detail. This chapter begins by orienting the reader in terms of the history of discrimination endured by the South African population during the Apartheid era. The relevance of discussing this topic rests on the notion that for years, the over-emphasis on the racial divide of the South African population has, quite frankly, moulded a mind-set of 'exclusion' and 'inclusion', particularly in terms of the necessary affirmative action and employment equity practices. The remainder of the chapter provides a general overview of the literature regarding attitude towards diversity, EI and diversity complexity, while the causal relationships between the constructs are explicated. The chapter concludes with the construction of a theoretical model, based on the available literature presented in the chapter.

Chapter 3 attempts to operationalise the theoretical model by defining the relevant variables present in the model in operational (i.e., practically measurable) terms. This chapter further includes the research design employed in order to allow for the empirical testing of the proposed model. Furthermore, a description is documented with regard to the measurement instruments used in the study, as well as the sample, data collection and statistical analyses used to analyse the data.

Chapter 4 constitutes the presentation of the research results. The results of the empirical procedure and its analysis of the data is reported and presented in meaningful tables. In Chapter 5, the research results are interpreted and discussed. The theoretical and practical implications, as well as the limitations of the study are addressed in this chapter. Finally, recommendations for future research and concluding remarks are presented

CHAPTER 2

THE INFLUENCE OF DIVERSITY COMPLEXITY AND EMOTIONAL INTELLIGENCE ON THE ATTITUDE TOWARDS DIVERSITY IN ORGANISATIONS: AN OVERVIEW OF THE LITERATURE

2.1   INTRODUCTION

An important aspect of the changing social environment in which organisations operate, concerns the composition of the workforce. The demographic shift towards a more diverse workforce, due to migration and growth in international assignments, the entry of woman into managerial and professional careers, and even increasing life expectancies, and the economic necessity for sustained labour participation at older ages, have all become important sources of diversity confronting organisations. The South African environment is of particular importance when studying the topic of diversity in organisations, given the plethora of differences (of which culture is only one) that characterise the population. This has become a definite concern for organisational management and is of significant importance to the industrial world itself. In what follows, this chapter aims to provide a comprehensive synopsis of the primary constructs that are the focus of the present study. These constructs are: 1) attitude towards diversity, 2) emotional intelligence and 3) diversity complexity. This discussion will build on the significance of each construct within the organisational framework and will further attempt to explicate the relationships between the various constructs. In order to meet this objective, this chapter will firstly attempt to provide an overview of the South African history of separation and discrimination, and how the era of Apartheid has impacted on the constitution, society and organisational dynamics of today.

2.2.   AN HISTORICAL PERSPECTIVE

South Africa is a country which, superficially at least, has undergone awe-inspiring changes in the last decade. The inauguration of the ANC, coupled with a democratic government lead by Nelson Mandela, marked South Africa's biggest step towards shaking off its legacy of oppression and the beginning of an era in which demographic differences were to be celebrated (McFarlin, Coster & Pretorius, 1999). For years the majority of the South African population was subjected to rigorous discrimination, ultimately forcing them into homogenous communities. Over time, it became increasingly clear that the notion of separate development was also unequal development, as the gap between whites and non-whites was evident in wealth, participative government and access to resources (Ramsay, 2005). Moreover, this basic premise of separate development denied various racial groups, specifically non-whites, access to proper education and equal opportunities for jobs. However, with the dismantling of apartheid in the early 1990's, the situation has been left, perhaps as it always was, with a disarray of complexity that embodies a multicultural nation, with deep historical antagonisms, profound differences between rich and poor and a predominantly black workforce.

The already difficult situation of a changing workforce is further intensified by the fact that the transition from an apartheid past, to an indeterminate future, constructed on the vision of 'non-racial' democracy and intercultural harmony, has endeavoured to offer identity possibilities predicted on the recognition and reversal of past inequalities (Franchi & Swart, 2003). The legislative and structural entrenchment of 'racial' discrimination, segregation and oppression during the apartheid years, saw a formalisation of a gradual and progressive process of 'racial categorisation' (Franchi, 2003). With the goal of transforming South African business organisations from discriminatory structures to one's that reflect the "demographic composition and values of the South African society as a whole" (Black Management Forum, as cited by Franchi, 2003), it is important to acknowledge that because of the previous over-arching emphasis on race during the Apartheid era, as a means of discrimination and segregation, intercultural relations in today's society are predominantly inclined to transpire across a 'radicalized' divide.

Apart from other visible demographic differences such as gender, race has ceaselessly played a pivotal role both during Apartheid-era South Africa and since the transition to a multi-racial democracy over a decade ago. Although much has changed since the democratic transition, the racial categories that once destructively segregated whites from blacks are ironically kept salient in order to provide compensation to those who suffered under the policies of the apartheid-era regime. Currently, South Africa has an estimated population of 48 687 000, with a racial breakdown that includes: African 79.4%, White 9.2%, Coloured 9%, and Indian 2.5% (STATSSA, 2009). These racial categories played a fundamental role during the era of apartheid, where an individual's label as African (Black), White, Coloured (mixed race) or Indian, allowed him/her access to education, job opportunities, residential areas, among other benefits. Evidently, these racial categories formalised a hierarchy of advantage, with Whites being the most advantaged, and Blacks the least under apartheid law (Ramsay, 2005). With the demise of the Apartheid regime in 1994, the new dispensation sought to rectify past inequalities and construct a sentiment of national unity, which integrates previously designated 'racially constructed' differences into a vision of a meaningful and valued national identity (Franchi & Swart, 2003). In this regard, obvious attempts at correcting the past inequalities and the previous violations of human rights have meant that the implementation of affirmative action measures in public and private sectors, aims to readdress past discrimination and promote employment equity.

While the crucial necessity for affirmative action may generate an ongoing focus on racial issues within South Africa, the debate concerning the definition, justification, impact and consequences of affirmative action is ongoing, complex and beyond the scope of this paper. Suffice it to say that, for the purpose of this research, affirmative action should not merely be thought of as simply a process of recruiting greater numbers of previously disadvantaged employees, but is rather defined, according to Human (1996a, p. 48) as:

> the process of creating greater equality of opportunity; it is temporary and flexible and not in accordance with ridged quota; it is compatible with the concept of qualification and it does not unnecessarily trample on the reasonable expectations of competent white men.

According to this definition, affirmative action is the process of creating equal employment opportunity (employment equity), which is ultimately the desired outcome. Affirmative action is not merely a process of recruiting greater numbers of historically disadvantaged employees, "it is part and parcel of a holistic system of human resource management and development and impacts on all the processes, policies and procedures relating to the selection, recruitment, induction, development, promotion and severance of people" (Human, 1996a, p. 48).

The problem with this definition of course, is that the permeation of racial issues into post-apartheid years has meant that the careful racial categorisation, that once formally classified South Africans on the basis of a variable definition of the construct of 'racial' difference, cannot be discarded as the structural footprint of racial categorisation will need to be kept salient in order to provide compensation to those who suffered under apartheid-era policies (Ramsay, 2005; Franchi & Swart, 2003). Thus, despite the virtuous intentions of affirmative action, the underlying 'racial' construction of privilege and discrimination in South Africa, the differences among affirmative action 'target-group' and 'non-target-group' members demographic status, histories of relative deprivations, personal and collective interests and political ideologies, has ultimately lead to a polarisation of attitudes towards affirmative action plans (Franchi, 2003), with the one group perceiving them from the perspective of "beneficiaries of past discrimination", and the other, from the perspective of "bearing the burden of the actions of their forefathers" (p. 159).

The startling divergence between these two distinctive groups has aroused claims that affirmative action is no more than reversed discrimination (Ramsay, 2005), that penalises young 'whites' who are not responsible for the discrimination in the first place, and which forces organisations to act unfairly by basing recruitment decisions simply on demographic variables as opposed to individual merits (Duncan, 2003). In light of this debate former President Thabo Mbeki once noted that, ''so wide, historically, is the gulf between black and white, that in reality we have different perceptions of South Africa, depending where you are, this side of the street or the other'' (Franchi, 2003, p. 158). Given the inherent racial construction of privilege and discrimination in South Africa, the concept of diversity for the majority of the

population, is merely associated with issues of race and gender. However, diversity comprises much more than simply these variables and is largely contested to be a business imperative in a crippling global economy, where distinctiveness and competitive advantage are a major source of survival.

Despite this, it is important to take cognisance of the fact that for years little significant interest and curiosity in researching the diversity phenomenon in industry was shown. It was only during the early eighties that research on diversity within the workplace began to surge and mindsets began to broaden. Primarily, research on race focused on identifying differences amongst groups (specifically whites and blacks), on a range of perceptions, behaviours and work-related attitudes (Vos, 1998). However, it was the pioneering work of Moerdyk and Coldwell (as cited by Vos) that brought a new definition to diversity within the world of work. The researchers proposed that by simply focusing on the positive impact that the different cultural heritages people bring to their work situation can potentially enhance the patterns of motivation, the values and the job related needs of the workforce. Thus, if different cultural heritages had the potential to positively impact on the work environment, it was only natural that jobs and organisational structures be adapted to build upon, rather than deny the existing deep rooted values that thrived within the South African workplace (Vos, 1998).

The argument underpinning this research project, is that there is a dire need to depart from the mentality of 'exclusion' and embrace the 'inclusion' of others, regardless of their differences in order to effectively utilise the human resources behind the impending organisational effectiveness. One cannot reiterate the importance of managing diversity within an organisation and how this process may be hampered by an over-emphasis on racial differences at the expense of both broader individual identity and situational variables. Recognising workforce differences and managing them to the benefit of the organisation is perhaps the only way in which the diversity that encapsulates the nation, will lead to the evolution of a unique 'rainbow management' style. South Africa, unlike other countries, has but no choice but to effectively manage workforce diversity; "the future, prosperity and stability of the country, and possibly the region, depend on it" (Human, 1996a, p. 46).

2.3   ATTITUDE TOWARDS DIVERSITY

2.3.1   The Concept of Attitude towards Diversity

As the South African workforce continues to become increasingly more diverse, much empirical research on diversity has began to take on a renewed form that not only focuses on the outcomes or effects of having a diverse workforce, but has begun to appraise the antecedents and outcomes of an individual's attitude towards those who are different from themselves (Aghazadeh, 2004; Sadri & Tran, 2002; Sawyerr, Strauss & Yan, 2005; Stephenson & Lewin, 1996). Such developments in research partly stem from demographic shifts influencing the ethnic composition of our society, as well as increased legal pressures for equal employment opportunities. Traditionally referred to as differences in demographic characteristics, diversity has in more recent times, been conceptualised to encompass differences in values, abilities, interests and experiences. Other researchers (Oosthuizen, Coetzee, Kruger & Meyer, 2005; Seyman, 2006) contend that diversity refers to differences between individuals on any attribute that may lead to the perception that another person is different to oneself. While Van Knippenberg, De Dreu & Homan (2004) believe that diversity refers to an almost infinite number of dimensions, ranging from age to nationality, from religious background to functional background, from task skills to relational skills and from political preference to sexual preference. In addition, Thomas (as cited by Sadri & Tran, 2002) assumes that the very nature of diversity relates to everyone and is multidimensional. More specifically, Fleury (as cited by Seyman, 2006, p. 297) defines diversity as "a mixture of people with different group identities within the same social system".

Within the context of the organisation, it is argued that the management of diversity is no more than the effective management of people. The problem however, is that significant research has indicated that not only do organisations and their respective cultures differ in the extent to which diversity is valued (Kossek & Zonia, 1993; Cox & Blake, 1991), but the individuals that comprise the organisations employee base are differing in their beliefs about and attitude towards diversity (Florack, Bless & Piontkowski, 2003; Homan, van Knippenberg, Van Kleef & De Dreu, 2007; Hostager & De Meuse, 2008; Strauss, Connerley & Ammermann, 2005). These studies have

advanced the theoretical notion that in order to harvest any form of benefits from workplace diversity, pro-diversity beliefs, attitudes and organisational cultures that value diversity, may in fact promote favourable responses to the group and its diverse membership. According to Montei, Adams and Eggers (1996), an individual's attitude towards organisational diversity refers to the degree to which one tends to accept diverse others in the workplace. This includes acceptance of such individuals as co-workers and supervisors, and any other persons in work-related roles. A concern, according to Miville, Gelso, Pannu, Liu, Touradji, Holloway, and Fuertes (1999), is that the degree to which individuals are similar or dissimilar in terms of diverse attributes, to the composition of his/her work unit, can potentially play an influential role in one's diversity-related attitude and behaviours. These attitudes, in turn, could be expected to affect individual, team and organisational level outcomes (Strauss & Connerley, 2003).

Sawyerr, Strauss and Yan (2005, p. 499) define attitudes as "a relatively enduring organisation of interrelated beliefs that describe, evaluate and advocate action with respect to an object or situation". Kenny (1994) on the other hand, believes that an individual's attitude is directly influenced by the values he or she maintains. Values are defined by Werner (2003, p. 45) as "principles or standards that we adopt as behavioural guidelines for all situations". Rokeach (1973, p.5) states that "a value is an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence". An attitude therefore, is less global than one's value system and revolves around an attitude object or a situation predisposing an individual to respond in some preferential manner (Sawyerr et al., 2005). Werner (2003) further states that attitudes can be stable or unstable. Stable or central attitudes are very closely linked to one's values and thus are less likely to change. Unstable or peripheral attitudes are easier to alter as they are related to one's experiences and knowledge.

In light of this, an individual who has a favourable attitude towards diversity will be able to accept others who are significantly different from themselves in the workplace. The problem however, is that when different dimensions of diversity converge, the covariation of differences has the potential to create a diversity rift that may elicit sub-group categorisation - an "us-them" distinction, which may in turn,

give rise to problematic inter-subgroup relations (Homan et al., 2007). According to Riordan and Shore (1997), those individuals who retain a negative attitude towards diversity will be less accepting of others which may lead to increased conflict among employees, as well as decreased morale and communication within the organisation and/or work group.

Interestingly, it is important to note that although it is likely that most people would like to believe they are "tolerant" of others, the extent to which they truly and consistently experience and express "tolerance" and genuine acceptance if others who are different from themselves is another matter (Miville et al., 1999). Having a positive attitude towards difference in general, and recognising and valuing those differences and perceived similarities, do not necessarily translate into seeking a plurality of interactions and feelings of comfort with diverse others (Sawyerr et al., 2005). Contact theory argues that interaction with diverse people leads to a more positive attitude towards those individuals (see Allport, 1954). Brown (1995, p. 172) states that "the best way to reduce existing negative intergroup attitudes between members of different groups is to bring them into contact with one another". While it is acknowledged that contact alone may not necessarily lead to a more positive attitude towards diverse individuals, and indeed negative experiences may lead to less favourable attitudes, the impact of a multicultural environment may be experienced differently for different participants depending on their actual exposure to diversity (Roccas & Brewer, 2002). In addition, the effect of living in a multicultural society on people's attitude towards diversity is also likely to be moderated by societal norms concerning multiculturalism (Brewer, 1991).

When people of various cultural groups live together, the cultural groups that they form are often not equal in power. Accordingly, some groups tend to dominate, enabling their ideology to have an extensive influence on both the perceptions of diversity and on the attitude people maintain towards diversity (Rentch, Turban, Hissong, Jenkins & Marrs, 1995). During the course of South Africa's Apartheid era, the dominant 'White' social group not only attempted, but succeeded in implementing an ideology that promoted a single culture within the nation and which subsequently failed to explicitly encourage the maintenance of the other cultural heritage of non-dominant 'Black' groups. Although South Africa's transition to a multi-racial

democracy, over a decade ago, has prompted an integrationist ideology, the amalgamation of differences that embody the workforce, coupled with a political history of racial categorisation and discrimination, naturally generates an awareness of how people are alike and dissimilar in terms of specific dimensions.

Despite the possibility of eliciting stereotypical views, such an awareness can however, prove an necessity to effective interpersonal interactions, by allowing one to build an alliance with others on the basis of similarities, while at the same time, being able to accept and discover value in those who are dissimilar (Fuertes, Miville, Mohr, Sedlacek & Gretchen, 2000). Similarities refer to those aspects of being human that are perceived as common between oneself and others, whereas differences refer to aspects that are unique or diverse among people, as based on certain factors, including (but not limited to) age, race, gender, sexual orientation or lifestyle (Miville et al., 1999). Perhaps it is largely due to the amalgamation of differences which characterises the contemporary workforce that generates a heightened awareness of connectedness to others by virtue of their similarities on specific dimensions. Yet, it is only through "an awareness, respect and valuing of differences among individuals" that permits one to truly value and appreciate diverse others (Rentsch et al., 1995, p.2). Thus, acknowledging that people are both similar to and different from each other is perhaps more warranted and forms the basis of Miville et al.'s (1999, p. 292) Universal-Diverse Orientation (UDO) construct, which can be defined as:

> An attitude towards all other persons which is inclusive yet differentiating in that similarities and differences are both recognized and accepted; the shared experience of being human results in a sense of connection with people and is associated with a plurality or diversity of interactions with others.

This definition confirms Fishbein's (1967) proposition that attitudes comprise three components: a cognitive, behavioural and affective component. That is, a person with a positive attitude towards diversity may seek a diversity of experiences with others (behavioural) because he/she values both the similarities and differences among himself and others (cognitive). These experiences in turn, may then reinforce a more

positive attitude towards diversity, which in turn results in a sense of connection with others (emotional).

Acknowledging that attitudes involve a behavioural, a cognitive and an emotional component has become fundamental to the management of organisational diversity. Yet human resource (HR) practices can only purposefully and rationally launch attempts to foster the managing and valuing of diversity if it truly understands the forces that shape it. Managing the social interaction between two or more individuals who vary in terms of a number of social variables is potentially a highly complex process, especially with respect to knowing how to respond to others in particular situations and the consequences of the responses chosen (Human, 1996a). Thus, an improved understanding of people's attitude towards diversity within the organisation, will ultimately inform management seeking to build an ethically diverse, healthy and productive workforce that values the differences found within a given organisation.

2.3.2. *Measuring the Attitude towards Diversity Construct*

To date, there has been very little research concerning attitude towards diversity, and in general, such empirical research has primarily focused on developing inventories designed to asses organisational diversity practices and interventions (see Gilbert & Ones, 1999, Diversity Practice Scale) or attitudes toward equal employment opportunity programmes such as affirmative action (Konrad & Linnehan, 1995). While these scales in themselves, are important steps in examining organisational attempts specifically aimed at evaluating differences, very few measures examining individual's attitude towards diversity appear to be available. Nevertheless, several attempts have been undertaken by theorists to expand the research on attitude towards diversity in organisations, which have in turn, resulted in the development of specific instruments that can potentially be utilised in organisations when trying to assess individual's attitude and beliefs about diversity. The following theories of individual's attitude towards diversity will be discussed: Attitudes towards Diversity Scale (ATDS) (Montei, Adams & Eggers, 1996), Miville-Guzman Universality-Diversity Scale (M-GUDS) (Miville, Gelso, Pannu, Lui, Touradji, Holloway & Fuertes, 1999), the Cultural Diversity Belief Scale (CDBS) (Rentsch, Turban,

Hissong, Jenkins & Mars, 1995), as well as the Diversity Perceptions Survey of Mor-Barak, Cherin & Berkman (1998).

According to Montei et al. (1996), the ATDS was developed to serve as a measure of attitudes toward diversity in the work environment as it relates to three dimensions, namely: co-workers, supervisors, and hiring and promotion. The scale was based on the notion that one's attitude towards diversity refers to the degree to which one tends to accept diverse others in the workplace. This includes acceptance of such individuals as co-workers and supervisors, and any other persons in work-related roles. In addition, one's attitude towards diversity includes the degree to which one accepts the increased hiring of diverse others. Each of the three dimensions is measured with ten items. The response format for each item is a five-point Likert-type scale ranging from *strongly agree* to *strongly disagree*. The scale also includes several reverse-scored items. The results from the studies of the ATDS indicate that it provides a valid and reliable measure of attitude towards diversity in organisations, where reliability analyses suggest that the scale is internally consistent and group differences in scores have generally found to be consistent with theoretical explanations.

Generalised measures of diversity perceptions and attitudes are thought to aid one's understanding in terms of the ways in which employees differ in perceptions and attitude. Consequently, Mor-Barak, Cherin and Berkman (1998) developed the Diversity Perceptions Survey which aimed to assess both personal and organisational dimensions in diversity perceptions. Collaboratively, these two dimensions assess the overall diversity environment in an organisation. The personal dimension explores an individual's views and prejudices toward people who are different from themselves that can affect attitudes and behaviours towards others in the organisation. The organisational dimension on the other hand, investigates management's policies and procedures specifically affecting various demographic groups, such as discrimination or preferential treatment in hiring and promotions procedures. The instrument includes 16-items specifically designed to measure personal and organisational dimensions in diversity perceptions as well as four additional sub-scales which are mapped onto the higher-order composite dimensions. The four sub-scales include: (a) organisational fairness, (b) organisational inclusion, (c) personal diversity value, and

(d) personal comfort. The response format for each item is a six-point Likert-type scale ranging from one (strongly agree) to six (strongly disagree), with an additional category of 'can't answer'. The scale also includes several reversed-scored items. Higher scores on the scale reflected a more positive perception of diversity, both personal and organisational. Cronbach's alpha for the overall scale was 0.83, indicating excellent internal consistency.

Miville et al. (1999) developed the Miville-Guzman Universality-Diversity Scale (M-GUDS) which has been utilised in several studies (Olukemi, Sawyerr, Strauss & Yan, 2005; Salamonson, Everett, Andrew, Koch & Davidson, 2009; Strauss & Connerly, 2003). This scale was developed on the basis that effective management of diversity in the workplace should be based on recognition of commonalities and awareness of differences among co-workers. Miville et al. (1999, p. 158) introduced the construct Universal-Diverse Orientation (UDO) which is defined as "an attitude towards all other persons which is inclusive yet differentiating in that similarities and differences are both recognized and accepted; the shared experience of being human results in a sense of connection with people and is associated with a plurality or diversity of interactions with others". To asses the UDO construct, the researchers initially developed the 45-item M-GUDS which consists of three subscales that assess the respective cognitive, behavioural and affective components of UDO: (1) relativistic appreciation of oneself and others, (2) seeking a diversity of contact with others, and (3) a sense of connection with the larger society or humanity as a whole (Miville, 1992).

It was found that the subscales for the three components were intercorrelated above 0.75 and highly correlated with the overall scale. Subsequently, Fuertes et al. (2000) developed a 15-item short form (M-GUDS-S) through the use of exploratory factor analysis. They found a correlation between the short and long forms of .77 (p < 0.001). Ratings for the M-GUDS-S are on a six-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree". A possible limitation of this measure, according to Fuertes et al. (2000), pertains to the possibility that the validity estimates reported for the scores on the M-GUDS-S are likely to be inflated because of the use of monomethod scales. Nevertheless, the short form of the M-GUDS-S has been praised for its ease of administration, and the fact that it consists of three distinct

factors conceptually similar to the UDO components. Moreover, it was found that factors correlated with other variables in the theoretically predicted direction.

The last measure discussed is that of the Cultural Diversity Beliefs Scale (CDBS), developed by Rentsch, Turban, Hissong, Jenkins and Marrs (1995). This test, evidently, was utilised to measure the attitude towards diversity construct in this study. Rentsch et al. (1995) believe that there are at least three distinct sets of beliefs about diversity that may exist, namely: (1) diversity as valuing individual differences, (2) tolerance for affirmative action, and (3) diversity as a competitive advantage. The inventory was developed to serve as a measure of attitudes towards diversity in the work environment as it relates to the three dimensions of diversity belief sets mentioned above. The response format for each of the 23-items is a seven-point Likert-type scale, ranging from *strongly disagree* to *strongly agree*. The scale also includes several reversed scored items. High scoring on the CDBS reflects a positive attitude towards diversity in the workplace, whereas low scoring suggests a negative attitude towards a diverse workplace. Interestingly, additional analyses indicated that gender, race, political affiliation, and liberal beliefs are related to cultural diversity beliefs in interpretable patterns. This measure has been touted as an effective means of understanding employee's attitude towards diversity in light of organisational change.

2.4. EMOTIONAL INTELLIGENCE

2.4.1 Introduction

Emotional Intelligence (EI) is a relatively new and growing area of behavioural research, having caught the imagination and interest of the general public, the commercial world, and the scientific community. According to Zeidner, Matthews and Roberts (2004), the concept resonates with a current zeitgeist emphasising the importance of self-awareness and understanding, readdressing a perceived imbalance between intellect and emotion in the life of the collective Western mind. Much of the current research on EI in organisational settings originates from a desire to explain differential attainment of occupational success, which cannot be accounted for by IQ alone (Goleman, 1995; Mayer et al., 2000; Murphy & Janeke, 2009; Sternberg, 1997).

However, there appears to be a lack of consensus in the field of organisational psychology, which centres on the definition and nature of EI as well as the measurement and application of the construct, further reiterating the novelty of the construct and the need for an urgent movement towards a deeper understanding and investigation into the field of EI. At the same time, the potential utility of EI has gained both prominence and notoriety in organisational settings as a psychological determinant of both occupational (Palmer, Gardner & Stough, 2003) and leadership (Vrba, 2007) success, has frequently been touted as an emerging construct with great predictive power (Van Rooy, Viswesvaran, Pluta, 2005), and has proven immensely appealing to psychologists, journalists and entrepreneurs alike. An overview of the historical development of the concept EI, followed by a synopsis of the categorisation of different models and measures of EI, will be discussed and elaborated on in the subsequent section.

2.4.2   The History and Origin of the Emotional Intelligence Construct

The history of research on intelligence has made it clear that a person's success in both personal and professional life depends not only on general cognitive intelligence (IQ), but also on other personal factors. As early as 1920, Thorndike proposed a model of intelligence which included not only traditional cognitive factors, but also non-cognitive factors which he termed social intelligence, defined as the ability to understand and manage others – to act wisely in human relations. Thordike's (1920) definition of social intelligence has both a cognitive and behavioural component. This implies firstly, that the ability to understand and manage people is an intellectual capacity, and secondly, this capacity is different from the abstract-verbal and concrete-mechanical aspects of intelligence (Derksen, Krammer & Katzko, 2002).

However, over the years the notion of social intelligence proved problematic primarily because it was a concept that was not only difficult to define, but was difficult to conceptually measure in a psychometrically sound manner (Derksen et al., 2002). Consequently, researchers sought to investigate other avenues that could potentially conceptualise and measure non-cognitive factors of intelligence. Individual's access to their feelings, the labelling of those feelings and use by them to guide behaviour was operationalised by Gardner (1983) in terms of 'Personal

Intelligence', one of the seven independent types of intelligence included in his Multiple Intelligence Theory. Personal Intelligence, a theoretical forerunner to the concept of emotional literacy and emotional intelligence can further be divided into intrapersonal intelligence' (the knowledge of one's internal processes and feelings) and interpersonal intelligence' (the ability to determine other people's reactions, needs, emotions and intentions).

Intrapersonal intelligence relates to one's intelligence in dealing with oneself, and is the ability to symbolise highly complex and differentiated sets of feelings. Interpersonal intelligence however, relates to one's intelligence in dealing with others and on the basis of discrimination, "to become more involved or withdraw from a situation" (Gardner, 1983, p. 239). These two forms of personal intelligence are intimately related. On the one hand, acquiring knowledge of one's own emotions is dependant on the ability to learn from observations of other people, while attention to one's subjective feelings is thought to function as 'sixth sense' providing valuable information about others (Gardner, 1983). Although Gardner (1983) never used the term emotional intelligence, his concepts of interpersonal and intrapersonal intelligence formed the foundation for later models of emotional intelligence, i.e., Bar-On's (1997) Bar-On Emotional Quotient Inventory (EQ-i). Despite this, the concept of EI stems in part from Gardner's contribution as his theory of intelligence included additional abilities that were not normally seen under the heading of intelligence. Following on Gardner's work, Steiner (1984, p. 165) suggested that "to be emotionally literate we need to know both what it is that we are feeling and what the cause of our feelings are". However it was Salovey and Mayer (as cited by Bar-On, Brown, Kirkcaldy & Thome, 2000), who proposed the label of Emotional Intelligence to represent the ability of a person to deal with his/her emotions.

2.4.3 Defining Emotional Intelligence

In a revision of their emotional intelligence theory, Mayer and Salovey (1997, p. 5), define EI as "the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and knowledge, and to reflectively regulate emotions so as to promote emotional intellectual growth". This definition mirrors Salovey and Mayer's (1990) original concept of EI, postulating that it is an umbrella

concept comprising three distinct components, appraisal and expression of emotions, regulations of emotions and utilisation of emotional information in thinking and acting. It is apparent from this theoretical perspective that EI refers specifically to the co-operative combination of intelligence and emotion (Ciarrochi, Chan & Caputi, 2000; Mayer & Salovey, 1997; Roberts, Zeidner & Matthews, 2001). Caruso and Salovey (2004) further elaborated on this definition by suggesting that EI involves the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, as well as regulate emotion in the self and others.

Another prominent researcher in the field of EI, Bar-On (1997), defines the concept as a multi-factorial construct that encompasses an array of interrelated emotional, personal and social competencies and skills that enable an individual to cope with environmental demands and pressures. While Dulewitz and Higgs (1999) define EI as being concerned with being aware of and managing one's own feelings and emotions; being sensitive to and influencing others; sustaining one's motivation; and balancing one's motivation and drive with intuitive, conscientious and ethical behaviour. Various other researchers have attempted to conceptualise and measure the construct, specifically within the work environment. For example, Palmer and Stough (2001) who define EI as the capacity to deal effectively with one's own and other's emotions, which involve the capacity to effectively perceive, express, understand and manage emotions in a professional and effective manner at work.

Evidently, there is an intense interest in the EI construct, with many views illustrating the discrepancy of opinion as to what exactly comprises the domain of EI and hence variation in measurement approaches and terminology used to describe the construct abound (Ciarrochi et al., 2000; Davies, Stankov & Roberts, 1998; Dulewicz & Higgs, 2000). In light of the different views that have emerged around the utilisation and measurement of the construct, as is evident in the distinction between ability, trait and mixed models of EI (Mayer, Caruso & Salovey, 2000), the EI construct has been branded as a construct with blurred boundaries (Stough, Palmer, Gardner, Papageorgiou & Redman, 2002), prompting debate around the legitimacy of the construct.

2.4.4   Multiple Theories of Emotional Intelligence and the Misconceptions about the Construct.

Within the EI field, numerous theories, models or views of the EI construct exist. The variations in views of EI has succeeded in delineating and demarcating opposing streams of thought, particularly with regard to the operationalisation and measurement of the construct. According to Badenhorst and Smith (2007), theories of EI, upon which definitions are based, are often classified into two basic types: those proposing a narrow definition of EI as an ability, focusing on aptitude for processing affective information, as based on the definition of Mayer et al. (1999), and mixed models that conceptulise EI as a diverse construct, including aspects of personality as well as the ability to perceive, assimilate, understand and manage emotions, as based on Goleman's (1995) approach. These two approaches are generally termed "ability models" versus "mixed-models" (Mayer et al., 1999). However, an issue that has raised concerns in the academic fraternity involves the lack of common language, evident from the widely divergent definitions of EI. Caruso (2004, p. 2) states that:

> If we, as researchers or practitioners, don't have a common language we cannot hope to effectively communicate with each other. We also run the risk of alienating our clients as they struggle to understand what it is we have been selling them.

A failure to find a common ground, has sparked wide debate among researchers with the one view stating that the goal of research, in itself, should be to identify and define a singular theoretical framework to be labelled as the "correct" version of EI, while the other maintains that having multiple theories can often serve to elucidate additional aspects of complex psychological constructs. Although this, superficially, may sound like a fair argument, the problem is that many theorists have made unfounded claims with regard to the scope of EI. Although writing for the scientific community is far different to writing for the general public, the integrity of the concept, such as EI, should ultimately remain intact (Badenhorst & Smith, 2007). According to Pfeifer (2001), a major weakness with the extant EI research literature is the lack of scientifically sound, objective measures of the EI construct. Although recent years have bared testament to the quest to identify valid EI measures (Gignac,

2008; Mayer, Salovey & Caruso, 2002; Palmer & Stough, 2002), Schutte and Malouff (1998) state that reliable and valid measures of EI and its components are important efforts to make theoretical advances in the area of EI; explore the nature and development of EI; predict the future functioning of individuals, for example, in training programmes or jobs; identify individuals likely to experience problems because of deficits in emotional skills.

A variety of measurement instruments such as Bar-On's (1997) Emotional Quotient Inventory (EQ-i), Gignac's (2008) Genos Emotional Intelligence Inventory, Mayer and Salovey's (1997) Multifactor Emotional Intelligence Scale (MEIS), and Palmer and Stough's (2001) Swinburne University Emotional Intelligence Test (SUEIT), each postulate a plethora of alternative conceptualisations of EI. According to Petrides and Furnham (2000), the different measurement approaches and operational definitions adopted by the prominent theorists of EI, have been broadly differentiated into two prominent groups, that being, trait versus ability models of EI and mixed versus ability models of EI. The fact that there appears to be some debate about what constitutes the domain of EI, about terminology used to describe the construct and about methods used to measure it, makes it imperative for researchers to fully understand and grasp the intricacies of the specific model in use, and to comprehend the influences in the development of the various measurement instruments of the construct. Petrides and Furnham (2000) go so far as to suggest that it is the type of measurement rather than the theory per se that determines the nature of the underlying model. For this reason, a discussion is provided below in which the various models of EI are examined and further elaborated on. Table 2.1 summarises some of the cardinal differences among ability and trait/mixed models of EI along a number of dimensions, such as conceptual context, focus, dimensionality, measurement procedures and their psychometric properties. The manifest differences, contained in this table, highlight to the reader a particularly problematic feature associated with current theories of EI: whatever is being measured within "mixed models", it is unlikely the same type of EI as that assessed by "ability models" (Zeidner, Matthews & Roberts, 2004).

2.4.4.1   *Ability Models of Emotional Intelligence*

According to the ability model of EI, just as individuals show intelligence in their understanding and use of numbers, words or geometric shapes, so people may be more or less intelligent in dealing with emotions (Petrides & Furnham, 2000). This approach tends to cluster EI in the domain of intelligence, where it is viewed in similar vein to that of cognitive and verbal intelligence, with the exception that it interacts with or within emotional content (Caruso, Mayer & Salovey, 2002). The enhanced emphasis on the cognitive components of emotional intelligence denotes a conceptualisation of EI in terms of the potential for intellectual and emotional growth. According to Ashkanasy and Daus (2004), within the ability model, EI is perceived as a conceptually related set of mental abilities dealing with emotions and the processing of emotional information, and which forms part of and contributes to logical thought and intelligence in general. These abilities are arranged hierarchically from basic psychological processes, to the more psychologically integrated and complex, and are thought to develop with age and experience, much the same way as crystallised abilities (Gardner & Stough, 2002). The mental ability dealing with emotions and the processing of emotional information is considered to be independent of traits, talents and preferred ways of thinking (Mayer & Salovey, 1993).

According to Mayer, Caruso and Salovey (1999), ability testing is the ultimate standard in intelligence research primarily because in this context, intelligence corresponds to the actual capacity to perform well at mental tasks and does not merely measure an individual's belief about those capacities. Due to this, attempts to measure EI as a cognitive ability is best assessed through measures of maximum performance rather than self-report (Petrides & Furnham, 2000). Thus, having an individual solve a problem (i.e., identifying the emotion in a person's face, story or painting), would allow one to measure the capacity by evaluating the answers against a set criteria. The Multifactor Emotional Intelligence Scale (MEIS) developed by Mayer and Salovey (1997), is currently the only example of an ability measure. Subsequently, Mayer and Salovey later refined their model, resulting in the development of the Mayer, Salovey and Caruso Emotional Intelligence Test (MSCEIT). According to this particular model of EI:

EI involves the capacity to reason with and about emotions, including (1) the ability to perceive accurately, appraise and express emotions; (2) the ability to access and/or generate feelings when they facilitate thought; (3) the ability to understand emotion and emotional knowledge; and (4) the ability to regulate emotions to promote emotional and intellectual growth (Mayer & Salovey, 1997, p. 10).

This definition forms the foundation of the MSCEIT, which is designed to yield an overall EI score, as well as subscale scores for four sub-scales namely, perception, facilitation, understanding and management (Mayer et al., 2000). Due to the difficulty in measuring the responses toward emotional content, EI ability models make use of at least three alternatives for designating a correct answer: consensus scoring, expert scoring and target scoring (Mayer et al., 1999).

Consensus scoring pools the judgements of hundreds of people and the test taker receives a credit for endorsing the emotions that the group endorses. Expert scoring, by contrast, makes use of experts in the field of emotions (i.e., clinical psychologists, psychiatrists). The expert is required to analyse certain stimuli, i.e., facial expression, and using their best judgement, determine how the test taker was feeling at the time. Credits are awarded to the correspondent if his/her rating corresponds to those of the expert. Finally, target scoring involves the test taker assessing what a particular target is feeling. The test taker guesses how the target was feeling at the time by referring to multiple emotion rating scales. The fact that it is particularly difficult to apply truly objective veridical criteria in scoring EI tasks has unsurprisingly prompted many researchers to investigate the construct as a constellation of dispositions and self perceived abilities rather than a class of cognitive-emotional abilities (Davies et al., 1998). This is the reason as to why most EI research papers and literature in recent times have been concerned with aspects of trait EI (Petrides & Furnham, 2000).

2.4.4.2   *Trait or Mixed Models of Emotional Intelligence*

Traditionally, a trait model of EI, often referred to as mixed models of EI, is conceived as a measure that explicitly amalgamates a combination of EI dimensions and non-EI dimensions, such as personality or competency dimensions (Gignac,

2008). Trait EI is concerned with cross-situational consistencies in behaviour, drawing heavily on personality variables such as empathy, assertiveness and optimism, but often including many other, somewhat vaguer, constructs that appear to be potential correlates (i.e., motivation, self-awareness, happiness) rather than essential elements of EI (Petrides & Furnham, 2000). For example, the BarOn EQ-i incorporates a dimension called 'reality testing', which is relevant to "the ability to assess the correspondence between what is experienced and what objectively exists" (BarOn, 1997, p.19). Another example of a mixed-model measure of EI is that of the Emotional Competence Inventory (ECI). The ECI includes a dimension termed 'conscientiousness', which has been defined as "taking responsibility for personal performance". According to several researchers, conscientiousness has long been considered a dimension of personality (McCrae & Costa, 1997).

Due to the fact that trait EI appears to be closely related to traditional personality traits, EI should then be conceived of as a disposition or an affect rather than a cognitive ability. It is imperative to understand that trait EI and ability EI are two different constructs; the former measured through self-report questionnaires, whereas the latter ought to be measured through tests of maximal performance, as the method used to measure individual difference variables has a direct impact on the operationalisation of the construct (Perez, Petrides & Furnham, 2005). This measurement distinction, according to Jonker and Vosloo (2008), has far-reaching theoretical and practical implications. For example, trait EI would not be expected to correlate strongly with measures of cognitive ability or proxies thereof, whereas ability EI should be equivocally related to such measures. Other examples of measurement approaches subscribing to the trait EI framework include the EQ-i (Bar-On, 1997), the Genos Emotional Intelligence Test (Gignac, 2008) and the Swinburne University Emotional Intelligence Test (Palmer & Stough, 2001).

TABLE 2.1

COMPARISON OF MIXED VS ABILITY MODELS OF EMOTIONAL

INTELLIGENCE

Dimension	Models of Emotional Intelligence	
	MIXED MODELS	**ABILITY MODELS**
Conception of EI	EI is viewed as melange of competencies and general dispositions for adaptive personal functioning and coping with environmental demands. The construct encompasses multiple aspects of emotional and personal knowledge and personal functioning that are rather closely related to emotions, including: motivation, personality traits, temperament, character and social skills.	EI is viewed as a well-defined and conceptually related set of cognitive abilities for the processing of emotional information and regulating emotion adaptively.
Psychological Focus	Affective	Cognitive
Typical Facets	Self-awareness, self-motivation, self-regulation, empathy, social skills, assertiveness, stress tolerance, impulse control, coping with stress, reality testing, social problem solving, etc.	Emotion identification, understanding of emotions in thought and use of emotions to enhance thought, emotion regulation
Number of competencies	Anywhere from four to 12 abilities. These can be grouped into four core areas: self-awareness, self-regulation/management, social awareness, relationship management and social skills (Cherniss & Goleman, 2001).	Four major branches: identification, understanding, usage and self regulation (Salovey et al., 2000).
Measurement approaches	Quasi-personality (self-report, Likert-type scales)	Competency (performance type items such as identification of emotions in pictures, identifying progressions and blends of emotions, problem solving, etc.).
Examples of Scales	Bar-On's (1997) EQ-i, , Boyatzis and Goleman's (1999) Emotional Competence Inventory (ECI), Palmer and Stough's (2002) Swinburne University Emotional Intelligence Test (SUEIT), and Gignac's (2008) Genos Emotional Intelligence Inventory.	Mayer, Caruso and Salovey's (1999; 2002) Multifactor Emotional Intelligence Scale (MEIS) and the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT).
Factor Structure	Little empirical data. General factor found for individual published scales, but little evidence to support claims of multiple factors (Petrides & Furnham, 2000).	Inconsistent with four-branch model. Exploratory factor analytic data consistent with three factor models of perception, understanding and regulation (Mayer, Caruso & Salovey, 2000).
Reliability of scales	Satisfactory (Bar-On, 1997; Dawda & Hart, 2000). Ranging between 0.70 – 0.85	Low to moderate (Roberts, Zeidner & Matthews, 2001) ranging between 0.68 – 0.71; inconsistency among scoring procedures and low subtest reliabilities.
Convergent/Divergent validity	Very low-negligible correlations with IQ (Bar-On, 2000; Derksen, Kramer & Katzko, 2002). Low discriminant validity vis-à-vis personality measures,	Moderate correlations of about 0.30 with ability (Mayer et al., 2000; Roberts et al., 2001). Good discriminant validity, with low correlations with "Big 5" personality facets (Roberts et al.,

particularly Neuroticism.	2001)
Predictive validity	Good, but many reflect confounding with personality (Janovices & Christiansen , 2001)	Good, but may reflect confounding with ability (Janovices & Christiansen, 2001).

(Adapted from Zeidner, Matthews, & Roberts, 2004).

2.4.5   Measures of Emotional Intelligence

The development of theoretical models of EI has been paralleled by the development of inventories to measure the concept accurately. Although several putative measures of EI have been published and intended specifically for use in workplace settings, few can truly be accredited as being designed to be used solely by human resource professionals, corporate coaches and industrial/organisational psychologists (Gignac, 2008). Evidently, the content of EI inventories varies greatly due to the fact that interpretation of the meaning of EI varies significantly. Ciarrochi et al. (2000) commented on this reality, stating that "while the definitions of EI are often varied for different researchers, they nevertheless tend to be complementary rather than contradictory" (p. 540). They further pointed out that "in general, the various measures of EI cover four distinct areas: emotion perception, regulation, understanding and utilization" (p. 540). An overview of the literature on emotional intelligence has revealed that several accredited inventories have been developed overtime. As such, a discussion follows in which a brief overview of these key measurement instruments is presented. This includes the Mulifactor Emotional Intelligence Scale (MEIS) (Mayer & Salovey, 1997); the Mayer, Salovey, Caruso Emotional Intelligence Test (MSCEIT) (Mayer et al., 2000); the Bar-On Self Report Emotional Intelligence Inventory (Bar-On, 1997); the Emotional Competence Inventory (ECI) (Goleman, 2001); Emotional Quotient Inventory (EQI), (Bar-On, 1997; 2000); and the Swinburne University Emotional Intelligence Test (SUEIT) (Palmer & Stough. 2001).

The MEIS is a multi-task ability measure which is designed to tap into four hierarchical dimensions of EI, namely: 1) *emotional perception*, 2) *emotional facilitation of thought*, 3) *emotional understanding*, and 4) *emotional management* (Mayer & Salovey, 1997). The MEIS requires respondents to complete tasks that require the identification of emotional expressions from facial expressions and

designs; define complex emotions and to generate and reason with emotion, to name a few. According to Ciarrochi et al. (2000) the MEIS has been touted as an objective measure (in that there are correct answers), has acceptable reliabilities, samples a wide variety of emotional behaviours, and appears to overlap much less with traditional measures of personality than previous ability models of EI (see Goleman, 1995). The MEIS provides an overall EI score as well as four sub scores which are mapped onto the four hierarchical dimensions of EI. According to Perez et al. (2005), the reliability coefficients for the MEIS are good for global ability (0.70 – 0.80) but low (0.35 – 0.66) for emotional understanding and emotional management. In an attempt to improve on the MEIS scoring, reliability and factor structure, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) was developed. The reliability coefficients for the revised model range from 0.68 – 0.71 (Mayer, Salovey & Caruso, 2002).

The Bar-On Self Report Emotional Intelligence Inventory (Bar-On, 1997) is a 133-item self report inventory consisting of 15 subscales. Items are declarative statements phrased in the first-person singular. Respondents are asked to indicate the degree to which the statement accurately describes them on a five-point Likert-type scale (1 = not true of me; 5 = true of me). Items are summed to yield a total score, which reflects overall EI, scores on five higher-order composite dimensions and scores on 15 lower-order component scales. The five higher-order composite scales include the following dimensions: 1) Intrapersonal Intelligence (which is comprised of the following linked sub-scales, emotional self awareness, assertiveness, self-regard, self-actualisation and independence), 2) Interpersonal Intelligence (comprising empathy, interpersonal relationship and social responsibility), 3) Adaptation (comprising problem solving, reality testing, flexibility), 4) Stress Management (comprising stress tolerance and impulse control), and 5) General Mood (comprising happiness and optimism). According to Dawda and Hart (2000), the EQ-i domain and component scales have good item homogeneity and internal consistency ($\alpha = 0.75\text{-}0.85$). One positive aspect of this instrument is that the correlations among the emotional intelligence composite scales as well as the pattern of convergent and discriminant validities suggests that the EQ-i taps a fairly broad range of related emotional constructs. The EQ-i has been

translated in 22 languages, with data that has been collected in over 15 countries (Bar-On & Parker, 2000).

The Emotional Competence Inventory (ECI) (Goleman, 2001), is a competency based inventory specifically designed for use in the workplace and is intended to be used in a 360-degree mode. This is a multi-rater survey instrument based on the Self Assessment Questionnaire (SAQ) developed by Boyatzis, the emotional competencies identified by Goleman (1998), as well as the competencies from Hay/McBer's Generic Competency Dictionary (Boyatzis, Goleman & Rhee, 2000). The ECI comprises 110 items within 20 competencies, divided into four clusters, namely: self-awareness, self-management, social-awareness and relationship management. Research conducted on the instrument shows that the ECI is related to outcomes such as individual life success (Sevinc, 2001), employee performance in call centres (Nel & De Villiers, 2004) and perceptions of leadership in a group (Humphrey, Sleeth & Kellet, 2001). Previous research has shown the ECI to have an overall average internal consistency coefficient of 0.85 for other ratings and 0.75 for self-ratings (Hay/McBer, 2002).

The Genos EI, developed by Gignac (2008), is a 70-item inventory that was preceded by a 64-item self report measure referred to as the Swinburne University Emotional Intelligence Test (SUEIT), developed by Palmer and Stough (2001). Both the SUEIT and the Genos EI are one-dimensional (i.e., a multi-dimensional construct) models, the factors of which represent a set of related abilities concerning how effectively people deal with emotions in the workplace. The number and nature of the dimensions found within the SUEIT were based on preliminary factor analysis of existing models and measures of EI. These measures included MSCEIT (Mayer et al., 1999), Bar-On EQ-I (Bar-On, 1997), EIS scale (Schutte, Malouff, Hall, Haggerty, Cooper, Golden, & Dornheim (1998), TMMS (Salovey, Mayer, Goldman, Turvey & Palfai, 1995), TAS – 20 (Bagby, Taylor & Parker, 1994) and the scale developed by Tett, Wang, Thomas, Griebler and Linkovich (1997). It was found that there were five common dimensions of EI namely: Emotional Recognition and Expression, Understanding Emotions External, Emotions Direct Cognition, Emotional Management and Emotional Control. Research on the SUEIT, conducted by Palmer and Stough (2003), indicated high internal consistency, (Cronbach Alpha coefficients ranging from 0.70

to 0.91), and high test-retest reliability (stability coefficients ranging from 0.82 to 0.92).

Although the SUEIT proved effective at measuring EI, Gignac (2008) examined the factor structure associated with the SUEIT in an extensive CFA investigation and discovered that it in fact measured a total of nine dimensions, of which seven were substantially relevant to EI. Based on this information, the decision was taken to revise the SUEIT. However, rather than build a revision of the SUEIT based exclusively upon factor analyses, focus groups were conducted with HR professionals to ascertain their views on what constitutes an ideal measure of EI, particularly for application within industry. Evidently, some of the key themes that emerged from the focus groups included: an inventory that measured a simple model (i.e., not a lot of dimensions), an inventory that took less than 15 minutes to complete and a developmental focus within the accompanying EI reports. Subsequent to this information and preliminary research, Gignac (2008) developed the Genos EI Inventory (Genos EI). This measure consists of 70-items designed to measure seven EI dimensions: Emotional Self Awareness, Emotional Expression, Emotional Awareness of Others, Emotional Reasoning, Emotional Self-Management, Emotional Management of Others, and Emotional Self-Control. The inventory can produce an inconsistency index score, an impression management score, a Total EI score, and scores for each of the seven sub-scales (Gignac, 2008). The psychometric properties of the Genos EI will be addressed in Chapter 3.

It is perhaps warranted to note that, although the above mentioned inventories are some of the most popular measures of EI, other measures of EI worth mentioning include the Trait Meta Mood Scale (TMMS, Salovey et al., 1995), the Twenty-Item Toronto Alexithymia Scale (TAS – 20, Bagby et al., 1994), and the Wong & Law Emotional Intelligence Scales (WLEIS, Wong & Law, 2002).

2.5   DIVERSITY COMPLEXITY

2.5.1   The Complexity of Diversity Perceptions

At the most basic level, the mere existence of identity differences between participants in a social interaction is likely to present stressful risks for identity negotiation (Frable, Blackstone & Scherbaum, 1990). According to Polzer and Caruso (2008), identity negotiation concerns the cognitions people have about themselves (self views), the cognitions they have about others (appraisals), the correspondence of the two, and the affective and behavioural manifestations of these cognitions. Polzer, Milton and Swann (2002) further advocate that group identity, social interaction, relationship conflict, and collective performance are all sensitive to the overall degree of correspondence between self-views and appraisals in a group of people, and which is often referred to as interpersonal congruence. The congruent understanding of each other's views enables individuals to more accurately infer each others intentions and meanings, facilitating fluent, efficient interaction, and thus assisting in the utilisation of their diverse abilities in accomplishing their collective goals. Congruent understandings of each other's views are indeed warranted in an organisational context, given the increased dependence on group processes, team work and cross-functional departments (Jehn, Northcraft & Neale, 1999; Johnson & Johnson, 2006).

The implications of low interpersonal congruence, on the other hand, is likely to manifest itself in frequent miscommunication, unintentionally inappropriate or even offensive behavioural patterns, and unpredictable encounters that promote self-doubt, frustration, anxiety and ultimately poor performance on collective tasks (Ely & Roberts, 2008). In light of this, an organisation's strategy for managing diversity cannot simply be determined top-down. Although processes, systems and 'ways of thinking' can be cascaded down to individual business units, the identities of individual employees comprising those business units are so complex and multifaceted, that inevitably, diversity issues have to be dealt with on a situational basis. This in turn, requires situational adaptability rather than the imposition of a stereotype (Human, 2005). Therefore, the perceived magnitude of uncertainty at the group level of analysis, with regard to individual identities, is important to consider as organisational conflict issues are likely to trickle down in a fashion that dilutes

saliency and increases variance in the interpretation and understanding of diversity within the organisation.

Although stereotypical thinking potentially leads to prejudiced feelings and discriminatory actions, inaccurate stereotypes can also severely retard the advancement of targeted individuals within a group and/or organisation which in turn, can be highly detrimental to the functioning of the group itself (Carr-Ruffino, 2005). On one level, such stereotyping denies the reality of within-group differences, between group similarities as well as the cross-cutting complexity of other social variables. Research on social categorisation and in-group preference suggests a seemingly universal tendency, to respond positively to other individuals simply by the knowledge that they share a common group identity (Brewer & Gardner, 1996). According to Van de Zee, Vos and Luijters (2009), detectable differences at the group level, may cause distrust among subgroups, resulting in fragmentation within the group. From the social identity theory, it can predicted that, if team members primarily stress their membership of a subcategory (i.e., being a white male), the emphasis in interactions will be on category values and perspectives, which differ for the various sub-groups within the team (Hogg & Turner, 1985; Tajfel, 1987).

For example, a situational setting, such as a work group, in which an individual is dissimilar to a majority of the members, may make the individual uncomfortable because of the increased awareness that the characteristics of his or her social identity are different from others (Riordan & Shore, 1997; Tajfel, 1978). Conversely, the social unit may be more attractive to the individual if it is composed of others whose demographic profiles are consistent with the categories that the individual has chosen to categorise him or herself (Tsui, Egan & O'Reilly, 1992). High group identification, in turn, may act as a source of social support and self-esteem that offsets the pain of stigmatisation (Cohen & Garcia, 2005). Moreover, high-group identified individuals also tend to have increased levels of motivation and ability both to reject negative representations of their group (Oyserman, Kemmelmeier, Fryberg, Brosch & Hart-Johnson, 2003) and to challenge its lower status in hierarchy (Ellemers, Spears & Doosje, 1997); tendencies that may buffer them against negative stereotyping.

Thus, social identity complexity is the product of a process of recognising and interpreting information about one's own in-groups. Roccas and Brewer (2002) further proposed that multiple social identities can be represented along a continuum of complexity and inclusiveness, reflecting the degree to which different identities are both differentiated and integrated in the individual's cognitive representation of his or her in-group memberships. According to Brewer and Pierce (2005, p. 2), "having a complex social identity is dependant on two conditions: first, awareness of more than one ingroup categorization, and second, recognition that the multiple ingroup categories do not converge". Partial overlapping group memberships reduce the evaluative significance for the self of intergroup comparisons, thereby undermining the motivational base for intergroup discrimination (Vanbeselaere, 1991). Thus, identities that are grounded in the embracement of mutual differences, build on shared features, reduce in-group favouritism and increase tolerance towards ambiguity and out-groups in general. By extension, and given the fact that those high in intolerance for ambiguity are more likely to perceive something that is different or ambiguous as threatening (Cox, 1994), Strauss, Connerley and Ammermann (2003) found that tolerance for ambiguity, and out-groups in general, is significantly and positively related to attitudes towards diversity.

On another level, stereotyping often signifies perceived power and status differentials as well as value-judgements concerning inherent superiority and inferiority (Human, 1996b). To further this point, research in South Africa, for example, for years advocated that many whites believed that blacks are inherently less capable than whites; centuries of oppression led to the "inferiorization of blacks", whereby blacks were seen to be innately inferior and intellectually limited (Adams & Moodley, 1993, p. 105). According to Human (1996a, p. 57) all over the world and particularly in a 'racist' country like South Africa, power differentials and stereotypical views of culture remain entrenched within the mind-sets of many individuals long after reconciliation has taken place. The implications of such instantaneous evaluations of others are enormous in the sense that they create the initial predisposition for things to get off on a positive or negative footing, particularly in situations where the diversity between individuals is rife.

Although instantaneous evaluations of others largely contributes to the negative impressions and attributions one ascribes to the diversity of others, it is in fact, the individual's perceptions about diversity that are complex, in the sense that they are differentiated, i.e., the perceptions cover multiple categories of reactions (Hostager & De Meuse, 2002). Hostager and De Meuse (p. 192) affirm that differentiation involves "the ability to perceive a phenomenon in terms of multiple aspects or dimensions and, as such, it is a hallmark of perceptual complexity". Gibson, Ivancevich and Donnelly (as cited by Vos, 1998, p. 58) describe perception as "the cognitive process by which an individual gives meaning to an environment… it is a process individuals use to select, organise, store and interpret stimuli into a meaningful and coherent picture of the world". This evaluative component of the mind that assists us in making sense of the world should be seen as part of the preconscious processing of the mind; in other words, the mind's perception and organisation of information that occurs before we become aware of it. Yet, because we are unaware of our initial judgments, we naturally tend to trust them in the same manner as we would trust our senses, without realising that what we assume to be neutral perceptions are in fact biased perceptions.

Human (1996b, p. 58) believes that, "if an individual is aware of his/her initial biases and preferences, thinking over one's initial judgments adds information and may overrule the unconscious thought". Failure to think further about initial judgments has the power to greatly influence the course of social interaction and the level at which an individual can integrate and understand that people differ in terms of a number of dimensions. As such, systematic differences in perceptions of diversity are derived from one's cognitive evaluations of others. Higher levels of differentiation, allows an individual to be more aware of his or her discrepant views of a person. Such discrepancies, which are part and parcel of understanding others for individuals high on diversity complexity, might be seen as inconsistent by the unidimensional person that he or she might just regard them as wrong and dismiss them out of hand. For example, an individual with less complex perceptions of diversity may abhor the extravagance of traditional African funerals and dismiss a co-worker who is arranging such a ceremony for his family as a primitive patriarch. The person who has more complex perceptions of diversity may not understand the need for such extravagance as much as his/her less differentiated colleague; however, he/she will most probably be able to accept the funeral planner as a competent colleague and as a friend.

In light of this example, it would appear that the ability to differentiate between various individual identities and to integrate on the basis of information relevant to a particular context is imperative to the development of a more complex perception of diversity. It is about understanding oneself and the extent to which unidimensional and value-laden thinking can both perpetuate dysfunctional social interaction and affect one's performance and motivation in the organisation. This involves an active process of controlling how one thinks about others (Human, 2005), as well as an awareness and acceptance of the individual's similarities (e.g., commonness of being human) and dissimilarities (e.g., race, gender, culture, etc.) (Miville, Gelso, Pannu, Liu, Touradji, Holloway, & Fuertes, 1999).

Thus, diversity complexity is a multifaceted concept, comprising as it does the ability to differentiate between the various individual identities and to integrate on the basis of the information relevant to a particular context. The interaction between two individuals is even more complex, especially with respect to knowing how to respond to another individual in particular situations and the consequences of the responses chosen (Human, 1996b). Moreover, within the organisation, the majority of human interactions appear to require cognitively complex responses and a willingness to accept perceptions which vary from the conventional experience (Hayes & Allinson, 1994). Cognitive complexity is concerned with the manner in which information is processed rather than the content of that information (Brewer & Pierce, 2005; Human, 2005). This particular theory of complexity questions how much differentiation and integration take place when a person makes a decision. Cognitive complexity, as defined by Roccas and Brewer (2002, p. 91), is characterised by "both differentiation and integration of potentially conflicting beliefs and values. The level of differentiation reflects the degree to which inconsistencies are recognized (rather than denied or suppressed); integration reflects the level of resolution or reconciliation between recognized inconsistencies".

This definition advocates that a cognitively complex individual would function multidimensionally, employing differentiation and integration as part of the information processing process; a less cognitively complex individual would tend to respond to stimuli on one or only a few dimensions, thus demonstrating less

differentiation and integration (Streufert & Swezy, 1986). Research on cognitive complexity has unveiled that an individual's need for consistency is negatively related to complexity and that cognitively complex individuals form more complete and balanced impressions of other people (Percival, Crous & Schepers, 2003). Moreover, these individuals are thought to be more moderate in their attitude towards diversity, more open to disconfirming information and readjusting their thinking and better mediators of the attitudes and intentions of others (Human, 1996a). They are also better able to plan strategically, they perform better at communication-dependant tasks, they involve themselves more in interpersonal interactions and they change their attitudes more easily. According to Human (1996b, p. 58), "such individuals tend to base part of their evaluations of others on (perceived) internal motivation rather than on purely external characteristics". As a result, the reasons they find for the behaviours of others is both more diverse and complex in nature.

Similarly, Hunsberger, Lea, Pancer, Pratt and McKenzie (1992) advocate that understanding, accepting and appreciating the diversity of others may reflect the neurological or cognitive capacity to think of others in a more multidimensional manner, or a knowledge bias that influences complex thought (i.e., one consciously makes an effort to acknowledge and accept the non-overlapping memberships of their multiple in-groups). The ability to recognise that people belong to various social groups and to groups of different types, enables one to acknowledge that an out-group member on one category dimension, is an in-group member on another (Brewer & Pierce, 2005). Thus, the actual degree of overlap between social categories of which a person is simultaneously a member, may vary considerably. For example, we begin to see the individual not only as a black person, but also as an African, as a South African, as a female, as Roman Catholic, as a wife, a mother, a dressmaker, a corporate executive, as someone who enjoys children and as someone with a strong personality. Making salient that an out-group member on one category dimension is an ingroup member on another, decreases bias by comparison with instances where the latter information is not available (Roccas & Brewer, 2002).

2.5.2   Measuring the Diversity Complexity Construct

Despite the prescriptive information and wealth of books, articles, seminars and training programmes offering advice on how to manage workplace diversity effectively (e.g., Carr-Ruffino, 2005; Cox & Blake, 1991; Van Aswegen, 2008; Zulu & Parumasur, 2009), comparatively little attention has been devoted to measurement issues. Even less attention has been attributed to the assessment of the complexity of diversity perceptions. Perhaps one reason for the lack of advancement is the fact that individual perceptions are relatively difficult to measure with self-report assessment tools, given that most individuals often deny their prejudices and biases against those who are different from themselves. Because it is difficult to ascertain the extent to which participant's responses are due to situational characteristics (e.g., the current organisational context) or personal biases and convictions, many of the established measures of diversity perceptions cannot be used in a study of this nature. Tan, Morris and Romero (1996) focused on measuring changes in perceptions, attitude and knowledge before and after a diversity programme. Although this study demonstrated significant increases in several forms of diversity-related knowledge-including how much individuals knew about a variety of diversity perceptions and attitudes-it failed to measure participants own perceptions of and attitude toward diversity explicitly. Ellis and Sonnenfeld (1994) also developed a survey that aimed to investigate the effects of diversity training on employee perceptions, attitude and knowledge. Although these approaches yield valuable information on how employees view diversity in the context of their present organisation, they fail to assess their perceptions, attitude and behaviours toward workplace diversity on a more general level.

The notion of complex diversity perceptions is closely related to, and grounded in the theoretical framework of, social identity complexity. Thus, it is important to provide a discussion on Roccas and Brewer's (2002) fundamental research on the measurement of the social identity complexity construct. Based on an initial qualitative study, Roccas and Brewer (2002) successfully developed an index of social identity complexity, which has since provided ground breaking advancements within the field of behavioural sciences and industrial/organisational psychology in particular. In the initial phase of the study, a sample of American university students (n=198) were

asked to check various social categories to which they belong (from a lengthy list of ethnic, religious, political, organisational, demographic and geological social groups) and to indicate which of these group memberships were particularly important to them. Based on responses to this initial survey, a sub-sample of respondents who had selected four or more different social identities were selected and social identity complexity measures were then computed with respect to four social categories—nationality, ethnicity, religious denomination and university.

In the second phase of the study, respondents were reminded of their individual social identities and were subsequently asked a series of questions about the relationships they perceived between all pairings of their in-groups. One series of questions assessed their subjective impression of the extent of overlap in membership between each of their in-groups in each direction of comparison (i.e., "Of persons who are Catholic, how many are university students?" "Of persons who are university students, how many are also catholic?"). Judgements were made on a 10-point scale ranging from 1 (very few) to 5 (about half) to 10 (all). An index of overlap complexity was created by calculating the mean rating of proportion of overlap between in-groups in which high values indicated greater overlap and less complexity in the representation of multiple identities.

A second series of questions assessed their subjective impression of the extent of similarity between each of their in-groups. For every pairing of the four in-group identities, participants were asked to indicate how much they agree that a typical member of one of the two in-groups is highly similar to a typical member of the other in-group (i.e., the typical American is very similar to the typical university student) using a 7-point rating scale ranging from 1 (strongly disagree) to 7 (strongly agree). An index of similarity complexity was created by computing the mean similarity ratings across all in-group pairs, with higher scores indicating greater shared characteristics and lower complexity. According to Roccas and Brewer (2002), the two measures of complexity were only slightly positively correlated ($r = 0.17$). The findings of this study concluded that when the overlap of multiple in-groups is perceived to be high, the individual maintains a relatively simplified identity structure whereby memberships in different groups converge to form a single in-group

identification. When an individual acknowledges, and accepts, that memberships in multiple in-groups are not fully convergent or overlapping, the associated identity structure is both more inclusive and more complex (Roccas and Brewer, 2002).

Using the same method of data collection as Roccas and Brewer (2002), Brewer and Pierce (2005) sought to investigate the hypothesis that perceived overlap among in-group memberships would be negatively related to in-group inclusiveness and tolerance for out-groups, such that individuals with high overlap (low complexity) would be less tolerant and accepting of out-groups in general than those with low overlap (high complexity). The results of the study supported this hypothesis. Individual differences in complexity of perception of their national, religious, occupational, political, and recreational social identities was systematically related to their attitudes toward ethnic out-groups and diversity.

De Meuse and Hostager (2001) developed a measuring instrument that assesses diversity perceptions in organisations, called the Reaction-To-Diversity-Inventory (RTDI). This measuring instrument is largely based on the Rosenberg and Hovland (1960) 'ABC' model of attitude, which identifies three components of attitudes, namely: (a) an affective component, focusing on feelings; (b) a behavioural component, focusing on behavioural intentions; and (c) a cognitive component, focusing on beliefs. Building on this established body of work, and in an attempt to move beyond surveys of how individual's viewed diversity in a particular company (e.g., Ellis and Sonnenfeld, 1994), De Meuse and Hostager (2001) identified five categories of diversity reactions: (a) Emotional Reactions, (b) Behavioural Reactions, (c) Judgements, (d) Personal Consequences, and (e) Organisational Outcomes. As a means of gauging the degree to which employee perceptions of diversity are complex, Hostager and De Meuse's (2002) aimed to assess the degree to which an individual's view of diversity is differentiated across the five categories of diversity reactions mentioned above. De Meuse and Hostager (2001) designed the RTDI to represent positive and negative elements in each of the above categories of diversity reactions. Consequently, a total of 70 words are included and listed randomly on the instrument (of which each perceptual category is represented by seven positive and seven negative words), employing a flexible format that allows subjects the freedom to circle only the words they associate with diversity.

A reliability analysis was performed to determine the degree to which the items on the RTDI measured the five purported dimensions consistently. Accordingly, Hostager and De Meuse (2008) report that reliability scores ranged from a high of 0.89 (emotional reactions dimension) to a low of 0.76 (organisational outcomes dimension). Although the RTDI lacks the signature structural characteristic of a typical Likert-type scale, it is able to use both positive and negative stimulus words to evoke connotative reactions toward workplace diversity along emotional, behavioural and cognitive lines. The individual responses to the RTDI translate into three measures of diversity complexity. The first complexity measure − *perceptual breadth* − focuses on the scope or range of one's perceptions of diversity. The second complexity measure − *perceptual depth* − assesses the extent to which perceptions are differentiated within specific portions of the perceptual field. A third and final type of complexity measure − *perceptual balance* − focuses on the degree to which participants perceptions are sophisticated in terms of seeing both the positive and negative sides of workplace diversity. The RTDI will be discussed in more detail in Chapter 3.

2.6   THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND ATTITUDE TOWARDS DIVERSITY

Attitude researchers have given considerable attention to social influences on behaviour (Allen, Machleit & Kleine, 1992; Carmeli, 2003; Sawyerr, Strauss & Yan, 2005). Much of this work has focused on the social bases of beliefs and attitudes, as it is reasonable to expect that a positive attitude towards out-group members would be connected to cooperative behaviour in the workplace. This work has included such research as the effects of social group membership on attitudes (Martin, Hewstone & Martin, 2003), and how the beliefs and attitudes of people shift as a function of the social context in which they find themselves (Terry & Hogg, 2000). According to Cottrell and Neuberg (2005), a generally negative attitude or evaluation towards different groups, can problematically fortify negative emotional responses towards others. Individuals believed to pose qualitatively distinct threats to in-group resources or processes could potentially give rise to differentiated emotional reactions (i.e., fear,

anger, distrust), cognitive images (i.e., out-group as the enemy), and action tendencies (i.e., attack, defend, rebel).

Although attitudes are comprised of cognitive and behavioural components, it is the affective component of attitudes that is thought to play a fundamental role in intergroup relations (Carmeli, 2003; Dijker, 1987). According to Cottrell and Neuberg (2005), distinct emotions are affiliated with specific physiological, cognitive and behavioural tendencies, all of which operate to facilitate in the development of a specific attitude. Emotions are thought to organize and coordinate ongoing psychological action (i.e., attention, motivation, memory, behavioural inclinations) so that individuals are able to respond more effectively to encountered events, the complexities characterizing social life and behaviours at work. Carmeli (2003) goes so far as to say that EI is a major contributing factor towards the development and maintenance of more positive attitudes, behaviours and outcomes. Antonakis, Ashkanasy and Dasborough (2009) also acknowledge that EI is a key ingredient in the process of developing and maintaining social relationships and for working with people in groups.

In the context of workgroups in particular, recent research by Jordan and Troth (2004) and Offermann, Bailey, Vasilopoulos, Seal and Sass (2004), demonstrated that, while intellectual intelligence is the pre-eminent predictor of individual work performance, group performance is more a function of EI. This claim is supported by Suliman and Al-Shaikh (2007) who argue that because individuals with high EI cope well with their own emotions, and notice, and respond appropriately to the emotions of others, emotionally intelligent individuals are thought to be: (a) more aware of their interpersonal style; (b) able to recognise and manage the impacts of emotions on their thought and behaviour; (c) able to develop their ability to judge social dynamics in the workplace; and (d) able to understand how well they manage interpersonal relationships with others. Furthermore, emotionally intelligent individuals are thought to be socially poised, outgoing, cheerful individuals who are sympathetic and caring in their relationships, and who are comfortable with themselves, others and the social environment in which they operate (Muchinsky, Kriek & Schreuder, 2005).

In light of these benefits, theories encompassing the concept of EI assert that people, who have an enhanced awareness and understanding of their emotional states and the reasons for their emotional reactions to situations, are more likely to have good relationships with their co-workers and may experience less interpersonal conflict than less emotionally intelligent employees (Murphy & Janeke, 2009; Suliman & Al-Shaikh, 2007). As a result, these individuals are considered to be more adaptable in terms of their thinking styles in complex-problem solving tasks and in social and interpersonal situations (Austin, Saklofske & Egan, 2005). Vakola, Tsaousis and Nikolaou (2004) contend that individuals with the ability to use their emotions appropriately, in order to remain optimistic and confront situations of ambiguity and or uncertainty, are more able to understand other's emotions as well as regulate and express their own emotions in such a way, that permits them to more easily reframe their perceptions, attitudes and behaviours towards others.

Emotion regulation, as defined by Gross (1998, p. 275), refers to "the process by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions". Regulation of one's own emotions and moods results in positive and negative affective states. Emotionally intelligent individuals are adept at placing themselves in positive affective states, and are able to experience negative affective states that have insignificant destructive consequences (Carmeli, 2003). Emotionally astute individuals can induce a positive affect in others, improving collaboration and interaction between diverse individuals, simply because "feeling and expressing positive emotions on the job, can lead to smoother social interactions, more helping behaviours, and a 'halo effect' that leads to more favorable evaluations of others" (Elfenbein & Ambady, 2002, p. 965). A better understanding of the nature of emotions, in general, and the associated outcomes of various emotions, may allow an individual to adjust their own emotions, thereby improving their ability to maximize constructive emotional responses while simultaneously minimizing the potentially destructive emotional responses at work.

Accordingly, employees with high levels of EI are likely to have a good relationship with their co-workers and may experience less interpersonal conflict than those who have lower levels of EI. Such individuals should be able to master their interactions with diverse others in a more effective manner, and as a result, maintain a more

positive attitude towards diversity. In contrast, employees with lower levels of EI are perhaps less aware of the fact that their emotions may motivate or affect their thoughts and behaviours at work, and are subsequently unable to express and control their emotions appropriately, leading to the probability of more negative interpersonal interactions. As a result of this, employees with lower levels of EI would be more likely to maintain a more negative attitude towards their diverse co-workers. Therefore, it is proposed that there is a significant interaction between an individual's attitude towards diversity and the positive versus negative valence of EI in predicting this attitude.

On the basis of the above arguments regarding the relationship between emotional intelligence and attitude towards diversity, the following hypothesis has been formulated:

> **Research Hypothesis 1:** *A significantly positive relationship exists between emotional intelligence and attitude towards diversity.*

2.7   THE RELATIONSHIP BETWEEN ATTITUDE TOWARDS DIVERSITY AND PERCEIVED DIVERSITY COMPLEXITY

The potential implications of productive social interactions are critical for effective co-ordination in organisations. Yet, in the modern, multicultural workplace, differences in perspectives and interaction styles, as well as intergroup prejudice and distrust that can be engendered, often make it difficult for individuals to establish rapport and effectively integrate their ideas, activities and resources (Sanchez-Burks, Blount & Bartel, 2009; Stauffer & Buckley, 2005; Williams & O'Reilly, 1998). According to Sanchez-Burks et al. (2009) it is not clear as to whether simply eliminating intergroup prejudice or bias could resolve the difficulties that arise in social interactions between individuals because members of different groups may interpret and respond to a given situation very differently due to the different relational schemas they use to navigate their workplace interactions. Fiske and Taylor (1991) advocate that relational schemas are central to co-ordinating interpersonal interactions as they provide individuals with internal goals and expectations about

what behaviours are appropriate (or not) in a given interaction, and guide attention to certain elements of the situation over other elements.

The problem of course, is that most of the time individuals are surrounded by others who are similar to themselves. The immediate social environment within which most people are socialised is objectively less complex than the broader society as a whole (Roccas & Brewer, 2005). When contact with out-group members is minimal, the local social structure encourages the perception of relatively high similarity and overlap between in-groups. This can lead individual's to identify more with the group member that are more similar to themselves in terms of, for example, demographic characteristics or values. Riordan and Shore (1997) support this notion in that they suggest that the individual, by nature, is instinctively attracted to a social unit that is composed of others whose demographic profiles are consistent with the categories that the individual has chosen to categorize him or herself. For example, if an individual uses gender as a category for self-definition, the individual may be most attracted to and satisfied in groups that are composed of the same gender category because the group contains an important part of the individual's existing self-identity (Tsui et al., 1992).

Thus, a situational setting such as a work group, in which an individual is dissimilar to a majority of the members, may make the individual uncomfortable, because of the increased awareness that the characteristics of his or her social identity are different from others, resulting in more negative attitudes and behaviours (Sanchez-Burks et al., 2009). Likewise, the similarity-attraction paradigm proposes that similarity between individuals within a group leads to a high degree of interpersonal attraction among members (Byrne, 1971). This interpersonal attraction in turn, is thought to be positively related to many group-related processes, such as cohesiveness, desire to maintain group affiliation, friendship ties, and communication (Riordan & Shore, 1997). If an individual is dissimilar to other work group members, little attraction will exist, which in turn, can negatively affect the individual's attitude towards that group. For example, Jackson, Brett, Sessa, Cooper, Julin and Peyronnin (1991) found that the greater a top management team's member's dissimilarity in education level and industry experience relative to the rest of the team, the more likely the individual was to leave the employing organisation.

Of particular importance when attempting to illustrate the relationship between the complexity of diversity and an individual's attitude towards diversity, one should undeniably consider the actual overlap and similarity between one's own in-groups. More specifically, an individual's perception of diversity can be represented along a continuum of complexity and inclusiveness, reflecting the degree to which different identities are both differentiated and integrated in the individual's cognitive representation of his or her group memberships (Brewer & Pierce, 2005). Members of groups that are highly similar in terms of their own unique attributes, or have highly overlapping beliefs and values, are more than likely to have a simple representation of the interrelations between those groups and thus a low level of diversity complexity. Low diversity complexity is likely to be accompanied by negative reactions to diversity along emotional, behavioural and cognitive lines (Hostager & De Meuse, 2008). These individuals are unable to appreciate others for their diverse attributes and are likely to have the perception that any individual who is an out-group member on one dimension is also an out-group member on all others. They are unable and/or unwilling to ally with others on the basis of similarities (e.g., commonness of being human) while at the same time being unable to accept and value the uniqueness of others.

Furthermore, a low level of diversity complexity implies that an individual's membership to different identity groups is based on the perception that their in-groups are highly overlapping and convergent. The failure to recognise that each of his or her group memberships incorporates a different set of people as in-group members, naturally results in a predominantly negative attitude towards the out-group. When an individual is able to acknowledge and appreciate the non-overlapping memberships of his or her multiple in-groups, their perception of diversity is both more inclusive and more complex. Individual's who are able to comprehend that they belong to more than one in-group and that their multiple in-group categories do not converge, shall have a higher level of diversity complexity and will therefore be more tolerant of out-group members. Maintaining a positive perception towards diversity, along emotional, behavioural and cognitive lines, enables one to differentiate or perceive a phenomenon in terms of multiple aspects. Thus, being able to communicate and interact effectively with diverse individuals involves the ability to appreciate others

on the basis of similarity, while simultaneously finding value in their perceived differences.

In an attempt to investigate when individual differences lead to positive or negative outcomes, Chatman and Flynn (2001) found that greater demographic heterogeneity results in lower cooperation, although this effect can decrease overtime if mitigated by the effects of extended intergroup contact. Allport (1979) proposed that contact with members of an out-group under optimal conditions of common goals, cooperation, equal status, and institutional support can lead to more positive attitudes toward that group. Similarly, Liebkind, Haaramo, and Jasinskaja-Lahti (2000) state that the best way to reduce existing negative intergroup attitudes between members of different groups is to bring them into contact with each other. However, simple contact between diverse individuals may not be enough to reduce bias and increase trust. In order to induce group members re-categorisation of diverse individuals into a common in-group identity, the contact situation however, must reflect certain conditions, including, most importantly, an objective that makes members shared fate salient (Brown & Hewstone, 2005; Turner, Hewstone, Voci & Vonofakou, 2008). This should influence members to perceive themselves as one superordinate group rather than as individuals differentiated by demographic characteristics. According to Chatman and Flynn (2001), interaction under such conditions of shared fate can broaden perceptual fields to allow impressions of out-group members to become more accurate and favourable.

Favourable impressions and attitude towards out-group members, as a result of extended contact, can lead to more positive perceptions regarding the norms and behaviours of the out-group. Interestingly, according to the reciprocity principle (Dittes, 1959), individuals have a natural inclination to like those who are perceived to like them. Thus, if extended group interaction leads to the perception that the members of an out-group are perceived as being interested in positive relations with one's in-group, one is likely to feel the same in return. Knowing that an in-group member holds a positive attitude towards the out-group, naturally leads to the perception that there are positive in-group norms pertaining to the out-group, which in turn, should have a strong positive influence on the perceiver's attitude towards the out-group (Turner et al., 2008). Moreover, given the cognitive overlap between the

self and the in-group, people tend to spontaneously treat members of the in-group like the self; that is, people have empathy with their problems, take pride in their successes, and generally see them in a positive light (Sanchez-Burks et al., 2009). Turner et al. (2008) believe that if the out-group also comes to be included in the self, out-group members will too receive these same advantages, with obvious benefits for intergroup relations.

Although opportunities for intergroup contact and interaction can actively alter the negative perceptions one has of diverse individuals and/or out-group members, ultimately the complexity of diversity perceptions is based on the chronic awareness and ability to differentiate between the multiple aspects or dimensions of diversity and to integrate on the basis of information relevant to a particular context. If, according to Crush (2008, p. 4), "the single biggest mitigator of negative stereotyping is personal familiarity", then developing a more complex perception of diversity, and hence, a more positive attitude towards diversity, involves the need to become more socially familiar with diverse individuals. The more socially familiar one becomes with diverse members within the organisation, the more likely their attitude towards these individuals will begin to change positively as they begin to take note of the shared similarities while understanding and appreciating their existing differences.

Based on the theoretical arguments, the following hypothesis was formulated to describe the linkage between attitude towards diversity and diversity complexity:

> **Research Hypothesis 2:** *A significantly positive relationship exists between attitude towards diversity and diversity complexity.*

2.8   THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND DIVERSITY COMPLEXITY

People differ in their ability to understand the complexities of diversity and as such, are likely to differ in their understanding and acknowledgement that one does in fact differ in terms of a number of aspects, including individual behavioural intentions, beliefs and more importantly, emotions. Emphasis on emotional intelligence as a critical competency in handling change and dealing with the 'being' or human

elements are becoming far more important in managing contemporary organisations than the traditional 'doing' elements (Werner, 2003). Dijker (1987) believes that understanding the determinants of emotions may be important for the explanation of the rigidity and elusiveness of attitudes, simply because "an understanding of emotion, both our own and that of other people, plays an important part in organisational life" (Brown & Brooks, 2002, p. 327). In a study conducted by DeGuara and Stough (2002), subordinates who could perceive and understand the emotions of their work colleagues, as well as being able to pick up on the emotional overtones of the workplace environments and meetings, were considered to be more understanding and sensitive towards others, while effective control over their emotional states allowed them to work better in teams.

Emotional self control, according to Gignac (2008) concerns the relative frequency with which an individual controls their emotions in the workplace. The ability to manage (monitor, evaluate, and adjust to changing moods) and regulate one's own emotions and moods results in positive and negative affective states. Carmeli (2003) contends that emotionally intelligent individuals are adept at placing themselves in positive affective states, and are able to experience negative affective states that have insignificant destructive consequences. Emotionally astute individuals can furthermore, induce a positive affect in others simply because they are able to perceive the emotions of the people around them, systematically allowing for the development of empathy, perhaps one of the most fundamental relationship skills. Empathy pertains to the ability to comprehend another's feelings and to re-experience them for oneself (Salovey & Mayer, 1990). One of the four sets of emotional competencies proposed by Goleman (2001) is social awareness, which is largely governed by empathy. With regard to the crucial importance of empathy in social relationships, Goleman, Boyatzis and McKee (2002) postulated that an individual with a high level of empathy, will be able to understand others sensitivities, thus enabling them to anticipate a negative emotional reaction in another individual, and to avoid behaviours that could trigger negative emotions both in themselves and in others. According to Wright and Staw (1999), positive emotions tend to have positive consequences, not only because of their association with individual differences, such as productivity and persistence, but because they appear to positively affect employee's relationship with colleagues. Similarly, Elfenbein and Ambady (2002, p.

965) contend that feeling and expressing positive emotions on the job can result in "smoother social interactions, more helping behaviours, and a "halo effect" that leads to evaluations that are more favorable".

High levels of EI are thought to enhance social responsibility, problem solving, stress tolerance, impulse control and happiness (Afolabi & Ehigie, 2005). These conditions, according to Werner (2003b), are said to enable a group to attain synergy by integrating individual levels of verbal fluency, creativity and empathy. Salovey and Mayer (1990) found that team members with high levels of EI are more able to monitor their own and others feelings and emotions, while simultaneously being able to discriminate among and guide their thoughts and actions. Consequently, member communication, flexibility, viability and overall team interaction processes were positively influenced. Individuals high on EI are able to engage in activities that are both pro-individual and pro-social (Goleman, 1995), and tend to feel emotions flexibility and appropriately to the situation at hand. Therefore, it is proposed that individuals high on EI, are more inclined to see the diversity of others in a more positive manner, in that they are more accepting of and find value in the differences of others. According to Hostager and De Meuse (2002), greater depth of focus in a positive light indicates greater perceptual complexity in the form of a more positively differentiated view of workplace diversity. Perceptions that are more differentiated, in general, are more complex insofar as they cover multiple aspects or features of diversity, which enables the individual to relegate sub-group differences into a second-tier status, in favour of shared values, beliefs and expectations (Fiske & Lee, 2008).

In fact, Harvey and Allard (2005, p. 47) contend that "emotional intelligence is one key to developing the ability to manage and appreciate individual differences". Plaut (2002) contends that differences between people are real, substantial, and consequential, and therefore, important for how we should treat each other; differences should be acknowledged and valued in daily interactions. Interestingly, individuals high on diversity complexity are more likely to recognise emotions in others, simply because they have acknowledged a difference between themselves and others and have made some attempt to understand how and why this difference exists. The multidimensionality of an individual high on diversity complexity allows for

differentiation and integration as part of the information processing activity at the social level (Human, 1996a). Such individuals tend to be more moderate in their attitudes, more open to disconfirming information and to the need to readjust their thinking. More importantly, they are thought to be better discerners of the attitudes and intentions of others. Congruent understandings of each other's views should enable one to more accurately infer other's intentions and meanings, facilitating fluent, efficient interaction and helping them utilise their diverse abilities to accomplish their collective goals (Heine, Proulx & Vohs, 2006; Polzer & Caruso, 2008).

Based on the arguments presented above, the following hypothesis was formulated regarding the proposed relationship between emotional intelligence and diversity complexity:

Research Hypothesis 3: *A significantly positive relationship exists between emotional intelligence and diversity complexity.*

2.9   A CONCEPTUAL MODEL OF THE RELATIONSHIP BETWEEN DIVERSITY COMPLEXITY, EMOTIONAL INTELLIGENCE AND ATTITUDE TOWARDS DIVERSITY

After an in-depth investigation of the literature (Chapter 2) covering attitude towards diversity, emotional intelligence and diversity complexity, the following conceptual model was derived. Figure 2.1 illustrates the conceptual model as derived from the theoretical arguments presented in this chapter. This model depicts the postulated relationships between emotional intelligence, diversity complexity and attitude towards diversity.

**Attitude
towards
Diversity
2.3**

2.6

**Emotional
Intelligence
2.4**

2.7

2.8

**Diversity
Complexity
2.5**
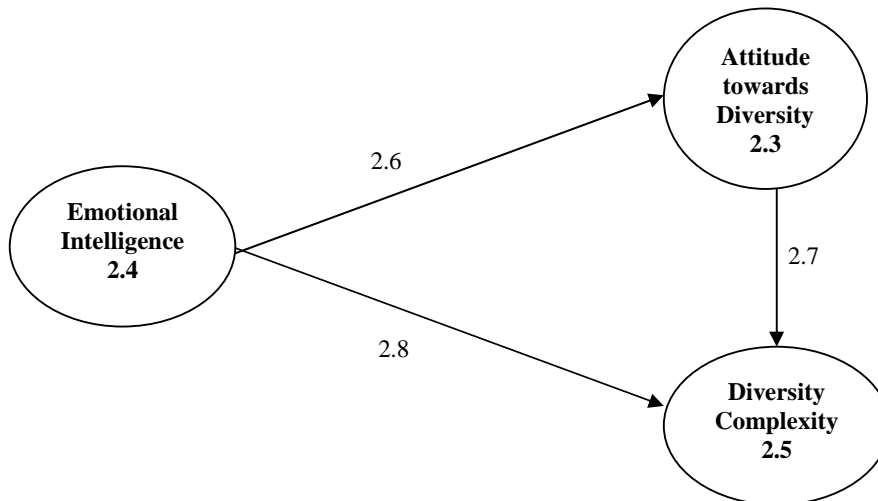
FIGURE 2.1

THE CONCEPTUAL MODEL

**(Note: The relevant headings in the chapter are superimposed onto the model
for ease of reference).**

According to the proposed model, as depicted in Figure 2.1, emotional intelligence is depicted as the exogenous latent variable, with diversity complexity and attitude towards diversity as the endogenous latent variables. It is proposed that increased levels of emotional intelligence is associated with a more positive attitude towards diversity as well as the ability to appreciate the diverse complexities of individuality. Furthermore, a more positive attitude towards diversity is thought to relate to higher levels of diversity complexity.

Upon further examination of the conceptual model and the specific latent variables relevant to this study, it was noted that certain dimensions of the attitude towards diversity and diversity complexity latent variables operate independently to that of the total scores (refer to sections 2.3.2 and 2.5.2 for a description of each dimension of the CDBS and the RTDI). With regard to the relationship between emotional intelligence and attitude towards diversity, it is proposed that emotional intelligence has a direct effect on valuing individual differences. That is, the higher an individuals level of EI, the more likely he/she will be able to find value in individual differences. Valuing individual differences in turn, is thought to have a direct effect on the individual's tolerance towards affirmative action and the perception that diversity can create a competitive advantage. Thus, an individual cannot be tolerant towards

affirmative action or view diversity as a competitive advantage, if they do not value individual differences in the first place. Consequently, EI is expected to affect tolerance towards affirmative action and competitive advantage, only indirectly through transmission of influence via the mediator, valuing individual differences.

In light of the diversity complexity construct, it made theoretical sense to position negative perceptual depth, positive perceptual depth and perceptual breadth, as separate latent variables, as each of these diversity complexity dimensions is thought to operate differently to that of the total score. Both positive and negative perceptual depth is thought to have a significant relationship with perceptual breadth. However, negative perceptual depth is argued to have no significant relationship with emotional intelligence or valuing individual differences. Thus, based on these theoretical arguments, a decision was made to modify the current conceptual model my mapping out each of the dimensions of the attitude towards diversity and diversity complexity constructs within the model. According to the relationships proposed, these competencies are depicted as influencing the various outcomes and have resulted in a revised conceptual structural model (illustrated in Figure 2.2). This model depicts the specific paths or hypothesised causal linkages between the relevant constructs.
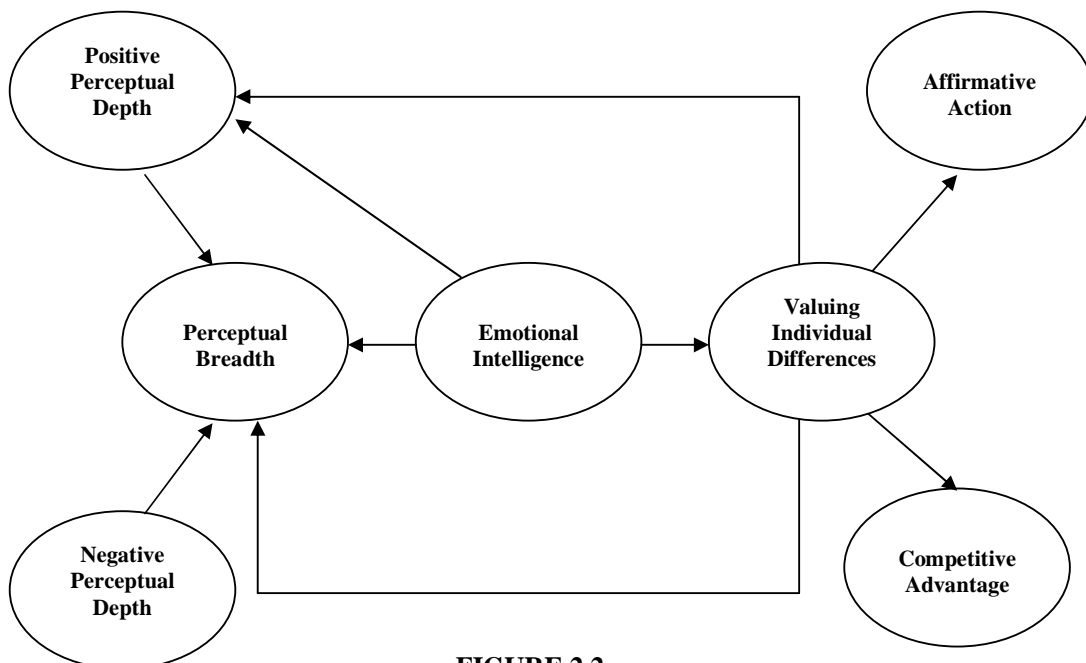
FIGURE 2.2

THE REVISED CONCEPTUAL STRUCTURAL MODEL

2.10   CHAPTER SUMMARY

The chapter has provided an overview of the literature dealing with three primary constructs relevant to this study, namely, attitude towards diversity, emotional intelligence and diversity complexity. Each of the constructs was first defined, followed by a discussion with regard to its conceptual development and measurement. Thereafter, a discussion on the various relationships that exist between the constructs was conducted. Research hypotheses were formulated to describe the various relationships between these constructs. Lastly, the chapter was concluded with a depiction of an integrated theoretical and conceptual model.

CHAPTER 3
RESEARCH DESIGN AND METHODOLOGY

3.1   INTRODUCTION

The study aimed to explicate the influence of EI and diversity complexity on individual's attitude towards diversity in organisations. The purpose of this study resulted in the development of two relevant research questions that were described in Chapter 1. The theoretical argument presented in the literature study (Chapter 2), culminated in a conceptual model (depicted in Figure 2.2) hypothesising specific structural relationships between the latent variables. Therefore, it is necessary to fit the conceptual structural model. However, in order to reach a meaningful conclusion regarding the correct fit of the structural model depends largely on the appropriate research methodology used to arrive at the conclusion.

Methodology is meant to serve the epistemic ideal of science. If very little of the methodology used is made explicit, there is no way of evaluating the merits of the researcher's conclusions, and the verdict consequently has to be accepted on face value, even though the verdict may be inappropriate due to an inappropriate or wrong procedure for investigating the merits of the structural model. As a result the rationality of science is compromised, as does ultimately the epistemic ideal of science (Babbie & Mouton, 2006). In order to establish the reader's confidence in the scope and quality of the chosen procedures, a discussion of the research process and chosen research methodology is outlined in the sections below. The chapter further consists of the following sections: the research design, sampling strategy, data collection procedure, measurement instruments used, and a description of the statistical analysis procedures used to analyse the obtained data.

3.2   THE CHOSEN RESEARCH DESIGN

Empirically investigating the influence of EI and diversity complexity on the attitude towards diversity in organisations requires a strategy that will ensure empirical evidence that can be interpreted unambiguously for or against the operational

hypotheses. The method through which the validity of the operational research hypotheses are tested, is known as the research design (Babbie & Mouton, 2006; Theron, 2007). The function of the research design firstly aims to attain answers to the research question, and secondly, endeavours to control variance (Kerlinger & Lee, 2000). According to Kerlinger (1973), the unambiguousness with which the empirical evidence can be interpreted for or against the operational hypotheses is largely determined by the degree to which the research design is able to minimise error variance, maximise systematic variance and control extraneous variance. Variance represents the extent to which the value of a variable differs/varies across units of analysis (Theron, 2007). Despite this issue, developing and evaluating the conceptual model (Figure 2.1) involves the facilitation of a research process, necessitating a particular research design which will set up a framework required to regulate the manner in which the validity of the hypothesised relations among the variables will be examined. For this specific study, the plan and structure is best achieved within the realms of the quantitative research paradigm. Quantitative research can be described as the systematic scientific investigation of the quantitative properties of phenomena and their relationships. Data is collected empirically within this paradigm, is quantitatively measured and results are presented in numerical format (Babbie & Mouton, 2006).

Due to the quantitative nature of the study, the chosen research design that was utilised is that of an ex post facto variety. Generally speaking, ex post facto designs, which is also known as a non-experimental approach, are designs in which the researcher uses neither random assignment nor experimental manipulation of the independent variables, primarily because the researcher lacks direct control over the independent variables either for the reason that their manifestations have already occurred, or they are not inherently manipulable (Kerlinger & Lee, 2000). Although ex post facto research designs are widely used in studies, it does however have three major limitations. According to Kerlinger and Lee (2000), these limitations include: 1) the inability to manipulate the independent variables; 2) the lack of power to randomize; and 3) the risk of improper interpretations. Despite these weaknesses, Kerlinger and Lee further noted that this particular research design is ideally suited to social sciences research, as the inability to manipulate variables implies that the variables are measured as they exist normally. Consequently, researchers are able to

investigate variables that would be impossible or unethical to study through manipulation.

For the purpose of this study, correlational research, as a type of relational research, was employed. The goal of the correlational research strategy aims to examine and describe the associations and indirect relationships in data, and permits the researcher to objectively establish which variables are closely associated with and/or influence one another. More specifically, both the independent variable(s) and the dependant variable(s) are observed across individuals in an attempt to identify any patterns of relationship that exist between the two variables, as well as to measure the strength of the particular relationship (Gravetter & Forzano, 2006). It should however be noted that correlational designs do not attempt to explain the observed relationship and makes no attempt to manipulate, control or interfere with the variables, but rather attempts to empirically test the validity of the statement 'if x then y'. Furthermore, it allows the researcher to determine the degree of the relationship between the variables being examined (Gravetter & Forzano, 2006). The main drawback of correlational designs is that it cannot be used to demonstrate cause-and-effect relationships between variables (Tabachnick & Fidell, 2001).

3.3 THE SAMPLE

3.3.1 The Sampling Strategy

A distinction is made between probability sampling (i.e., random samples, stratified samples, systematic samples and cluster samples) and non-probability sampling (accidental samples, quota samples, snowball samples, purposive samples and convenience samples). Probability sampling remains the optimal method of sampling as it aims to "select a set of elements from a population in such a way that descriptions of those elements (statistics) accurately portray the parameters of the total population from which the elements are selected" (Babbie & Mouton, 2006, p. 175). Although this method of sampling is the ultimate, this type of sampling method is not always practical or even attainable in social research. Thus, non-probability sampling techniques are often the most practical alternative. For the reasons stated above, the present study made use of non-probability sampling as a means of

generating an appropriate sample. Although this method of sampling was the most viable option, the study cannot claim to have sampled a representative subset of people working in South African organisations. This is due, in particular, to the use of a convenient sample.

3.3.2 The Data Collection Procedure

The sample consisted of 237 employees operating within various organisations within South Africa. A questionnaire, measuring attitude towards diversity, emotional intelligence, diversity complexity and certain demographic variables, was either physically handed to the respondent in the form of a pencil and paper format or was made available as an online composite questionnaire, depending on their preference. The online survey was completed by 61 respondents, while the remaining 176 respondents chose to complete the questionnaire in pencil and paper format. The cover letter, which was included in both the online survey and the hard copy, explicated reasons for the research as well as the aim of the study with emphasis on the confidentiality of responses, and the constructive nature in which the results of the study were to be utilised. Due to the sensitive nature of this study, consent to participate in this study did not require any participant to reveal his/her identity. Items were however, included in the demographic questionnaire pertaining to the industry in which the respondent's organisation represented in the South African economy, as well as the age, race and gender of the respondent. Information regarding their level of professional qualification was also obtained. Those respondents who chose to complete the pencil and paper questionnaire were required to tick a bullet box at the end of the cover letter, confirming their voluntary participation in the study.

The electronic questionnaire, on the other hand, was designed in such a way that respondents could provide only one answer per an item and that all items had to be answered in order to proceed to the subsequent section. Thus, the only responses that were used were from respondents who had completed all the sections correctly. Prior to the respondent completing the electronic questionnaire, an email request was sent to the individual to request their participation in the study, and a link to the online questionnaire (as described above) that was developed and kept on the University of Stellenbosch's web server. To view the questionnaire, participants were instructed to

click on the link, which opened the web form of the questionnaire. In order to complete the required fields, participants were requested to tick an electronic box at the end of the cover letter, confirming that they accept the conditions and agree to participate voluntary in the study. The raw data was then collected from the web questionnaire into a Microsoft Excel database, which was then used as input for the two statistical programmes that were utilised in conducting the statistical analyses. These programmes include SPSS (version 17) and LISREL (version 8.53) and are discussed in detail in section 3.6.

3.3.3   *The Demographic Profile of the Sample*

The sample consisted of 140 females (59.1%) and 97 males (40.9%). The majority of respondents were aged between 18 and 29 (34.6%), while the race distribution in the sample was: African (19.4%), White (60.8%), Coloured (16.8%) and Indian (3.0%) With regard to the highest level of qualification, the majority of respondents had 12 years of schooling (38.8%). Descriptive statistics for the sample group is presented in Table 3.1. As can be seen, the normative sample consisted of individuals across a range of industries. The majority of respondents came from Health and Welfare Services (20.3%); however, there are several industries with percentages in excess of 5% of the normative sample.

TABLE 3.1

GENDER, RACE, AGE DEMOGRAPHICS AND HIGHEST LEVEL OF QUALIFICATION ACROSS THE SAMPLE.

DEMOGRAPHIC VARIABLES	TOTAL SAMPLE (N=237)	
	N	% in Sample
GENDER		
Male	97	40.9%
Female	140	59.1%
TOTAL	237	100%
RACE		
African	46	19.4%
White	144	60.8%
Coloured	40	16.8%

Indian		7	3.0%
	TOTAL	**237**	**100%**
AGE			
18-29		82	34.6%
30-39		74	31.2%
40-49		54	22.8%
50-59		19	8.0%
60-69		7	3.0%
70-79		1	0.4%
	TOTAL	**237**	**100%**
LEVEL OF EDUCATION			
Less than 12 years schooling		8	3.4%
12 years schooling		92	38.8%
Diploma certificate		25	10.5%
University graduate degree		53	22.4%
University post-graduate degree		59	24.9%
	TOTAL	**237**	**100%**

TABLE 3.2

INDUSTRY BREAKDOWN ASSOCIATED WITH THE SAMPLE

INDUSTRY	N	%
Biotech/Pharmaceuticals	4	1.7
Defence Force, Police and Security Services	13	5.5
Education/Training	8	3.4
Financial and Accounting Services	43	18.1
Food and Beverages	19	8.0
Health and Welfare Services	48	20.3
HR/Recruitment Services	9	3.9
Information Systems, Electronics and Telecommunication Technologies	3	1.3
Insurance	7	3.0
Legal	4	1.7
Local Government and/or Public Sector	8	3.4
Logistics and Transportation	3	1.3
Manufacturing, Engineering and Related Services	16	6.8

Media and Advertising		2	0.8
Mining		1	0.4
Tourism and Hospitality		6	2.6
Wholesale and Retail		31	13.1
Other		2	0.8
	Missing	**0**	**0**
	TOTAL	**237**	**100%**

3.4   MISSING VALUES

Often, some components of a vector observation are unavailable. Multivariate data sets more often then not contain missing values, which in this case, was a result of the unwillingness of the respondent to answer a particular item on the survey questionnaire. Subsequently, missing values presented a problem that had to be addressed before the analysis could proceed. According to Pigott (2001), selecting the most suitable method of managing missing values was not an easy task as different methods require certain assumptions about the nature of the data and the reasons for the missing values is not openly acknowledged or observable during the data gathering phase. Spangenberg and Theron (2004) believe that the traditional way in which missing values are dealt with is the use of list-wise deletion to generate a data set that would only contain the complete data cases. The problem with this approach however, is that due to the extent of the problem and the length of the questionnaire, the sample size would be dramatically reduced, making any meaningful statistical analysis impossible. In order to avoid the problem of a diminished data set, the possibility of using imputation as a method to solve the missing value problem was explored.

Lohr (1999) contends that imputation is commonly used to assign values to the missing items. The substitute values replaced for a case are derived from one or more other cases that have a similar response pattern over a set of matching variables (Jöreskog & Sörbom, 1996). The main advantage of multiple imputation is that it reflects the uncertainty of estimates, whilst delivering plausible values; in other words, it corrects for bias by conducting several imputations for each missing value (Raghunathan, 2004). However, one should take note that although this method is

considered relatively robust, the model used to generate the imputations will only be approximately true (Schafer, 1999). Although ideally, one would want to use matching variables that will not be utilised in the confirmatory factor analysis, this will not be possible in this case. Thus the items least plagued by missing values were firstly identified to serve as matching variables. The PRELIS programme (Jöreskog & Sörbom, 1996) was used to impute missing values, which proved to be an effective response to the missing value problem. By default, cases that contained missing values after imputation were eliminated. After imputation, 237 of the original 242 cases, with observations on all the items included in the questionnaire remained in the validation sample.

3.5   MEASURING INSTRUMENTS

The constructs of attitude towards diversity, emotional intelligence and diversity complexity were measured with the CDBS, Genos EI and RTDI respectively. These three measures are all classified as self-report measures.

3.5.1   Attitude towards Diversity: CDBS

The Cultural Diversity Belief Scale (CDBS) developed by Rentsch, Turban, Hissong, Jenkins and Marrs (1995), is used in this study as a means of measuring an individual's attitude towards diversity in the workplace. Due to limited empirical research in the area of individual beliefs concerning workplace diversity, few attempts have been made to investigate the components of diversity beliefs. Moreover, an increasingly diverse workforce has contributed to a surge of research initiatives that are directed primarily towards organisational diversity practices and interventions (see Gilbert & Ones, 1999, Diversity Practices Survey) or attitudes towards equal employment opportunity programmes such as affirmative action (Konrad & Linnehan, 1999). Consequently, in an attempt to understand individual diversity beliefs, in light of organisational change, Rentsch et al. (1995) developed the CDBS as it relates to at least three specific components of diversity beliefs: (1) diversity as valuing individual differences, (2) diversity as a competitive advantage, and (3) diversity as a tolerance for affirmative action.

Rentsch et al. (1995) contends that diversity emphasises the value of individual differences. Differences in this instance not only emphasising demographics such as age, race or gender, nationality or religion, but also individual differences such as skills, language and experiences. Consistent with this viewpoint, Cox and Blake (as cited by Rentsch et al., 1995, p. 3) suggested that valuing diversity in organisations should include "all cultural groups respecting, valuing and learning from one another, integrating cultural groups across the organization, all organizational members identifying with organizational goals, and eliminating prejudice and discrimination". In addition, the organisational culture should be such that prejudice and discrimination are eliminated which in turn, enables all diverse groups to respect, value and learn from one another.

In contrast to valuing individual differences equally, the second view of diversity interprets diversity efforts as emphasizing the value of some groups at the expense of other groups. Affirmative action, as a means of re-addressing the past discriminations and inequalities, has become a reality within the corporate world. Tolerance for affirmative action is of distinct importance to the South African business context, where various legislation require that organisations move to hiring employees by racial group in proportion with the race group of the broader population (Ramsay, 2005). A lack of understanding of the process underpinning the crystallization of negative attitudes towards affirmative action and the defensive reactions towards out-group members, can conceal the manner in which affirmative action related strategies serve to reproduce discrimination in the workplace and legitimate resistance to positive redress. A third perspective of diversity views diversity as a competitive advantage, increasing the potential for organisational success. Cox and Blake (1991) describe six areas in which organisations may gain a competitive advantage from cultural diversity efforts, namely, resource acquisition, marketing, creativity, organisational expenses, problem-solving and organisational flexibility. Similarly, diversity within the workplace offers new and important insights into problems and challenges as it counteracts groupthink, enhancing organisational creativity and decision making (Werner, 2003).

The three identified distinct dimensions concerning diversity beliefs form the basis of this inventory. However, Rentsch et al. (1995) do not claim to have measured the

universe of diversity belief sets and acknowledge that there may be other belief sets which they did not consider. The CDBS contains 23 Likert-type scale statements designed to tap the three diversity belief sets described above. Respondents are required to answer on a seven-point response scale, ranging from 1 (strongly agree), to 7 (strongly disagree). The information obtained from this inventory can be used to diagnose and understand employee diversity beliefs in order to determine whether or not a diversity intervention is required. Managers who understand their employee's diversity beliefs may be able to predict the level of success of their diversity initiative and may be better equipped to link diversity efforts to other aspects of organisational culture and design, which could eventually lead to a more healthy work environment.

3.5.1.1   *Development of the CDBS*

Twenty-three items were recorded to assess the various diversity beliefs identified from the literature. In particular, Rentsch et al. (1995) developed each item to tap into one of the three diversity belief sets: diversity as valuing individual differences, diversity as a competitive advantage, and diversity as a tolerance for affirmative action. Data was collected from two samples at two universities. Participants in Sample 1 consisted of 622 students in accounting courses, of which 400 were male and 206 were female (16 individuals did not report gender). Data for Sample 2 was collected from 349 students enrolled in a management degree at an alternative university. Principal components factor analyses with Varimax rotation was conducted separately for each sample. Although five factors had eigenvalues above 1.00, the scree plots for both samples suggested three factors, thus the analyses were rerun setting the number of factors at three. Items were retained for scale development if they had factor loadings greater than .40 on only one factor for both samples.

Reliability and factor analyses were conducted separately for each sample. Factor analysis on the data indicated that the first factor, Valuing Individual Differences accounted for 19% and 14% of the variance in the items in Samples 1 and 2, respectively. The second factor, Tolerance for Affirmative Action, explained 16% and 12% of the variance in the items in Samples 1 and 2, respectively. The third factor, Competitive Advantage, accounted for 15% and 18% of the variance in the items in Samples 1 and 2, respectively. The reliability analyses assessed across the two

samples suggest that the scale is internally consistent. An overall internal consistency coefficient of 0.82 for Sample 1 and 0.77 for Sample 2 was found, indicating acceptable ranges for a new measure (Nunnally, 1967). The means, standard deviations and reliability statistics for the CDBS, as reported by Rentsch et al (1995), are documented below in Table 3.3.

TABLE 3.3

THE MEANS, STANDARD DEVIATIONS AND RELIABILITY STATISTICS FOR THE CDBS

	SAMPLE 1			**SAMPLE 2**		
DIMENSIONS	**Means**	**Standard Deviations**	**α**	**Means**	**Standard Deviations**	**α**
Valuing Individual Differences	5.48	0.89	**0.83**	5.58	0.86	**0.86**
Competitive Advantage	4.99	1.00	**0.82**	5.21	0.98	**0.77**
Affirmative Action	3.44	1.08	**0.72**	3.25	1.02	**0.63**

(Adapted from Rentsch et al. 1995).

3.5.2   Emotional Intelligence: Genos EI

In this study, EI was measured using the Genos Emotional Intelligence Inventory (Genos EI) developed by Palmer, Stough and Gignac (as cited in Gignac, 2008). Despite the popularity of EI as an employee selection and learning and development medium, few EI inventories have been specifically designed for use in the workplace, such as the Bar-On EQ-i (Bar-On, 1997) and the MSCEIT (Mayer, Salovey & Caruso, 2000). As a result of this, the authors designed the Genos EI specifically for use in the workplace as a learning and development aid for human resource (HR) professionals and occupational psychologists involved in the identification, selection and development of employees. According to Gignac (2008), Genos EI does not measure EI per-se'; rather, it measures how often an individual demonstrates emotionally intelligent workplace behaviours that represent the effective demonstration of EI in the workplace. This approach to the assessment of EI is somewhat different from the

approaches provided by leading authors in the area in that it is a measure of typical rather than maximal performance.

The Genos EI 70-item inventory was preceded by a 64-item self-report measure referred to as the Swinburne University Emotional Intelligence Test developed by Palmer and Stough (SUEIT, Palmer & Stough, 2001). The number and nature of the dimensions of the SUEIT were based on preliminary factor analysis of a large number of dimensions found within a number of different models and measures of EI. The scales included in the preliminary analysis included: (1) Mayer, Salovey, Caruso Emotional Intelligence Test (MSCEIT, Mayer et al., 1999); (2) Bar-On Emotional Quotient Inventory (Bar-On, 1997); (3) Trait Meta-Mood Scale (Salovey et al., 1995); (4) Twenty-item Toronto Alexithymia Scale - II (TAS – 20; Bagby, Taylor & Parker, 1994); (5) the scale by Schutte et al. (1998); and (6) the scale by Tett et al. (1997). Based on the preliminary analyses, it was determined that there were five common dimensions of EI: Emotional Recognition and Expression, Understanding Emotions External, Emotions Direct Cognition, Emotional Management and Emotional Control.

Gignac (2005) examined the original five-factor taxonomic model structure associated with the SUEIT in an extensive CFA investigation and concluded that the SUEIT in fact measured a total of nine dimensions, of which seven were associated with EI. This discovery resulted in the realisation that a revision of the SUEIT was needed. However, a decision was taken to not only exclusively rely on the information reported in Gignac (2005), but rather include the use of focus groups with HR professionals to determine what an ideal measure of EI would constitute for application in the workplace. Thus, both the quantitative information reported in Gignac (2005) and the qualitative information obtained from the industry focus groups were considered in the development of the Genos EI. The Genos model of EI comprises a general factor (Overall or Total EI), described by seven orthogonal factors outlined in Table 3.4.

TABLE 3.4

A DESCRIPTION OF THE SEVEN ORTHOGONAL FACTORS OF THE GENOS MODEL OF EMOTIONAL INTELLIGENCE

FACTOR NAME	DESCRIPTION
1. Emotional Self-Awareness (ESA)	The skill of perceiving and understanding your own emotions.
2. Emotional Expression (EE)	The skill of effectively expressing your own emotions.
3. Emotional Awareness of Others (EAO)	The skill of perceiving and understanding other's emotions.
4. Emotional Reasoning (ER)	The skill of using emotional information in decision-making.
5. Emotional Self-Management (ESM)	The skill of managing your own emotions.
6. Emotional Management of Others (EMO)	The skill of positively influencing the emotions of others.
7. Emotional Self-Control (ESC)	The skill of effectively controlling your own strong emotions.

(Adapted from Gignac, 2008)

Each of the seven factors is measured by 10 homogenous emotionally intelligent work behaviours (i.e., items). Respondents are requested to indicate an anchored rating scale from 1 to 5, how often the behaviour in question is demonstrated (where 1 = Almost Never; 2 = Rarely 3 = Sometimes; 4 = Often; and 5 = Almost Always). One of the acclaimed advantages of the Genos EI is the taxonomic 7-factor model this measure assesses is simple in consideration to some of the larger models in the field of EI. According to Palmer, Stough, Harmer and Gignac (2008), this feature makes the Genos EI more straightforward to debrief, easier for participants to recall whilst undertaking their daily work, and easier to link to the organisational competency models (i.e., leadership, sales or customer service).

Gignac (2008) examined the internal consistency reliability of the Genos EI self report inventory with large workplace samples across a variety of nationalities. Gignac reported that mean subscale reliabilities (α) ranging from 0.71 to 0.85 across five nationalities (American, Australian, Asian, Indian and South African). The mean

Genos EI total score internal consistency reliability (α) was estimated at 0.96. It was further found that test-retest correlations of the Genos Total EI scores were associated with a reliability coefficient of 0.83 and 0.72, based on two-month and six-month time intervals, which is indicative of a respectable amount of stability in the scores over time. The means, standard deviations and reliability statistics for the Genos EI, as reported by Gignac (2008), are presented in Table 3.5.

TABLE 3.5

THE MEANS, STANDARD DEVIATIONS AND RELIABILITY STATISTICS FOR THE GENOS EI

GENOS EI DIMENSIONS	Means	Standard Deviations	Cronbach's Alpha (α)
Total EI	279.13	27.76	0.95
Emotional Self Awareness (ESA)	41.94	4.56	0.74
Emotional Expression (EE)	39.53	4.85	0.77
Emotional Awareness of Others (EAO)	40.22	4.79	0.82
Emotional Reasoning (ER)	39.29	4.44	0.67
Emotional Self-Management (ESM)	38.36	4.72	0.74
Emotional Management of Others (EMO)	40.29	4.89	0.83
Emotional Self-Control (ESC)	39.51	4.80	0.75

(Adapted from Gignac, 2008).

Due to the substantial correlation between the 5-factor SUEIT inventory and the 7-factor Genos EI inventory, Gignac (2005) was able to effectively uncover the Genos EI 7-factor model within the SUEIT. According to Palmer et al. (2008), although the labels used to describe the seven factors of the Genos EI model are somewhat different, there are substantially obvious similarities between the subscales. Based on the item-level factor analysis results reported by Gignac (2005), an alternative scoring key has been devised to effectively recover very similar Genos EI subscale scores from the SUIET. The primary implication of having the capacity to recover Genos EI subscale scores from the SUEIT is that past research that has made use of the SUEIT can be reanalysed. For example, in order to examine the associations between Genos EI and two primary leadership styles measured by the MLQ (transformational

leadership and laissez-faire leadership), Gignac (2005) re-analysed the data associated with Downey, Papageorgiou and Stough (2006). It was found that Genos EI correlated positively with transformational leadership and negatively with laissez-faire leadership. This study by Gignac (2005) formed part of the development process of the Genos EI inventory (Gignac, 2008). Some other studies conducted by Gignac (2005) in the development of Genos EI as a measurement of EI, include the role of Genos EI in predicting both job satisfaction and organisational commitment, and the association between EI, as measured by Genos EI, and a number of workplace relevant well-being indicators.

3.5.3   Diversity Complexity: RTDI

In order to assess the complexity of diversity perceptions, this study made use of De Meuse and Hostager's Reaction-To-Diversity-Inventory (RTDI; De Meuse & Hostager, 2001). The initial goal in the development of the measure was to identify key attitudinal and perceptual dimensions categorizing the broad range of reactions to diversity. The development of the RTDI began with a sample of 10 faculty members and 40 students, drawn from various academic disciplines in business and the social sciences (management, economics and sociology). Participants identified five advantages and five disadvantages of workplace diversity. A subsequent content analysis involving two raters yielded support for Rosenberg and Hovland's (1960) 'ABC' model of attitudes, as a means of identifying three distinct categories of advantages and disadvantages listed in the responses: Affect (feelings or emotional reactions), Behavioural intentions (behavioural reactions) and Cognitions (judgements). Further items in the response set clustered around two additional dimensions: Personal consequences (outcomes for individuals) and Organisational consequences (impacts on the organisation). Based on the results of the process, the following five categories of diversity reactions were identified as the dimensional framework for representing the range of positive and negative reactions to workplace diversity:

1. *Emotional Reactions* – initial, visceral responses to workplace diversity; an individual's "gut feelings" about diversity in general;

2. *Behavioural Reactions* – what an individual does (or intends to do) in response to diversity; verbal and nonverbal actions;

3. *Judgments* – an individual's normative evaluation of diversity; one's value judgments regarding diversity in principle (e.g., is diversity good or bad);

4. *Personal Consequences* – beliefs regarding perceived outcomes on an individual level; an individual's views on how diversity will affect them personally; and

5. *Organizational Outcomes* – beliefs regarding perceived outcomes on an organizational level; an individual's views on how diversity will affect the company as a whole.

Guided by the dimensional framework, the subsequent goal in the development of the RTDI was to identify one-word items that would capture the dimensional framework identified previously. De Meuse and Hostager (2001) researched the current professional literature for specific words or phrases related to diversity. Words deemed obscure or abstract were eliminated to enhance readability, while profane language or words eliciting an extreme emotional reaction (i.e., hatred) were excluded to decrease the likelihood that a single word on the instrument would generate a strong negative reaction, contaminating responses to the rest of the inventory. A master list of 218 words was distilled to the final 70-item inventory through two rounds of Q-sorting. In the first round, 110 business students at the junior and senior level used the five dimensional framework to sort all 218 words. Items with less than a 40% agreement rate were deleted from the list, resulting in a 100-word master list. In a second round of Q-sorting, 143 junior and senior level business students who had not previously participated in the study were used to pare the list of 100 to 70 words (seven positive and seven negative words for each of the five dimensions), again using a 40% agreement cut-off (De Meuse & Hostager, 2001).

The 70 words (items) included in the RTDI are listed randomly on the instrument, with each word depicting either a positive or negative response to one of the five dimensions. Although it lacks the signature structural characteristic of a semantic differential approach, the RTDI is not very different to a semantic differential, as its use of positive and negative stimulus words succeed in evoking connotative reactions to workplace diversity (Hostager & De Meuse, 2008). The flexible format of the

instrument allows subjects the freedom to circle only those words they associate with diversity, thus the RTDI does not force the respondent to respond to each item (or underling dimension). Responding to a single word on the RTDI further permits for more freedom of interpretation as no explicit context is provided to subjects.

One approach to measuring the complexity of diversity perceptions is to assess the degree to which an individual's view of diversity is differentiated across the five categories of diversity reactions. Individuals who perceive diversity as involving at least one item in each of the five categories demonstrate complexity in the form of perceptual breadth. By including items from all five categories of diversity reactions, the individual's perceptions are thought to be more differentiated (i.e., more complex) than individuals who include items from only one or two categories. According to Hostager and De Meuse (2002), perceptual breadth focuses on the range of one's perceptions. On the other hand, using multiple items to represent each category measures a second form of perceptual complexity – perceptual depth. Perceptual depth can be defined as the degree to which an individual's diversity perceptions are differentiated insofar as they cover multiple aspects or features within a category. Counting the number of positive words circled on the inventory provides an index of the degree to which participants viewed diversity in a positive light (positive depth of focus). Similarly, counting the number of negative words circled, yields a measure of the extent to which diversity is perceived in a negative light (negative depth of focus).

Subsequent to the development of the RTDI, De Meuse and Hostager (2001) developed a shorter version of this instrument, namely, the Workplace Diversity Survey (WDS). A total of 20 items were included on the WDS, of which two positive and two negative items were used to represent each of the five dimensions, with each item containing a word taken directly from the RTDI. Responses to each statement were reported on a five-point Likert scale ranging from 1 = Disagree, to 5 = Agree. There appears to be very little information available regarding the RTDI's psychometric properties. Consequently, data obtained from the administration of the WDS was used to assess the convergent validity of the RTDI. The findings revealed a high level of agreement ($r = .51$, $p<.001$). A significant correlation would suggest that despite their differences in procedures and formatting, both instruments measure the same construct. Furthermore, a reliability analysis was performed on the WDS to

determine whether the items on the WDS measured the five purported dimensions of the RTDI consistently. Accordingly, all five of the dimensional sub-scores were significantly related between the RTDI and the WDS at the p<.01 level (De Meuse & Hostager, 2001). The Cronbach's alpha for the various dimensions were calculated, and are as follows: (1) Emotional Reactions: $\alpha = 0.89$; (2) Judgements: $\alpha = 0.87$; (3) Behavioural Reactions: $\alpha = 0.75$; (4) Personal Consequences: $\alpha = 0.84$; and (5) Organisational Outcomes: $\alpha = 0.76$.

3.6   STATISTICAL ANALYSIS OF DATA

Once all the raw data had been obtained for the three constructs and their relevant dimensions, it was possible to proceed with the statistical analysis. The Statistical Package for the Social Sciences (SPSS) (version 17) was used to perform a range of statistical analyses on the questionnaire data and to test the theoretical model. The following statistical techniques were utilised as a means of analysing the collected data and will be discussed in detail below: item analysis, exploratory factor analysis, confirmatory factor analysis (CFA), correlation analysis, and standard multiple regression analysis.

3.6.1   Item Analysis

Item analysis was conducted on the construct scales used in this study for data gathering by means of the SPSS Reliability Procedure (Version 17). Item analysis allows one to identify and eliminate items not contributing to an internally consistent description of the various latent dimensions comprising the construct in question (Theron, 2008). In other words, item analysis aims to ascertain which of the items in a scale, if any, have a negative effect on the overall reliability of the scale. According to Anastasi and Urbinia (1997), high validity and reliability can be incorporated into tests in advance through item analysis, therefore improving the tests through selection, substitution or revision of items.

Coefficient alpha values were calculated to determine whether the superordinate scales and the subordinate scales were internally consistent. An item was found

reliable according to the standards set out by Malhotra (2004), where a reliability score of less than 0.6 indicates a lack of internal consistency. Coefficient alphas greater than 0.60, were thus deemed internally consistent and reliable. However, it is important to note that, according to Pallant (2007), Cronbach's alpha values are very sensitive to the number of items in a scale. For scales with fewer than 10 items, alpha values in the region of 0.50 are frequently obtained. Nunnally (1967) also reported that for preliminary research, alpha values of 0.50-0.60 could be taken as a recommended level and that higher recommended values of 0.90-0.95 are more appropriate only for applied research. For the purpose of this particular study, Cronbach alpha values > 0.60 were deemed acceptable.

In order to further ensure that the measuring instruments and their respective sub-scales were internally consistent, a decision was made to report the item-total correlations for the specific items. Briggs and Cheek (1986, p.115) suggest that the optimal range for the item-total correlation is between 0.20 and 0.40. With regard to this particular study, item-total correlations found to be greater than 0.20, as indicated by the standards set out by Nunnaly (1972), were deemed acceptable. Thus, items that revealed item-total correlations below 0.20 were regarded as unacceptable and consequently qualified for elimination. Lastly, items were considered for deletion if it was deemed that the removal of the item indicated a substantial increase in Cronbach's alpha and overall scale reliability.

3.6.2   *Evaluating the Measurement Models*

The objective of factor analyses is to confirm that the dimensionality of each sub-scale item contributes to an internally consistent description of the sub-scale in question. Furthermore, factor analysis can be used as a statistical process to refine and reduce scale items by identifying and removing sub-scale items with inadequate factor loadings. Pallant (2007, p. 179), argues that the purpose of factor analysis is to 'gather information about (explore) the interrelationships among a set of variables… while attempting to produce a smaller number of linear combinations of the original variables in a way that captures (or accounts for) most of the variability in the pattern of correlations". All variables are considered simultaneously in factor analysis, i.e., each variable is related to all other variables, and forms factors not with the aim of

predicting a dependant variable, but to maximise their explanation of the total variable set (Hair, Anderson, Tatham & Black, 1998).

LISREL 8.54 (Jöreskog & Sörbom, 1996) was used to perform separate confirmatory factor analyses (CFA) on each of the sub-scales of the various instruments used in this study. The reason for analysing the various dimensions separately, were to prevent the possibility of obtaining inflated indices. The results of the Confirmatory Factor Analyses (CFA) are discussed per dimension in terms of two important fit indices namely, p-value Test of Close Fit and RMSEA, where p > 0.05 and RMSEA < 0.08 indicate good model fit. After the initial CFA was performed on all the sub-scale items, the results would indicate either: (a) the model would fit poorly, in terms of p-value Test of Close Fit and/or RMSEA, or (b) the model would achieve good fit in terms of the p-value Test of Close Fit and RMSEA. In light of this, different steps would be taken depending on whether the model fit was good or poor.

Poor Model Fit

If it was found that either of the two important fit indices of the measurement model were insignificant (i.e., p-value Test of Close Fit < 0.05; RMSEA > 0.08), the model was therefore said to fit poorly with the data. In order to resolve this problem, the *first step* would be to perform an Exploratory Factor Analysis (EFA) on all the items comprising the sub-scale. This was done in order to determine the uni-dimensionality of the sub-scale, and if possible, identify items contributing to the lack of coherency. Moreover, the results of the EFA aided the researcher in ascertaining the degree to which the instruments reflected the constructs postulated by the original authors. Principal axis factoring was chosen over principal components analysis, as the statistical calculations in the former, allows for the presence of measurement error, an intrinsic aspect of research into human behaviour (Stewart, 2001). Tabachnick and Fidell (2001) suggest that oblique rotation be used when the underlying factors are believed to be correlated, which is the case with the current scales. Moreover, oblique rotation was deployed for the reason that it is considered a theoretically superior method to orthogonal rotation techniques, and has been found to provide better fit when interrelations between variables being measured is expected (Kerlinger & Lee, 2000; Pallant, 2007). Factors that have eigenvalues greater than one and "clear

breaks" on the scree-plot are considered to be the indication of a number of meaningful factors.

Prior to performing the EFA, the suitability of the data for factor analyses needs to be assessed. Inspection of the correlation matrix should reveal numerous coefficients above 0.30, indicative of the matrix being factor analysable (Tabachnick & Fidell, 2001). Furthermore, inspection of the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO index) and the Bartlett's test of sphericity will provide further evidence as to whether the matrix is factor analysable. According to Pallant (2007), when the KMO value approaches unity and is > 0.60 one can assume that the correlation matrix can undergo factor analysis. The Bartlett test further indicates that the scale is factor analysable when the significance level is $p < 0.05$, showing that the factor analysis would be considered appropriate. Finally, all the KMO values for the individual items in the anti-image correlation matrix should be above 0.50, thus supporting the factorability of the correlation matrix.

Once the suitability of the data for factor analysis has been assessed, and the number of meaningful factors has been determined, the factor loadings on the rotated matrix are then studied. The *second step* would be to identify poor items, and subsequently eliminate any item as per the EFA decision criteria listed below. The decision rules for determining the criteria for the removal of an item, the items associating with each factor, and the number of factors to be extracted were as follows:

- An item will be excluded if their factor loadings are not > .30 on any factor (Pallant, 2001).
- An item will be excluded if it loads > .30 on more than one factor and the difference between the two loadings is < .25.
- Items will be excluded if their loadings display conceptual incoherence with the meaning of the factor, thus decreasing the scientific utility of the final solution (Tabachnick & Fidell, 1996).
- According to Kaiser's (1961) criteria, the number of factors to be extracted should not be more than the number of eigenvalues > 1.00 (Pallant, 2007).

– Each dimension will be required to have at least four or more items that successfully represent the respective latent variable. If it should occur that, for instance, the majority of items load on the first factor, and four or less items load on the second factor a decision will be made to delete the four or less items loading on the second factor.

Using these decision rules as criteria for deleting an item, poor items could be detected and removed from the respective sub-scale. Poor items should also be examined in terms of the previously flagged items in the reliability analysis. The *third step* entailed that a further CFA be performed on the modified sub-scale structure. Model fit was again evaluated in terms of the p-value Test of Close Fit and the RMSEA. If it was found that model fit had been achieved, the next step could be performed. The *fourth step* required that each item be evaluated in terms of its completely standardised factor loadings (LAMBDA-X). This matrix can be interpreted as the regression slopes of the regression of the standardised indicator variables on the standardised latent variable. The completely standardised factor loadings therefore indicate the average change expressed in standard deviation units in the indicator variable associated with one standard deviation change in the latent variable. Items would need to reach the >0.30 level required to indicate that the item successfully contributes to the coherency of the sub-scale. If it was found that all the remaining items loaded significantly (>0.30) on the latent variable, the factor analysis procedure was then completed. If however, an item was found to have an insignificant factor loading, the item was to be deleted. Thereafter, further CFA's were to be performed on the refined sub-scale items until all items demonstrate satisfactory factor loadings.

Good Model Fit

If it was found that both of the required fit indices of the measurement model were significant (i.e., p-value Test of Close Fit > 0.05; RMSEA < 0.08), the good model fit was said to be achieved. The next step entailed that each item be evaluated in terms of its completely standardised factor loadings (LAMBDA-X), with acceptable items having reached the >0.30 level required to indicate that the item successfully contributes to the coherency of the sub-scale. If it was found that all the remaining items loaded significantly (>0.30) on the latent variable, the factor analysis procedure

was then completed. If however, an item was found to have an insignificant factor loading that item was subsequently deleted. Thereafter, further CFA's were to be performed on the refined sub-scale items until all items demonstrate satisfactory factor loadings.

3.6.3 Correlation Analysis

According to Pallant (2007), correlation analysis is used to describe the strength and direction of the linear relationship between variables. More specifically, the purpose of correlation analysis is to establish that a relationship exists between variables and to describe the nature of the relationship. The statistical procedures are simply used to measure the strength or consistency of a relationship, with no attempt to manipulate, control or interfere with the variables (Gravetter & Forzano, 2006). In light of this, the first objective was to determine whether relationships exist between the three constructs: attitude towards diversity (as measured by the CDBS), emotional intelligence (as measured by Genos EI), and diversity complexity (as measured by the RTDI).

3.6.3.1 Pearson Product-Moment Correlation Coefficient

Initially the questionnaire data was typed into an excel file and subsequently transferred into the Statistical Package for the Social Sciences (SPSS, Version 17) for the purpose of performing a Pearson product-moment correlation analysis. This is the first step in the data analysis process and forms the basis of all subsequent data analyses. Pearson correlation coefficients (r) can only take on values from -1 to +1. The positive or negative sign indicates whether there is a positive correlation (as one variable increases, so too does the other), with +1 indicative of a perfect positive correlation, or a negative correlation (as one variable increases, the other decreases), with -1 indicative of a perfect negative correlation. A correlation of zero indicates that no relationship exists between the variables.

The size of the absolute value provides an indication of the strength of the relationship between the variables; however the interpretation of values falling between 0 to -1 and 0 to +1 can present some difficulty. Due to the obscurity of interpretation,

Guilford (as cited by Tredoux & Durrheim, 2002) provides guidelines for the informal interpretations of statistically significant Pearson correlation coefficients. Effect sizes were computed to asses the practical significance of relationships in this study. A cut-off point of ≥ 0.30, representing a medium effect (Steyn, 2002), was set for the practical significance of correlation coefficients. Table 3.6 presents Guilford's (as cited by Tredoux & Durrheim, 2002, p. 194) proposed values for interpretation of correlation coefficients:

TABLE 3.6

GUIDELINES FOR INTERPRETING PEARSON'S *R*

Absolute Value of *r* (+ or -)	Informal Interpretation
Less than .20	Slight, almost negligible relationship
.20 – .40	Low correlation: definite but small relationship
.40 – .70	Moderate correlation: substantial relationship
.70 – .90	High correlation: marked relationship; and
.90 – 1.0	Very high correlation: very dependable relationship
≥ .30	Practically significant relationship

Guilford (as cited in Tredoux & Durrheim, 2002, p. 184).

For the purpose of the present study and in order to foster consistency in interpretation, the .30 cut-off point and the above value interpretation was subsequently used in order to evaluate the obtained correlation coefficients. The first two levels of the above guideline are thus adapted as follows: Less than .30 = Not practically significant; and .30-.40 = Low correlation: definite but small relationship.

3.6.3.2   *Standard Multiple Regression Analyses*

Standard multiple regression is a multivariate analytic procedure that can be used to explore the relationship between one continuous dependant variable and a number of independent variables or predictors (Pallant, 2007). This method of analysis allows one to identify the unique contribution of each independent variable to the prediction of the dependent variable. In standard multiple regression analysis, all the independent (or predictor) variables are entered into the equation at once, each one is assessed as if it had entered the regression after all other independent variables had

been entered (Tabachnick & Fidell, 2001). Each independent variable is evaluated in terms of its predictive power, over and above that offered by all the other independent variables (Gravetter & Forzano, 2006). Furthermore, standard multiple regression analyses provide two coefficients, namely: (1) a multiple correlation coefficient (R), and (2) a coefficient of multiple determination (R^2). According to Licht (1995, p. 29), whereas as R indicates "the degree of relationship between the criterion… and the weighted combination of predictors as specified by the regression equation" ranging between 0 (no relationship between predicted and actual criterion scores) and 1 perfect prediction, R^2 indicates "the proportion of variance in the criterion that is shared by the weighted combination of predictors".

3.6.4   *Structural Equation Modelling (SEM)*

In order to test the proposed model's absolute fit, structural equation modeling (SEM) was used as the statistical analysis technique. SEM is a statistical methodology that takes a confirmatory (i.e., hypothesis-testing) approach to the analysis of a structural theory on specific phenomenon. Typically, this theory represents "causal" processes that generate observations on multiple variables. According to Kelloway (1998), there are three primary reasons as to why SEM, as an analysis technique, should be used. Firstly, in social sciences, measures are often used to represent constructs. Kelloway (1998) believes that SEM allows the researcher to determine how well these measures reflect the intended constructs. Kelloway (p. 2) argues that:

> Confirmatory factor analysis, an application of structural equation modeling, is both more rigorous and more parsimonious than the "more traditional" techniques of exploratory factor analysis.

What is more, is that factor analysis, as per SEM, is based on the testing of hypotheses, with explicit tests of both the overall quality of the factor solution and the specific parameter (i.e., factor loadings) composing the model (Kelloway, 1998). A second reason in favour of SEM is that social scientists are largely interested in the question of prediction. Due to the fact that predictive models have become so complex, Kelloway (1998) argues that, SEM permits the testing and specification of these more complex 'path' models as an entity in addition to testing the components comprising the model. Lastly, Kelloway argues that SEM provides a flexible, yet

powerful, method by which the quality of measurement can be taken into account when evaluating the predictive relationships existing between the latent variables. In contrast to the more traditional analysis techniques, SEM permits estimates of the strength of the relationship existing between latent variables unattenuated by measurement error.

Also in favour of SEM is Byrne (2001, p. 4), stating that:

> Several aspects of SEM set it apart from the older generation of multivariate procedures. Firstly, although traditional multivariate procedures are incapable of either assessing or correcting for measurement error, SEM provides explicit estimates of these error variance parameters. Second, although data analyses using the former methods are based on observed measurements only, those using SEM procedures can incorporate both unobserved (i.e., latent) and observed variables. Finally, there are no widely and easily applied alternative methods for modeling multivariate relations, or for estimating point and/or interval indirect effects; these important features are available using SEM methodology.

Based on the arguments provided by both Kelloway (1998) and Byrne (2001), a decision was made to select SEM as the statistical analysis technique used in this study. The statistical package that was used in the analysis is LISREL 8.54 for Windows (Jöreskog & Sörbom, 1996). The applications that characterize SEM were adhered to, and involve the following five, relatively distinct, but interrelated steps, as specified by Diamantopoulos & Siguaw (2000):

- Model specification
- Model identification
- Parameter estimation
- Assessment of model fit
- Model modification

Model specification involves describing the nature and number of parameters to be estimated in the initial comprehensive model. This step would further include the construction of a comprehensive path diagram depicting the substantive hypotheses and measurement system. The second step, model identification, involves the examination of information provided by the data in order to determine whether it is sufficient for parameter estimation; that is, one must be able to obtain a single, unique

value for every specified parameter from the observed data that has been collected. Once the model has been identified, an estimation technique is selected, often determined by the nature and distributional properties of the variables that are being analyzed. Following parameter estimation, the model is tested to ascertain whether it is consistent with the data; in other words, does the model fit the data. Should the model fit the data adequately, the process can stop. However, model modification might be necessary, as quite often, the model can be improved through modification of the model, either by fixing currently free parameters, constraining parameters or freeing additional parameters, as a result of which steps 2-5 should be repeated (Jöreskog & Sörbom, 1996).

3.6.5   *The Structural Model of the Present Study*

In its most general form, the structural model consists of a set of linear structural equations, which specify the causal relationships among the latent variables, describes the causal effects, and assigns the explained variance (Jöreskog & Sörbom, 1993). As based on the theoretical arguments presented in Chapter 2, the structural model of the present study is illustrated in Figure 3.1. Emotional intelligence and perceptual depth (negative) are the independent or exogenous variables in the present study and are indicated by the symbol KSI (ξ). Perceptual depth (positive), perceptual breadth, valuing individual differences, tolerance for affirmative action and competitive advantage are endogenous variables, indicated by the symbol ETA (η). The structural model also indicates a variety of paths that represent the relationships between the constructs. The directional paths linking exogenous and endogenous variables are described with the sign GAMMA (γ). The single directional paths that describe the relationship between two endogenous variables, is described with the sign BETA (β). Moreover, ZETA (ζ) represents the errors in structural equations in the model and describe the error terms of η_1, η_2, η_3, η_4, and η_5. Therefore, ζ represents residual error in the latent endogenous variables.
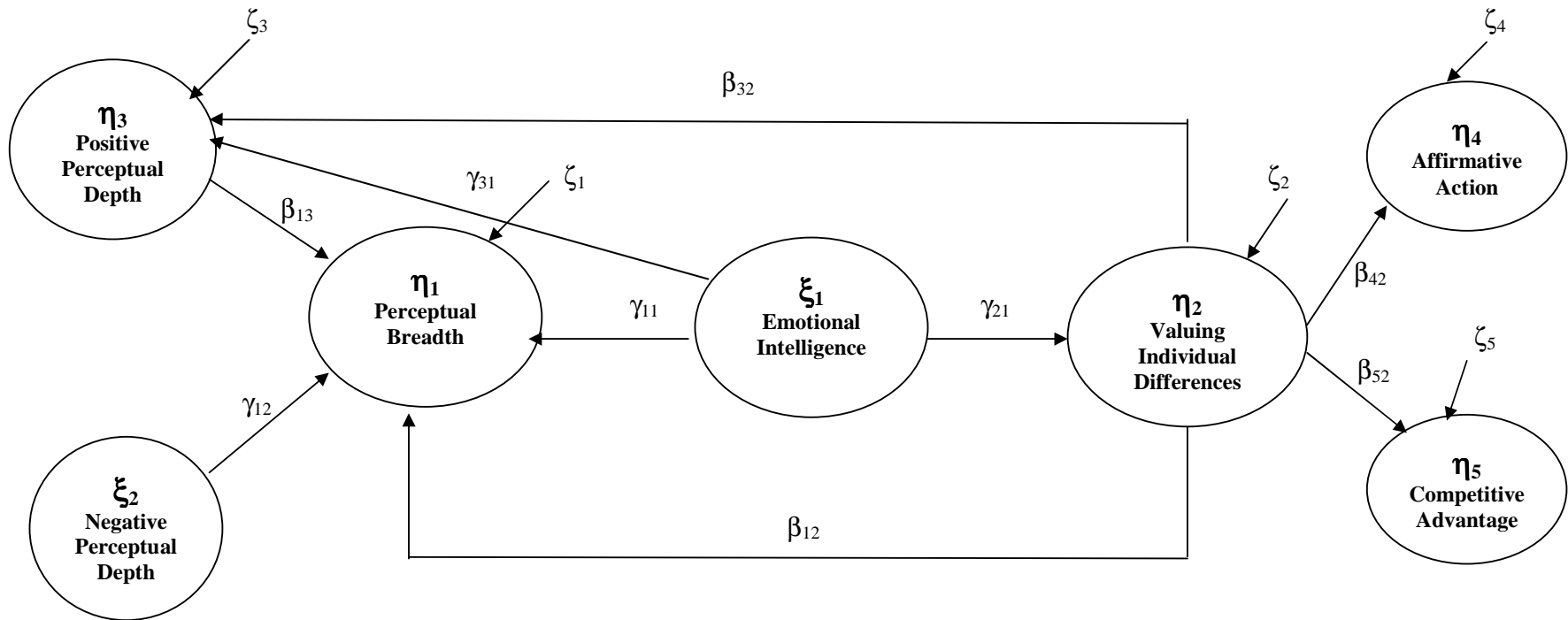
FIGURE 3.1

THE CONCEPTUAL STRUCTURAL MODEL

The proposed structural model, which serves as the basis of this study, can further be expressed algebraically as a set of structural equations, representing the research hypotheses to be investigated. These equations are presented below:

$$\eta_1 = \xi_1\gamma_{11} + \eta_2\beta_{12} + \xi_2\gamma_{12} + \eta_3\beta_{13} + \zeta_1$$

$$\eta_2 = \xi_1\gamma_{21} + \zeta_2$$

$$\eta_3 = \xi_1\gamma_{31} + \eta_2\beta_{32} + \zeta_3$$

$$\eta_4 = \eta_2\beta_{42} + \zeta_4$$

$$\eta_5 = \eta_2\beta_{52} + \zeta_5$$

The structural model can also be portrayed mathematically in terms of a series of matrices. The structural model is defined by the following two matrices and two vectors:

- A 5 x 4 Γ (gamma)-matrix of path/regression coefficients γ describing the strength of the regression of η_i on ξ_i in the structural model;
- A 5 x 3 symmetrical β (beta)-matrix of regression path coefficients (β) describing the strength of the regression of η_i on η_I in the structural model;
- A 2 x 1 ξ (ksi) column vector of exogenous latent variables;
- A 5 x 1 η (eta) column vector of endogenous latent variables;
- A 5 x 1 ζ (zeta) column vector of residual error terms.

More specifically, the hypothesised causal relationships depicted in Figure 3.1 can further be expressed in matrix form:

$$\begin{pmatrix} \eta_1 \\ \eta_2 \\ \eta_3 \\ \eta_4 \\ \eta_5 \end{pmatrix} = \begin{pmatrix} 0 & \beta_{12} & \beta_{13} \\ 0 & 0 & 0 \\ 0 & \beta_{32} & 0 \\ 0 & \beta_{42} & 0 \\ 0 & \beta_{52} & 0 \end{pmatrix} \begin{pmatrix} \eta_1 \\ \eta_2 \\ \eta_3 \\ \eta_4 \\ \eta_5 \end{pmatrix} + \begin{pmatrix} \gamma_{11} & \gamma_{12} \\ \gamma_{21} & 0 \\ \gamma_{31} & 0 \\ 0 & 0 \\ 0 & 0 \end{pmatrix} \begin{pmatrix} \xi_1 \\ \xi_2 \end{pmatrix} + \begin{pmatrix} \zeta_1 \\ \zeta_2 \\ \zeta_3 \\ \zeta_4 \\ \zeta_5 \end{pmatrix}$$

$$\eta = \mathrm{B}\,\eta + \Gamma\,\xi + \zeta$$

3.6.6   The Statistical Hypotheses

The overarching substantive research hypothesis tested in this study is that the structural model depicted in Figure 3.1 provides a permissible account of the manner in which diversity complexity and emotional intelligence influence an individual's attitude towards diversity in organisations. The overarching substantive hypothesis can further be dissected into nine separate substantative research hypotheses as represented by the paths hypothesised in Figure 3.1

Should the overarching research hypothesis be interpreted to imply that the structural model provides a perfect account of the manner in which diversity complexity and emotional intelligence influence attitude towards diversity in organisations, there is therefore, no significant discrepancy between the reproduced covariance matrix implied by the model ($\Sigma(\Theta)$; see Figure 3.1) and the observed population covariance matrix (Σ):

$$H_{01a}: \Sigma = \Sigma(\Theta)$$
$$H_{a1a}: \Sigma \neq \Sigma(\Theta)$$

The substantive research hypothesis can be translated into the following exact fit null hypothesis 1a:

$$H_{01a}: \mathrm{RMSEA} = 0$$
$$H_{a1a}: \mathrm{RMSEA} > 0$$

If the overarching research hypothesis is interpreted to imply that the structural model provides an approximate account of the manner in which diversity complexity and emotional intelligence influence attitude towards diversity in organisations, the substantive research hypothesis can be translated into the following close fit null hypothesis 1b:

$$H_{01b}: RMSEA \leq 0.05$$
$$H_{a1b}: RMSEA > 0.05$$

If H_{01a} and/or H_{01b} would not be rejected (or at least if reasonable model fit would be obtained), the two separate substantive research hypotheses, as represented by the paths depicted in Figure 3.1, will be tested by testing the following specific null hypotheses described below and illustrated in Table 3.7.

Hypothesis 2:

Positive perceptual depth (η_3) has a statistically significant positive effect on perceptual breadth (η_1).

$$H_{02}: \beta_{13} = 0$$
$$H_{a2}: \beta_{13} > 0$$

Hypothesis 3:

Negative perceptual depth (ξ_2) has a statistically significant positive effect on perceptual breadth (η_1).

$$H_{03}: \gamma_{12} = 0$$
$$H_{a3}: \gamma_{12} > 0$$

Hypothesis 4:

Valuing individual differences (η_2) has a statistically significant positive effect on perceptual breadth (η_1).

$$H_{04}: \beta_{12} = 0$$
$$H_{a4}: \beta_{12} > 0$$

Hypothesis 5:

Emotional intelligence (ξ_1) has a statistically significant positive effect on perceptual breadth (η_1).

$$H_{05}: \gamma_{11} = 0$$

$$H_{a5}: \gamma_{11} > 0$$

Hypothesis 6:

Emotional intelligence (ξ_1) has a statistically significant positive effect on positive perceptual depth (η_3).

$$H_{06}: \gamma_{31} = 0$$

$$H_{a6}: \gamma_{31} > 0$$

Hypothesis 7:

Emotional intelligence (ξ_1) has a statistically significant positive effect on valuing individual differences (η_2)

.

$$H_{07}: \gamma_{21} = 0$$

$$H_{a7}: \gamma_{21} > 0$$

Hypothesis 8:

Valuing individual differences (η_2) has a statistically significant positive effect on positive perceptual depth (η_3).

.

$$H_{08}: \beta_{32} = 0$$

$$H_{a8}: \beta_{32} > 0$$

Hypothesis 9:

Valuing individual differences (η_2) has a statistically significant positive effect on tolerance for affirmative action (η_4).

.

$$H_{09}: \beta_{42} = 0$$

$$H_{a9}: \beta_{42} > 0$$

Hypothesis 10:

Valuing individual differences (η_2) has a statistically significant positive effect on competitive advantage (η_5).

.

$$H_{010}: \beta_{52} = 0$$
$$H_{a10} \ \beta_{52} > 0$$

TABLE 3.7
THE STATISTICAL HYPOTHESES

Hypothesis 2	Hypothesis 3	Hypothesis 4
$H_{02}: \beta_{13} = 0$	$H_{03}: \gamma_{12} = 0$	$H_{04}: \beta_{12} = 0$
$H_{a2}: \beta_{13} > 0$	$H_{a3}: \gamma_{12} > 0$	$H_{a4}: \beta_{12} > 0$
Hypothesis 5	**Hypothesis 6**	**Hypothesis 7**
$H_{05}: \gamma_{11} = 0$	$H_{06}: \gamma_{31} = 0$	$H_{07}: \gamma_{21} = 0$
$H_{a5}: \gamma_{11} > 0$	$H_{a6}: \gamma_{31} > 0$	$H_{a7}: \gamma_{21} > 0$
Hypothesis 8	**Hypothesis 9**	**Hypothesis 10**
$H_{08}: \beta_{32} = 0$	$H_{09}: \beta_{42} = 0$	$H_{010}: \beta_{52} = 0$
$H_{a8}: \beta_{32} > 0$	$H_{a9}: \beta_{42} > 0$	$H_{a10} \ \beta_{52} > 0$

3.7   ASSESSING MODEL FIT

The main aim of SEM is to explain the patterns of covariances observed among the study variables in terms of the relationships hypothesised by the measurement and structural models. Hu and Bentler (1995) contend that determining and evaluating the fit of the measurement and structural models is concerned with the ability of the fitted models to reproduce the observed covariance matrix. Traditionally, overall model fit was based on the chi-square (χ^2) statistic that is used to test the overarching hypothesis that there is no significant discrepancy between the reproduced covariance matrix implied by the model ($\Sigma(\Theta)$; see Figure 3.1) and the observed population covariance matrix (Σ). According to Jöreskog and Sörbom (1993), the exceedence probability, reported by LISREL, is the probability of obtaining a χ^2 value larger than

the calculated value, given that the overarching null hypothesis is 1. Jöreskog and Sörbom (p. 122) further state that:

> Chi-square is a badness of fit measure in the sense that a small chi-square corresponds to good fit and a large chi-square to bad fit. Zero chi-square corresponds to perfect fit.

The problem however, is that the χ^2 measure is distributed asymptotically as an χ^2 distribution. The result of this is that just at the point where the distributional assumptions of the test statistic become tenable, the statistical power of the test also become extremely high (Hu & Bentler, 1995). Consequently, it becomes extremely unlikely to obtain the desired insignificant χ^2 statistic, especially with regard to larger samples, even when the model fits the empirical data well. Due to this dilemma, numerous alternative indices of fit have been developed and are increasingly being used to combat the sensitivity of the χ^2. Kelloway (1998) has conveniently categorised these various fit statistics into goodness-of-fit indices for assessing, a) absolute fit, b) comparative fit, and c) parsimonious fit. This study makes use of these categories and as such, a description of each follows:

Absolute indices of goodness-of-fit directly assess how well a model reproduces the sample data (Hoyle, 1995). The overall test of fit in covariance structure analysis assesses the magnitude of the discrepancy between the sample and fitted covariance matrices. Once the parameters have been estimated to minimise the discrepancy between the sample and fitted covariance matrices, the following exact fit null hypothesis is then tested with regards to the population:

$$H_0: \Sigma = \Sigma(\Theta)$$
$$H_a: \Sigma \neq \Sigma(\Theta)$$

In order to test this null hypothesis, the Satorra Bentler χ^2 statistic is used, with the aim of not rejecting the null hypothesis (Mels, 2003). Kelloway (1998) contends that a non-significant χ^2 (p>0.05) indicates that the model 'fits' the data exactly, in that it can reproduce the sample covariance matrix to a degree of accuracy that could not be explained in terms of sampling error only under the exact fit null hypothesis. The reality however, is that the null hypothesis of exact fit is unrealistic. It thus, becomes more appropriate to test the following close fit null hypothesis:

$$H_0: RMSEA \leq 0$$

$$H_a: RMSEA > 0$$

Absolute fit measures that are reported are: the Goodness-of-Fit Index (GFI), Root Mean Square Residual (RMR), Root Mean Square Error of Approximation (RMSEA), P-Value for Test of Close Fit (RMSEA < 0.05), and Expected Cross-Validation Index (ECVI).

Incremental fit measures, also termed comparative indices of goodness-of-fit, measure the proportionate improvement in fit by comparing a target model with a more restricted, nested baseline model (Hoyle, 1995). Indices of comparative fit typically choose to a baseline model for comparison. Comparative fit is based on a comparison of the structural model with the independence model that provides the poorest fit possible to the data. Comparative fit measures reported are: the Normed-Fit Index (NFI), the Non-Normed Fit Index (NNFI), the Incremental Fit Index (IFI), the Comparative Fit Index (CFI), the Relative Fit Index (RFI), and the Adjusted Goodness-of-Fit Index (AGFI). With the exception of the NNFI, all of these indices have a range of 0 and 1 with values closer to 1, and more specifically >0.90 representing good fit. The NNFI on the other hand, can take values >1.0.

Parsimonious indices of goodness-of-fit are based on the recognition that one can always obtain a better fitting model by means of estimating more parameters (Kelloway, 1998). Parsimonious fit relates to the benefit that accrues in terms of improved fit in relation to degrees of freedom lost to achieve the improvement of fit (Jöreskog, 1993). This increase in model fit does however, come at a cost of loss of degrees of freedom. Thus parsimonious fit measures relate the goodness-of-fit of the model to the number of estimated coefficients required to achieve the level of fit. The objective consequently is to diagnose whether model fit has been achieved by 'overfitting' the data with too many coefficients (Hair et al., 1998). A second formulated model is necessitated by the meaningful use of parsimonious fit indices that contain additional paths that can be theoretically justified. The relevant indices reported in this study are: the Parsimonious Normed Fit Index (PNFI) and the Parsimonious Goodness-of-Fit Index (PGFI).

Table 3.8 summarises the goodness-of-fit indices as described above. These indices, and the levels summarised in this table will be used for the purpose of the present study, in order to reach a meaningful conclusion regarding model fit. Furthermore, the results of the indices will be provided in this format.

TABLE 3.8

SUMMARY OF GOODNESS-OF-FIT INDICES TO BE USED

ABSOLUTE FIT MEASURES	
Minimum Fit Function Chi-Square	A non-significant result indicates model fit
Normal Theory Weighted Least Chi-Square	A non-significant result indicates model fit
χ^2/df	Values between 2 and 5 indicate good fit
Root Mean Square Error of Approx. (RMSEA)	Values of 0.08 or below indicate acceptable fit, below 0.05 indicate good fit, and values below 0.01 indicate outstanding fit
P-Value for Test of Close Fit (RMSEA < 0.05)	Values > 0.05 indicate good fit
90% Confidence Interval for RMSEA	This is 90% confidence interval of RMSEA testing the closeness of fit (i.e., testing the hypothesis H_0: RMSEA < 0.05)
Expected Cross-Validation Index (ECVI)	Lower values indicate better fitting models
90% Confidence Interval for ECVI	This is 90% confidence interval for ECVI
Root Mean Square Residual (RMR)	Lower values indicate better fit with values below 0.08 indicative of good fit
Standardised RMR	Lower values indicate better fit with values less than 0.05 indicating good fit
Goodness of Fit Index (GFI)	Values closer to 1 and >0.90 represents good fit
INCREMENTAL FIT MEASURES	
Normed Fit Index (NFI)	Values closer to 1 indicate better fit with values >0.90 indicative of good fit
Non-Normed Fit Index (NNFI)	Higher values indicate better fit with values >0.90 indicative of good fit
Adjusted Goodness of Fit (AGFI)	Values closer to 1indicate better fit with values >0.90 indicative of good fit
Comparative Fit Index (CFI)	Values closer to 1indicate better fit with values >0.90 indicative of good fit
Incremental Fit Index (IFI)	Values closer to 1indicate better fit with values >0.90 indicative of good fit
Relative Fit Index (RFI)	Values closer to 1indicate better fit with values >0.90 indicative of good fit
PARSIMONIOUS FIT MEASURES	

Parsimony Normed Fit Index (PNFI)	**Values closer to 1indicate better fit with values >0.90 indicative of good fit**
Parsimony Goodness of Fit Index (PGFI)	**Values closer to 1indicate better fit with values >0.90 indicative of good fit**

3.8   SUMMARY

The present study aimed to explicate the influence of diversity complexity and emotional intelligence on the attitude towards diversity in organisations. In order to achieve this aim, the research questions and the subsequent research hypotheses were discussed in Chapter's 1 and 2. In this chapter, the research methodology of the study was explicated. This included stating the statistical hypotheses, details pertaining to the measurement instruments used, as well as the statistical analyses performed on the resultant data. The results of the research will be presented in the subsequent chapter (Chapter 5), followed by the interpretation of these results (Chapter 6).

CHAPTER 4
RESEARCH RESULTS

4.1 INTRODUCTION

The theoretical model has been derived from the literature and in accordance with the proposed relationships between the latent variables (depicted in Figure 3.1); specific statistical hypotheses were subsequently formulated. The purpose of this chapter is to report the results of the statistical analyses used for the testing of the hypotheses. This chapter begins by presenting the treatment of missing values and the results of the item and dimensionality analyses performed in order to establish the psychometric integrity of the indicator variables used to represent the various latent variables. Thereafter, the results of the tested hypotheses are reported, as based on the procedures outlined in the previous chapter. The method used to test each hypothesis is specified and the results tabulated. The chapter is concluded with a summary of the study's results.

4.2 MISSING VALUES

Given the flexible format of the Reaction-To-Diversity-Inventory that permitted participants the freedom to circle only those words they associated with diversity complexity, missing values did not present a problem with regard to this particular scale. However, missing values did present a minor problem, with regard to the Cultural Diversity Beliefs Scale and the Genos EI, which needed to be addressed before evaluation of the data could proceed. A relatively small number of respondents failed to respond to any individual item, however, the fact that missing values were present in the data, implied that they needed to be dealt with accordingly. The number of missing values, due to omission or inability to respond to, for the CDBS and the Genos EI are indicated in Table 4.1 and Table 4.2 respectively.

TABLE 4.1

DISTRIBUTION OF MISSING VALUES FOR THE CDBS

Number of Missing Values	Number of Respondents
1	11
2	7
3	4
4	1

TABLE 4.2

DISTRIBUTION OF MISSING VALUES FOR THE GENOS EI

Number of Missing Values	Number of Respondents
≤ 5	7
6	16
7	21
8	11
9	8
10	3
11	3
12	1

Although there are a number of options one could potentially make use of to solve this problem of missing values, it was agreed that the most satisfactory solution would be to use imputation by matching procedure, available in PRELIS, as a method to solve the problem as it normally appears to be the safest most conservative procedure (Spangenberg & Theron, 2004). Imputation by matching refers to a process of substituting real values for missing values. The missing values are replaced by substitute values, which in turn, are derived from one or more other cases that have a similar response pattern over a set of matching variables (Theron, 2008).

One would ideally want to use matching variables that will not be used in the confirmatory factor analysis; however this is generally not the case. As a result, the first step was to identify the subset of variables/items that are least plagued by the missing values problem. In this case, the decision was made to use variables with four or less missing values to serve as matching variables. The subsequent PRELIS run on

the reduced item set proved to be effective in solving the missing value problem as the effective sample size is appropriate. If after imputation, cases still contained missing values, they were eliminated. With regard to the CDBS, after imputation, 239 cases with observations on all 3 dimensions remained in the validation sample. Similarly, after imputation, the Genos EI reported 237 cases with observations on all 7 dimensions in the validation sample.

4.3   ITEM ANALYSIS

In order to ensure that the measurement scales demonstrate acceptable levels of internal reliability and construct validity, item analysis was performed on the three superordinate scales of the measuring instruments by means of SPSS (Version 17). Coefficient alpha values were calculated to determine whether the superordinate scales and the subordinate scales were internally consistent. An item was found reliable according to the standards set out by Malhotra (2004), where a reliability score of less than 0.6 indicates a lack of internal consistency. For the purpose of this study, coefficient alphas greater than 0.60, were thus deemed internally consistent and reliable. Reliability values below 0.60 will not be accepted and will consequently qualify for elimination. Moreover, item-total correlations found to be greater than 0.20 were deemed acceptable (Nunnally, 1978), while items that revealed item-total correlations below 0.20 were regarded as unacceptable and consequently qualified for elimination.

A decision was made to refrain from removing poor items at this stage of the analyses. Instead, the results of the reliability analysis were used as an opportunity to flag potentially poor items. Only after factor analysis was conducted on the various dimensions of the measuring instruments for this study, did the notion of removing items become plausible. The reliability results of each sub-scale, comprising all items, are presented in the subsequent sections. Only after the refined sub-scale structures had been identified (via CFA and EFA procedures), was the reliability analysis repeated without the identified poor items.

4.3.1 Reliability Analysis: CDBS

Tables 4.3 to 4.9 present the results of the Cronbach's alpha and item-total correlations for the CDBS sub-scales. The CDBS originally consisted of 23 items that related to each of the three subordinate scales, Valuing Individual Differences, Diversity as a Competitive Advantage and Tolerance towards Affirmative Action. Each of the three CDBS sub-scales was subjected to item analysis.

4.3.1.1 Reliability Results: Competitive Advantage

Table 4.3 presents the reliability results for the *Competitive Advantage (CA)* sub-scale. The coefficient alpha for the total competitive advantage variable was found to be 0.439. This value did not meet the required 0.6 cut-off score. Consequently, a decision was taken to identify problematic items that could be contributing to the decreased reliability of the sub-scale. As can be seen in Table 4.3, Item 1 appears to be somewhat of a poor item. The relative magnitude of the corrected item-total correlation (-0,011) and the increase in scale alpha affected by the removal of this item (0,439 to 0,612) suggested that this was not successfully reflecting the same underlying latent variable than the majority of the items in the sub-scale were reflecting. Consequently, this item was flagged as a poor item.

TABLE 4.3

RELIABILITY OF COMPETITIVE ADVANTAGE

CA (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item1	19.81	11.154	-.011	.612
Item8	18.43	11.017	.208	.399
Item9	18.31	9.936	.362	.295
Item13	18.40	9.690	.356	.293
Item17	18.48	10.098	.372	.295

The reliability results of the final items comprising the refined CA sub-scale, after factor analysis (refer to section 4.4.1.1) was performed on the sub-scale items, is presented in Table 4.4.

TABLE 4.4

RELIABILITY OF THE REFINED COMPETITIVE ADVANTAGE SUB-SCALE

CA (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item8	14.88	7.291	.355	.569
Item9	14.76	6.766	.455	.494
Item13	14.85	7.067	.352	.574
Item17	14.93	7.216	.411	.529

4.3.1.2   Reliability Results: Valuing Individual Differences

The reliabilities for each item comprising the Valuing Individual Differences subscale were calculated and are provided in Table 4.5. The coefficient alpha for the total VID sub-scale was 0.776. This construct was thus deemed reliable for the purpose of the study as it exceeded 0.60. With regard to the 12 items comprising the *Valuing Individual Differences (VID)* sub-scale, Item 16 was identified as an item that lowers the homogeneity of the scale and was subsequently flagged as problematic. Although the item was not removed from the sub-scale, the decision to flag this item was justified by the relative magnitude of the corrected item-total correlation (0,176) and the increase in scale alpha affected by the removal of this item (0,776 to 0,796).

TABLE 4.5

RELIABILITY OF VALUING INDIVIDUAL DIFFERENCES

VID (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item2	55.23	49.092	.528	.752
Item3	55.86	48.442	.348	.768
Item4	55.47	48.047	.454	.756
Item6	55.38	49.008	.399	.761
Item7	55.06	50.204	.392	.763
Item12	55.72	48.515	.352	.767
Item14	55.21	49.176	.587	.749

Item16	56.63	50.031	.176	.796
Item18	55.48	48.445	.450	.756
Item19	55.43	47.780	.547	.748
Item21	55.54	47.784	.503	.751
Item23	55.81	44.889	.493	.751

The final reliability results of the items comprising the refined VID sub-scale, after factor analysis (refer to section 4.4.1.2) was performed on the sub-scale items, is presented in Table 4.6.

TABLE 4.6

RELIABILITY OF THE REFINED VALUING INDIVIDUAL DIFFERENCES SUB-SCALE

VID (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item2	36.09	23.920	.445	.740
Item7	35.92	24.087	.378	.749
Item12	36.58	22.337	.377	.755
Item14	36.07	23.245	.601	.720
Item18	36.34	22.742	.447	.738
Item19	36.29	21.936	.591	.714
Item21	36.40	22.350	.494	.730
Item23	36.68	20.576	.455	.743

4.3.1.3   Reliability Results: Tolerance towards Affirmative Action

With regard to the tolerance towards affirmative action dimension, the final sub-scale of the CDBS, the coefficient alpha for the total tolerance towards affirmative action variable was reported to be 0.547. This alpha value is below the required 0.60 cut-off score, and thus implies that the sub-scale is unreliable. Upon further inspection of the reliability results for each sub-scale item, Items 5 and 11 were identified as items that lower the homogeneity of the scale. The results of the reliability analyses for Items 5 and 11 illustrated that the relative magnitude of the corrected item-total correlation (0,138 and 0,039 respectively) and the increase in scale alpha affected by the removal of these items (0,547 to 0,574 and 0,547 to 0,621 respectively) justified the need to

flag these potentially poor items. Table 4.7 provides the reliability coefficients for the tolerance towards affirmative action sub-scale items.

TABLE 4.7

RELIABILITY OF TOLERANCE TOWARDS AFFIRMATIVE ACTION

AA (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item5	21.69	23.953	.138	.574
Item10	19.88	21.404	.401	.452
Item11	20.87	25.399	.039	.621
Item15	21.05	19.264	.444	.419
Item20	19.81	21.019	.485	.421
Item22	20.64	21.773	.336	.480

The final reliability results of the items comprising the refined AA sub-scale, after factor analysis (refer to section 4.4.1.3) was performed on the sub-scale items, is presented in Table 4.8

TABLE 4.8

RELIABILITY OF THE REFINED TOLERANCE TOWARDS AFFIRMATIVE ACTION SUB-SCALE

AA (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item10	12.86	12.790	.510	.612
Item15	14.04	12.401	.404	.687
Item20	12.79	12.792	.573	.601
Item22	13.62	12.871	.454	.647

It is important to document the current study's means, standard deviations and reliability statistics for the CDBS after poor items were removed. It is clear from Table 4.9 that a satisfactory level of reliability ($\alpha > 0.60$) was found for the subscales of the refined CDBS. Although the values presented in the Table 4.9 are the final reliability results for the refined CDBS, it is recommended that section 4.4 be referred

to as it provides an in-depth discussion into the procedure of factor analysis and the reasons for the removal of certain items.

TABLE 4.9

THE CURRENT STUDY'S MEANS, STANDARD DEVIATIONS

AND RELIABILITY STATISTICS FOR THE REFINED CDBS

Cultural Diversity Belief Dimensions	Means	Standard Deviations	Number of Items in Final Scale	Cronbach' Alphas
Valuing Individual Differences	41.48	5.349	8	.761
Competitive Advantage	19.81	3.340	4	.612
Affirmative Action	17.77	4.529	4	.695

4.3.2   Reliability Analysis: Genos EI

The Genos EI originally comprised of seven sub-scales, each containing 10 separate empirical indicators (items). In order to determine if the measuring instrument is internally consistent, a reliability analysis was performed separately on each of the sub-scales. Tables 4.10 to 4.24 presents the results of the Cronbach's alpha and item-total correlations for each of the seven Genos EI sub-scales namely, Emotional Self Awareness, Emotional Expression, Emotional Awareness of Others, Emotional Reasoning, Emotional Self Management, Emotional Management of Others and Emotional Self Control. If a poor item emerged after the reliability analysis, it was only flagged rather than deleted as all items needed to undergo a factor analysis procedure.

4.3.2.1   Reliability Results: Emotional Self Awareness (ESA)

The reliability results for the ESA sub-scale (refer to Table 4.10) appears to meet the reliability criteria as the total scale alpha is reported to be 0.652. As indicated, all items appear to have item-total correlations > 0.20, except for Item 9 (0.197). However, given that item 9's item-total correlation is only marginally below the cut-

off value of 0.20, and the insignificant increase in alpha, should this item be deleted, it
was decided to not consider the item for deletion.

TABLE 4.10

RELIABILITY OF EMOTIONAL SELF AWARENESS (ESA)

ESA (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	35.04	18.240	.259	.638
Item 2	35.27	17.047	.341	.622
Item 3	35.42	17.228	.348	.621
Item 4	35.54	17.097	.294	.633
Item 5	35.20	16.533	.458	.598
Item 6	35.26	17.245	.369	.617
Item 7	35.61	17.018	.274	.639
Item 8	35.43	17.593	.342	.623
Item 9	35.73	18.086	.197	.653
Item 10	35.04	18.388	.319	.629

The final reliability results of the items comprising the refined ESA sub-scale, after
factor analysis (refer to section 4.4.3.1) was performed on the sub-scale items, is
presented in Table 4.11

TABLE 4.11

RELIABILITY OF THE REFINED ESA SUB-SCALE

ESA (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	27.82	12.725	.302	.645
Item 2	28.05	11.654	.387	.624
Item 3	28.20	12.145	.340	.637
Item 4	28.32	11.878	.305	.649
Item 5	27.98	11.216	.517	.590
Item 6	28.04	12.295	.338	.637
Item 8	28.21	12.317	.361	.631
Item 10	27.82	13.206	.301	.646

4.3.2.2   *Reliability Results: Emotional Expression (EE)*

With regard to the EE subscale, the coefficient alpha for the entire variable was reported to be 0.707. This construct was thus deemed reliable for the purpose of the study as it exceeded 0.60. However, Item 3 was identified as an item that lowers the homogeneity of the scale and was subsequently flagged as a potentially poor item, the relative magnitude of the corrected item-total correlation (0,119) and the increase in scale alpha affected by the removal of this item (0,707 to 0,732) proved to be unacceptable The result of the reliability analysis, for the EE subscale, is presented in Table 4.12 below.

TABLE 4.12

RELIABILITY OF EMOTIONAL EXPRESSION

EE (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	33.17	22.466	.421	.675
Item 2	33.08	21.908	.358	.687
Item 3	33.01	24.546	.119	.732
Item 4	32.92	21.938	.471	.666
Item 5	32.58	22.812	.452	.672
Item 6	32.54	23.563	.368	.685
Item 7	33.11	22.635	.414	.676
Item 8	32.79	23.540	.350	.687
Item 9	33.22	22.339	.347	.688
Item 10	33.04	22.227	.447	.670

The final reliability results of the items comprising the refined EE sub-scale, after factor analysis (refer to section 4.4.3.2) was performed on the sub-scale items, is presented in Table 4.13

TABLE 4.13

RELIABILITY OF THE REFINED EMOTIONAL EXPRESSION SUB-SCALE

EE (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	29.58	19.440	.490	.693

Item 2	29.49	19.997	.299	.732
Item 4	29.32	19.424	.478	.695
Item 5	28.99	20.267	.458	.701
Item 6	28.94	20.641	.421	.707
Item 7	29.52	19.759	.463	.698
Item 8	29.19	21.038	.344	.718
Item 9	29.62	20.262	.302	.729
Item 10	29.45	19.579	.469	.697

4.3.2.3 Reliability Results: Emotional Awareness of Others (EAO)

The 10 items comprising the EAO sub-scale underwent a reliability analysis in order to assess the internal consistency of the sub-scale. Table 4.14 illustrates the results of the reliability analysis for the EAO subscale. The overall reliability coefficient for this subscale was reported to be 0.627, crediting the construct as reliable for the purpose of this study. Item 3 was identified as a problematic item as the relative magnitude of the corrected item-total correlation (0.167) and the increase in scale alpha affected by the removal of this item (0.627 to 0.637) justified the flagging of this potentially poor item.

TABLE 4.14

RELIABILITY OF EMOTIONAL AWARENESS OF OTHERS (EAO)

EAO (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	33.46	16.665	.251	.612
Item 2	33.91	16.390	.225	.620
Item 3	33.66	16.734	.163	.637
Item 4	33.61	15.561	.470	.567
Item 5	33.38	16.297	.321	.597
Item 6	33.68	16.093	.238	.618
Item 7	33.46	16.258	.280	.606
Item 8	33.46	16.207	.376	.587
Item 9	33.24	16.147	.398	.583
Item 10	33.65	16.481	.335	.595

The final reliability results of the items comprising the refined EAO sub-scale, after factor analysis (refer to section 4.4.3.3) was performed on the sub-scale items, is presented in Table 4.15

TABLE 4.15

RELIABILITY OF THE REFINED EMOTIONAL AWARENESS OF OTHERS SUB-SCALE

EAO (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	22.86	9.804	.277	.679
Item 4	23.02	9.135	.470	.625
Item 5	22.79	9.235	.410	.641
Item 7	22.86	9.451	.310	.672
Item 8	22.87	9.326	.442	.633
Item 9	22.64	9.307	.461	.628
Item 10	23.06	9.590	.388	.647

4.3.2.4 *Reliability Results: Emotional Reasoning (ER)*

The reliability results of the ER sub-scale reported that the overall reliability coefficient for this particular sub-scale was 0.638. Upon inspection if the reliability coefficients for each of the 10 sub-scale items, it appeared that Items 4 and 10 were failing to contribute to the internal consistency of the total sub-scale and as such, were flagged as poor items. The reason for this is based on the poor results of the magnitude of the corrected item-total correlation for Items 4 (0.099) and 10 (0.185) as well as the increase in scale alpha affected by the removal of these item (Item 4 = 0.638 to 0.660 and Item 10 = 0.638 to 0.728 respectively). See Table 4.16 below.

TABLE 4.16

RELIABILITY OF EMOTIONAL REASONING

ER (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	32.95	15.104	.392	.592
Item 2	32.91	15.386	.406	.590
Item 3	32.50	15.488	.442	.585
Item 4	33.27	17.300	.099	.660
Item 5	32.91	14.949	.529	.566
Item 6	33.13	15.029	.438	.582
Item 7	32.91	14.796	.458	.577
Item 8	32.73	16.401	.395	.600

Item 9	32.76	16.664	.326	.611
Item 10	34.00	19.686	-.185	.728

The final reliability results of the items comprising the refined ER sub-scale, after factor analysis (refer to section 4.4.3.4) was performed on the sub-scale items, is presented in Table 4.17

TABLE 4.17

RELIABILITY OF THE REFINED EMOTIONAL REASONING SUB-SCALE

ER (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	15.65	5.068	.463	.625
Item 2	15.61	5.519	.415	.645
Item 3	15.20	5.575	.465	.623
Item 5	15.60	5.588	.455	.627
Item 8	15.43	6.212	.410	.649

4.3.2.5 *Reliability Results: Emotional Self Management (ESM)*

With regard to the reliability analysis of the ESM subscale, the overall coefficient alpha was reported to be 0.652, indicating the internal consistency of the construct in general. However, upon closer inspection, Item 3 appeared to have a very low corrected item-total correlation (0.091) and a marginal increase in scale alpha if removed (0.652 to 0.678). Thus, Item 3 was flagged as a potentially poor item. The results are presented in Table 4.18.

TABLE 4.18

RELIABILITY OF EMOTIONAL SELF-MANAGEMENT

ESM (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	33.16	17.903	.305	.631
Item 2	32.30	17.840	.439	.602
Item 3	33.35	20.042	.091	.678
Item 4	32.81	17.979	.407	.608
Item 5	32.86	18.866	.280	.634

Item 6	32.47	18.284	.464	.602
Item 7	32.35	19.145	.297	.631
Item 8	32.62	18.643	.304	.629
Item 9	32.73	18.274	.413	.609
Item 10	32.81	19.123	.245	.642

The final reliability results of the items comprising the refined ESM sub-scale, after factor analysis (refer to section 4.4.3.5) was performed on the sub-scale items, is presented in Table 4.19

TABLE 4.19

RELIABILITY OF THE REFINED EMOTIONAL SELF MANAGEMENT SUB-SCALE

ESM (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 2	26.04	12.558	.458	.626
Item 4	26.54	12.775	.408	.638
Item 5	26.60	13.301	.313	.662
Item 6	26.21	12.707	.534	.613
Item 7	26.09	13.627	.322	.658
Item 8	26.36	13.706	.247	.678
Item 9	26.47	13.064	.410	.638
Item 10	26.54	13.419	.292	.667

4.3.2.6   Reliability Results: Emotional Management of Others (EMO)

In terms of the EMO sub-scale, the total coefficient alpha value was reported to be 0.734. One item (Item 2) comprising the sub-scale was however, identified as a potentially poor item. The decision to flag this item was based on the relative magnitude of the corrected item-total correlation (0.153) and the increase in scale alpha affected by the removal of this item (0.734 to 0.752). Table 4.20 tabulates the sub-scale reliability results.

TABLE 4.20

RELIABILITY OF EMOTIONAL MANAGEMENT OF OTHERS

EMO (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	33.29	21.350	.484	.703
Item 2	33.70	22.633	.153	.752
Item 3	33.55	20.816	.427	.707
Item 4	33.45	21.570	.307	.726
Item 5	33.54	20.504	.538	.693
Item 6	33.95	20.188	.505	.695
Item 7	33.78	20.062	.554	.688
Item 8	33.81	20.525	.496	.697
Item 9	34.03	20.830	.340	.722
Item 10	33.89	21.730	.257	.735

The final reliability results of the items comprising the refined EMO sub-scale, after factor analysis (refer to section 4.4.3.6) was performed on the sub-scale items, is presented in Table 4.21.

TABLE 4.21

RELIABILITY OF THE REFINED EMOTIONAL MANAGEMENT OF OTHERS SUB-SCALE

EMO (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	26.00	16.161	.487	.740
Item 3	26.26	15.414	.469	.741
Item 4	26.16	16.483	.286	.774
Item 5	26.25	15.309	.560	.726
Item 6	26.66	14.862	.551	.726
Item 7	26.49	14.802	.595	.719
Item 8	26.53	14.860	.593	.719
Item 9	26.74	16.211	.270	.782

4.3.2.7   Reliability Results: Emotional Self Control (ESC)

The last and final sub-scale of the Genos EI, ESC, revealed a total coefficient alpha value of 0.684, which exceeded the minimum cut-off score of 0.60. Of the 10 items

comprising this sub-scale, Item 8 was flagged as problematic and was justified by the poor magnitude of the corrected item-total correlation (0.101) and the increase in scale alpha affected by the removal of this item (0.684 to 0.706). Table 4.22 presents the Cronbach's alpha and item-total correlations for the ESC subscale.

TABLE 4.22

RELIABILITY OF EMOTIONAL SELF-CONTROL

ESC (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	32.68	23.438	.289	.670
Item 2	32.91	23.090	.289	.670
Item 3	32.94	19.361	.549	.616
Item 4	32.79	23.055	.326	.665
Item 5	33.43	20.093	.478	.632
Item 6	32.73	19.188	.565	.612
Item 7	33.25	23.256	.203	.686
Item 8	34.32	24.107	.101	.706
Item 9	33.19	22.559	.326	.664
Item 10	33.09	21.903	.316	.666

The final reliability results of the items comprising the refined ESC sub-scale, after factor analysis (refer to section 4.4.3.7) was performed on the sub-scale items, is presented in Table 4.23

TABLE 4.23

RELIABILITY OF THE REFINED EMOTIONAL SELF CONTROL SUB-SCALE

ESC (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 3	11.19	6.301	.582	.599
Item 5	11.68	6.948	.459	.676
Item 6	10.99	6.224	.594	.592
Item 10	11.34	7.607	.374	.721

It is important to document the current study's means, standard deviations and reliability statistics for the Genos EI after poor items were removed. Although the values presented in Table 4.24 are the final reliability results for the refined Genos EI,

it is recommend that section 4.4 be referred to as it provides an in-depth discussion into the procedure of factor analysis and the reasons for the removal of certain items.

TABLE 4.24

THE CURRENT STUDY'S MEANS, STANDARD DEVIATIONS

AND RELIABILITY STATISTICS FOR THE REFINED GENOS EI

GENOS EI DIMENSIONS	MEANS	STANDARD DEVIATIONS	NUMBER OF ITEMS IN FINAL SCALE	CRONBACH ALPHAS
1. Emotional Self-Awareness	32.06	3.896	8	0.663
2. Emotional Expression	33.01	4.954	9	0.732
3. Emotional Awareness of Others	26.68	3.278	7	0.681
4. Emotional Reasoning	19.37	2.846	5	0.684
5. Emotional Self-Management	30.12	4.051	8	0.678
6. Emotional Management of Others	30.16	4.428	8	0.766
7. Emotional Self Control	15.07	3.315	4	0.714

4.3.3   Reliability Analysis: Reaction-To-Diversity-Inventory

The Reaction-To-Diversity-Inventory comprises two subscales namely, Perceptual Depth and Perceptual Breadth. Perceptual Depth is measured on two levels: positive depth of focus (Positive Perceptual Depth) and negative depth of focus (Negative Perceptual Depth). In terms of the reliability analyses for the RTDI, separate analyses were performed on each of the items comprising Positive Perceptual Depth (POS_PD, Negative Perceptual Depth (NEG_PD) and Perceptual Breadth. Tables 4.25 to Table 4.28 tabulate the respective results.

4.3.3.1   Reliability Results: Positive Perceptual Depth

The reliabilities for each item of the positive perceptual depth subscale were calculated and are provided in Table 4.25. The coefficient alpha for the total subscale was 0.923. The relative high internal consistency of this subscale deemed this construct reliable for the purpose of the study. All five of the sub-scale items were

considered internally consistent and thus, none of the items were flagged for potential deletion.

TABLE 4.25

FINAL RELIABILITY OF POSITIVE PERCEPTUAL DEPTH

POS_PD (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach Alphas if Item Deleted
1. Positive Behavioural Reactions	11.4160	62.337	.826	.901
2. Positive Emotional Reactions	12.2185	64.247	.769	.912
3. Positive Judgements	12.0336	64.556	.793	.908
4. Positive Organisational Outcomes	11.8824	63.243	.826	.901
5. Positive Personal Consequences	12.0126	64.215	.789	.908

4.3.3.2   Reliability Results: Negative Perceptual Depth

With regard to the reliability of the items comprising the Negative Perceptual Depth sub-scale (refer to Table 4.26 below), the overall coefficient alpha for the total subscale was reported to be 0.907. This scale was thus considered appropriate. Upon further investigation, all five of the sub-scale items appeared to reflect the same underlying variable. As such no items were flagged as problematic.

TABLE 4.26

FINAL RELIABILITY OF NEGATIVE PERCEPTUAL DEPTH

NEG_PD (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. Negative Behavioural Reactions	4.2857	27.597	.841	.871
2. Negative Emotional Reactions	3.8697	25.717	.853	.867
3. Negative Judgements	4.4538	28.983	.763	.888
4. Negative Organisational Outcomes	4.0714	31.484	.623	.915
5. Negative Personal	3.7059	28.495	.759	.888

4.3.3.3   *Reliability Results: Perceptual Breadth*

The last and final sub-scale of the RTDI was that of Perceptual Breadth. This particular sub-scale assesses complexity on two levels: perceptual breadth in terms of category breadth and perceptual breadth in terms of cell breadth. The fact that only two items comprise the sub-scale implies that if one item were to be dropped, it would not constitute a composite scale any longer. The total coefficient alpha for this sub-scale was reported to be 0.606. Although not particularly high, this value was within the decision criteria used to determine if the sub-scale was in fact reliable. Furthermore, the item statistics are presented in Table 4.27. It can be concluded that items comprising this particular sub-scale represent the same underlying variable and thus none of the items are deemed problematic.

TABLE 4.27

FINAL RELIABILITY FOR PERCEPTUAL BREADTH

PERCEPTUAL BREADTH (Items)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. Category Breadth	6.45798319	3.853	.668	.[a*]
2. Cell Breadth	4.63445378	.528	.668	.[a*]

Note*: *a* = the value is negative due to a negative average covariance among items. This violates reliability model assumptions.*

After examination of each of the RTDI subscales, it was concluded that the Cronbach's alpha values were all above the required 0.60 cut-off. Thus, each subscale was considered to be internally consistent and reliable. The current study's means, standard deviations and reliability statistics for the RTDI are presented in Table 4.28.

TABLE 4.28

THE CURRENT STUDY'S MEANS, STANDARD DEVIATIONS AND RELIABILITY STATISTICS FOR THE RTDI

RTDI Dimensions	Means	Standard Deviations	Number of Items in Final Scale	Cronbach Alphas
1. Positive Perceptual Depth	14.89	9.88	5	0.923
2. Negative Perceptual Depth	5.10	6.59	5	0.907
3. Perceptual Breadth	11.09	2.51	2	0.606

4.4   EVALUATING THE MEASUREMENT MODELS

LISREL 8.54 (Jöreskog & Sörbom, 1996) was used to perform separate confirmatory factor analyses (CFA) on each of the sub-scales of the various instruments used in this study. The reason for analysing the various dimensions separately, were to prevent the possibility of obtaining inflated indices. The results of the Confirmatory Factor Analyses (CFA) are discussed per dimension in terms of two important fit indices namely, p-value Test of Close Fit and RMSEA, where $p > 0.05$ and RMSEA < 0.08 indicate good model fit. After the initial CFA was performed on all the sub-scale items, the results would indicate either: (a) the model would fit poorly, in terms of p-value Test of Close Fit and/or RMSEA, or (b) the model would achieve good fit in terms of the p-value Test of Close Fit and RMSEA. In light of this, different steps would be taken depending on whether the model fit was good or poor.

Poor Model Fit

If it was found that either of the two important fit indices of the measurement model were insignificant (i.e., p-value Test of Close Fit < 0.05; RMSEA > 0.08), the model was therefore said to fit poorly with the data. In order to resolve this problem, the *first step* would be to perform an EFA on all the items comprising the sub-scale. This was done in order to determine the uni-dimensionality of the sub-scale, and if possible, identify items contributing to the lack of coherency. Moreover, the results of the EFA aided the researcher in ascertaining the degree to which the instruments reflected the constructs postulated by the original authors. Principal axis factoring was chosen over principal components analysis, as the statistical calculations in the former, allows for

the presence of measurement error, an intrinsic aspect of research into human behaviour (Stewart, 2001). Tabachnick and Fidell (2001) suggest that oblique rotation be used when the underlying factors are believed to be correlated, which is the case with the current scales. Moreover, the scree plot and the eigenvalue-greater-than-unity rule of thumb were used to determine the number of factors to extract.

The *second step* would be to identify poor items, and subsequently eliminate any item as per the EFA decision criteria listed below. The decision rules for determining the criteria for the removal of an item, the items associating with each factor, and the number of factors to be extracted were as follows:

- An item will be excluded if their factor loadings are not > .30 on any factor (Pallant, 2001).
- An item will be excluded if it loads > .30 on more than one factor and the difference between the two loadings is < .25.
- Items will be excluded if their loadings display conceptual incoherence with the meaning of the factor, thus decreasing the scientific utility of the final solution (Tabachnick & Fidell, 1996).
- According to Kaiser's (1961) criteria, the number of factors to be extracted should not be more than the number of eigenvalues > 1.00 (Pallant, 2007).
- Each dimension will be required to have at least four or more items that successfully represent the respective latent variable. If it should occur that, for instance, the majority of items load on the first factor, and four or less items load on the second factor a decision will be made to delete the four or less items loading on the second factor.

Using these decision rules as criteria for deleting an item, poor items could be detected and removed from the respective sub-scale. Poor items should also be examined in terms of the previously flagged items in the reliability analysis. The *third step* entailed that a further CFA be performed on the modified sub-scale structure. Model fit was again evaluated in terms of the p-value Test of Close Fit and the RMSEA. If it was found that model fit had been achieved, the next step could be performed. The *fourth step* required that each item be evaluated in terms of its

completely standardised factor loadings (LAMBDA-X). This matrix can be interpreted as the regression slopes of the regression of the standardised indicator variables on the standardised latent variable. The completely standardised factor loadings therefore indicate the average change expressed in standard deviation units in the indicator variable associated with one standard deviation change in the latent variable. Items would need to reach the >0.30 level required to indicate that the item successfully contributes to the coherency of the sub-scale. If it was found that all the remaining items loaded significantly (>0.30) on the latent variable, the factor analysis procedure was then completed. If however, an item was found to have an insignificant factor loading, the item was to be deleted. Thereafter, further CFA's were to be performed on the refined sub-scale items until all items demonstrate satisfactory factor loadings.

Good Model Fit

If it was found that both of the required fit indices of the measurement model were significant (i.e., p-value Test of Close Fit > 0.05; RMSEA < 0.08), the good model fit was said to be achieved. The next step entailed that each item be evaluated in terms of its completely standardised factor loadings (LAMBDA-X), with acceptable items having reached the >0.30 level required to indicate that the item successfully contributes to the coherency of the sub-scale. If it was found that all the remaining items loaded significantly (>0.30) on the latent variable, the factor analysis procedure was then completed. If however, an item was found to have an insignificant factor loading that item was subsequently deleted. Thereafter, further CFA's were to be performed on the refined sub-scale items until all items demonstrate satisfactory factor loadings.

4.4.1   Investigating Measurement Model Fit of the CDBS

CFA was firstly carried out on the participant's responses to the CDBS developed by Rentsch et al. (1995). A decision was made to perform separate CFA's on each of the three different sub-scales of the CDBS, with all items included, in order to assess whether the measurement model adequately fits the data by testing the hypotheses of close fit [H_{01b}: RMSEA ≤ 0,05] and exact fit [H_{01a}: RMSEA = 0] (null hypothesis is

rejected if p<0,05). The analyses performed on the three sub-scales of the CDBS are presented and discussed below.

.

4.4.1.1 Evaluating the Measurement Model Fit of Competitive Advantage

With regard to the Competitive Advantage (CA) sub-scale of the CDBS, a CFA was performed on all five items comprising this scale. The resultant path diagram of the fitted measurement model is presented in Figure 4.1. Upon inspection of the CFA results, it appeared that good model fit had been achieved (p-value Test of Close Fit = 0.16; RMSEA = 0.080).
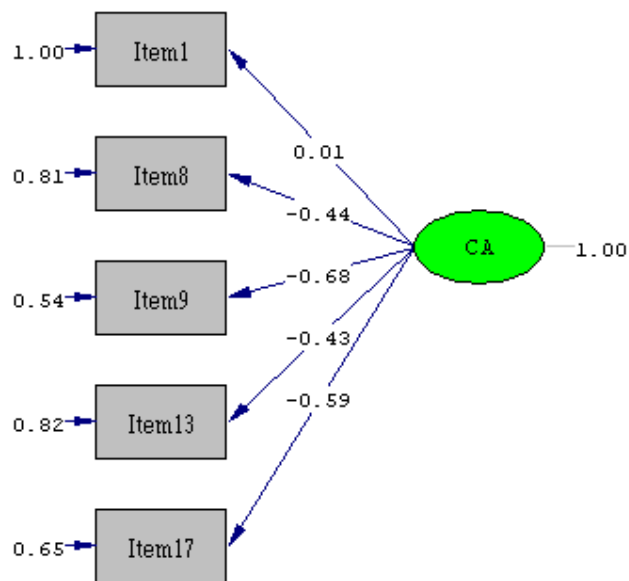
Chi-Square=12.47, df=5, P-value=0.02893, RMSEA=0.080

FIGURE 4.1

MEASUREMENT MODEL OF COMPETITIVE ADVANTAGE

However, with regard to the completely standardised factor loadings, Item 1 had a loading of only 0.01 on the latent variable. This caused a concern as it had also previously been flagged as a potential poor item after the reliability analysis. Consequently, the poor factor loading of Item 1, justified its deletion and a further CFA was performed on the remaining items. The results of the second CFA revealed good model fit in that the p-value Test of Close Fit (0.33) and the RMSEA (0.059) indicated that the null hypothesis of close fit is rejected, implicating that the

measurement model closely fits the data. The completely standardised LAMBDA-X matrix, reflecting the regression of X_i on ξ_i, is used to evaluate the significance of the factor loadings hypothesised by the proposed CA measurement model of the CDBS and is presented in Table 4.29. Significant indicator loadings provided validity evidence in favour of the indicators (Diamantopoulous & Siguaw, 2000).

The results of the LAMBDA-X matrix, with Item 1 omitted, indicate that all proposed first-order factor loadings are significant ($p<0.05$). This means that none of the existing paths in the model appear to be redundant, and all items appear to significantly reflect the dimension they were designed to represent. Consequently, there was no need to further analyse the CA sub-scale, as measurement model fit had been achieved, and all items had significant factor loadings. The goodness-of-fit indices of the CA sub-scale are presented in Table 4.42.

TABLE 4.29

COMPLETELY STANDARDISED LAMBDA-X MATRIX FOR THE REFINED COMPETITIVE ADVANTAGE SUB-SCALE

	CA
Item8	0.44
Item9	0.68
Item13	0.43
Item17	0.59

4.4.1.2 Evaluating the Measurement Model Fit of Valuing Individual Differences

With regard to the Valuing Individual Differences (VID) sub-scale of the CDBS, a CFA was performed on all 12 items comprising this scale. The resultant path diagram of the fitted measurement model is presented in Figure 4.2. Upon inspection of the CFA results, it appeared that the data fits the model poorly (p-value Test of Close Fit = 0.00042; RMSEA = 0.085). Both indices indicate that the null hypothesis of close fit is rejected, which in turn, indicate that the model is invalid.
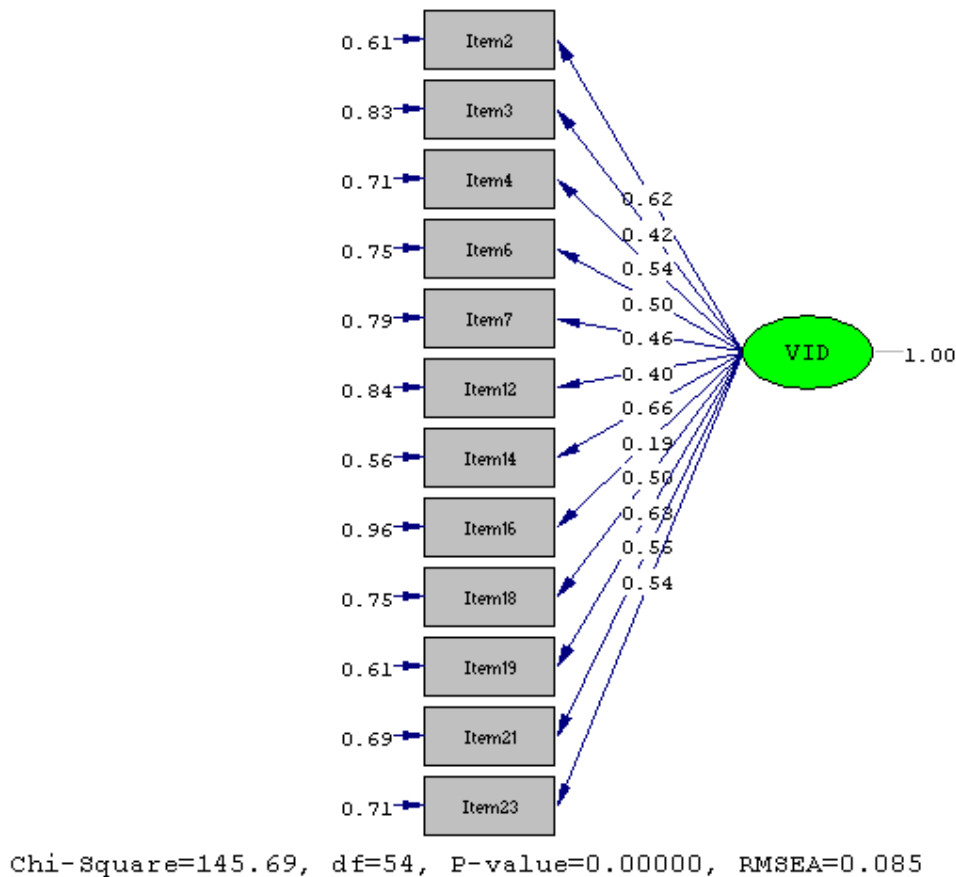
FIGURE 4.2

MEASUREMENT MODEL OF VALUING INDIVIDUAL DIFFERENCES

Due to the fact that poor fit had been achieved, the decision was made to analyse the sub-scale data further by performing an EFA on all the sub-scale items using SPSS. Prior to performing the EFA, the measures of sampling adequacy had to be evaluated to determine whether the correlation matrix for the items comprising the sub-scale was suitable for factor analysis. In this case, factor analysis could be performed on the data as indicated by a KMO value of 0.804 and with the Bartlett's Test of Sphericity reaching statistical significance at 0.000 (Approx. Chi Square = 698.701; df = 66). The anti-imagine correlation matrix also showed all the KMO values for individual items being above 0.5 and an examination of the correlation matrix revealed numerous coefficients above 0.30. The application of the eigenvalues-greater-than-unity rule indicated that two factors underlie the observed correlation matrix for the VID subscale as two eigenvalues >1.0 was obtained. The eigenvalues were found to

be: eigenvalues one = 3.877 and eigenvalues two = 1.576. The results of the factor loadings for the VID sub-scale are depicted in Table 4.30.

TABLE 4.30

FACTOR LOADINGS FOR VID SUB-SCALE FOR CDBS

(ROTATED FACTOR MATRIX)

	Factor	
	1	2
Item2	.317	**-.751**
Item3	.204	**-.477**
Item4	.189	**-.773**
Item6	.273	**-.549**
Item7	.364	**-.379**
Item12	**.451**	-.204
Item14	**.694**	-.420
Item16	**.380**	.049
Item18	**.607**	-.244
Item19	**.646**	-.393
Item21	**.555**	-.370
Item23	.430	**-.446**

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.
Rotation converged in 16 iterations.

Table 4.30 illustrates that Items 7, 21 and 23 cross-loads on both Factors, in that they load > .30 on more than one factor and the difference between the two loadings is < .25. Although the decision criterion for possible deletion states that complex items are to be deleted, a decision was made to examine each of the complex items and determine whether it made conceptual sense to remove the specific items. As a result of this, the researcher decided that none of the identified complex items should be removed as it did not make conceptual sense to remove them from the sub-scale. However, upon inspection of the remaining items, the loadings of Items 3, 4 and 6 tended to display conceptual incoherence with the meaning of the factor, thus decreasing the scientific utility of the final solution. Consequently, these items were subsequently removed from the sub-scale. A further CFA was performed on the items, omitting Items 3, 4 and 6, in hope of achieving measurement model fit.

Upon inspection of the respective CFA fit indices, model fit had in fact been achieved (p-value Test of Close Fit = 0.36; RMSEA = 0.055). The model can thus be said to display good fit with the data. However, an examination of the completely standardised factor loadings indicated that Item 16 (0.27) had failed to significantly load on the latent variable. Due to the fact that model fit had already been achieved, Item 16 was subsequently deleted simply for the reason that it had an insignificant factor loading. The results of the reliability analysis confirm this assumption thus, further justifying its removal from the sub-scale. Thereafter a further CFA was performed on the remaining eight items.

The results of the subsequent CFA procedure revealed good model fit in that the p-value Test of Close Fit (0.49) and the RMSEA (0.049) indicated that the null hypothesis of close fit is not rejected and the measurement model is said to show close fit. The result of the completely standardised LAMBDA-X matrix of the proposed VID measurement model is presented in Table 4.31. The goodness-of-fit indices of the VID sub-scale are presented in Section 4.4.2.

TABLE 4.31

COMPLETELY STANDARDISED LAMBDA-X MATRIX FOR THE REFINED VALUING INDIVIDUAL DIFFERENCES SUB-SCALE

```
                        VID
                       ------
        Item2           0.50
        Item7           0.44
       Item12           0.44
       Item14           0.71
       Item18           0.55
       Item19           0.70
       Item21           0.57
       Item23           0.50
```

4.4.1.3 Evaluating the Measurement Model Fit of Tolerance towards Affirmative Action

With regard to the Tolerance towards Affirmative Action (AA) sub-scale of the CDBS, a CFA was performed on all six items comprising this sub-scale. The resultant path diagram of the fitted measurement model is presented in Figure 4.3.
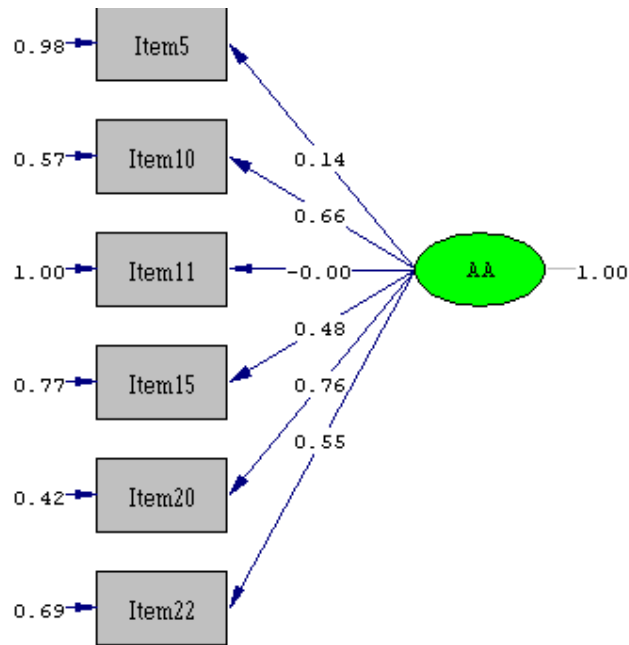
FIGURE 4.3

MEASUREMENT MODEL OF TOLERANCE TOWARDS AFFIRMATIVE ACTION

Upon inspection of the CFA results, it appeared that the data fits the model appropriately (p-value Test of Close Fit = 0.59; RMSEA = 0.038). However Items 5 (0.14) and 11 (0.00) revealed insignificant factor loadings, which caused concern as both items had also previously been flagged as potential poor items after the reliability analysis. Consequently, a decision was made to delete Items 5 and 11 and to perform a further CFA on the remaining four items. The results of the second CFA revealed good model fit in that the p-value Test of Close Fit (0.91) and the RMSEA (0.00) indicated that the null hypothesis of close fit is not rejected and the measurement model is said to show close fit. The results of the completely standardised LAMBDA-X matrix, reflecting the regression of X_i on $\xi_{i,}$ is presented in Table 4.32. The goodness-of-fit indices of the AA sub-scale are presented in section 4.4.2

TABLE 4.32

COMPLETELY STANDARDISED LAMBDA-X FOR THE REFINED AA SUB-

SCALE

	AA

Item10	0.66
Item15	0.48
Item20	0.76
Item22	0.56

4.4.2: Goodness-Of-Fit: The Refined CDBS

Having distilled the most meaningful factor structures within the responses of the present sample, via both CFA and EFA procedures, the final step in the analysis was to examine the goodness-of-fit statistics for each of the final item structures of the three respective CDBS dimensions. In order to fully evaluate the measurement models fit with the data, it was decided that the most important absolute and incremental fit indices be reported. As the theory behind each of the mentioned statistics has already been elaborated on, only the level of goodness-of-fit of each dimension is tabulated in Table 4.33 and is presented in the subsequent section.

TABLE 4.33

CONFIRMATORY FACTOR ANALYSIS FIT INDICES OBTAINED FOR THE

REFINED CDBS MEASUREMENT MODELS

INDICES	VID	CA	AA
ABSOLUTE FIT MEASURES			
χ^2/df	1.556	1.835	0.175
Root Mean Square Error of Approx. (RMSEA)	0.049	0.059	0.0
P-Value for Test of Close Fit (RMSEA < 0.05)	0.49	0.33	0.91
Root Mean Square Residual (RMR)	0.065	0.050	0.025
Standardised RMR	0.053	0.032	0.0095
Goodness of Fit Index (GFI)	0.95	0.99	1.00
INCREMENTAL FIT MEASURES			
Normed Fit Index (NFI)	0.95	0.97	1.00
Non-Normed Fit Index (NNFI)	0.98	0.96	1.00
Adjusted Goodness of Fit (AGFI)	0.91	0.96	0.99
Comparative Fit Index (CFI)	0.98	0.99	1.00
Incremental Fit Index (IFI)	0.98	0.99	1.00
Relative Fit Index (RFI)	0.93	0.91	0.99

Results: Absolute Fit Measures

A comparison of the indices reported in Table 4.33 indicates that the refined structure of each respective dimension, presents a good fit with the data. In terms of the Goodness-of-Fit indices, the χ^2/df ratio (1.585 – 1.835) for the refined measurement models failed to come close to the 2-5 range, indicative of acceptable fit. Nonetheless, the RMSEA suggests that the refined measurement models fit the obtained data adequately (0.0 – 0.059) as values < 0.08 represent good model fit. The p-value for Test of Close Fit (RMSEA < 0.05) is 0.33 – 0.91 and therefore the null hypothesis of close fit is not rejected and the various measurement models can be said to show close fit. The RMR of 0.025 – 0.065 indicates reasonable fit, however the Valuing Individual Difference sub-scale appears to marginally exceed the 0.08 threshold. Because the RMR is known to be a somewhat unreliable index, the standardised RMR values of 0.0095 – 0.053 is a more stable figure, and in this instance, is indicative of a good model fit. The GFI values for each of the measurement models, is close to 1.0

(0.95 – 1.0) indicative that good fit has been achieved as each dimension has reached the > 0.90 level required to indicate good fit.

Results: Incremental Fit Measures

The results of the incremental fit measures indicate that, when compared to a baseline model, all three refined measurement models achieve NFI, NNFI, IFI, CFI and RFI indices that are > 0.90, which represents good fit. These relative or comparative indices therefore, appear to portray a positive picture of model fit. The results further seem to indicate that the model can be ascribed to more than chance.

Conclusion:

For each of the three measurement models of the refined CDBS, the null hypothesis of exact fit is rejected (H_0: $\Sigma = \Sigma(\Theta)$), and the null hypothesis of close fit is not rejected ($H_{0:}$ RMSEA $\leq$ 0.05). This indicates that each of the separate measurement models 'fits' the data well, in that the model can reproduce the observed sample covariance matrix to a degree of accuracy that can be explained solely in terms of sampling error. Thus, the three respective measurement models, comprising the refined CDBS can therefore be said to provide a credible explanation of the observed covariance matrices.

4.4.3   Investigating Measurement Model Fit of the Genos EI

4.4.3.1   Evaluating the Measurement Model Fit of Emotional Self Awareness

With regard to the Emotional Self Awareness (ESA) sub-scale of the Genos EI, a CFA was performed on all 10 items comprising this scale. The resultant path diagram of the fitted measurement model is presented in Figure 4.4.

Chi-Square=65.59, df=35, P-value=0.00131, RMSEA=0.061
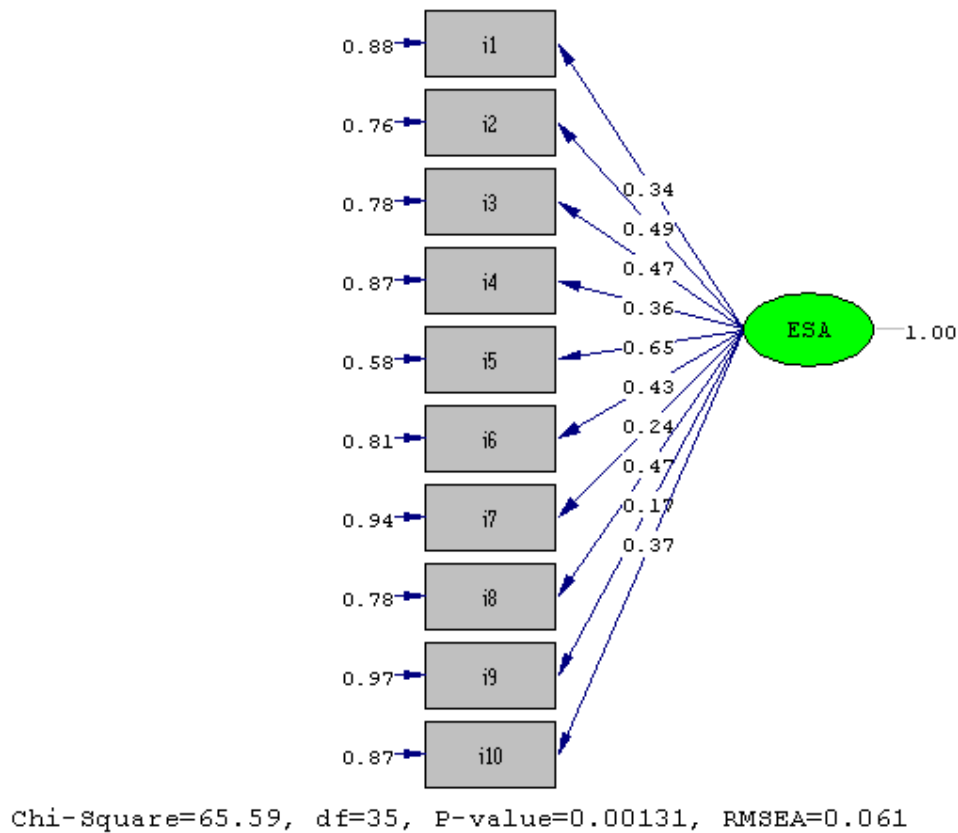
FIGURE 4.4

MEASUREMENT MODEL OF EMOTIONAL SELF AWARENESS

Upon inspection of the CFA results, it appeared that the data fits the model appropriately (p-value Test of Close Fit = 0.20; RMSEA = 0.061). However, Items 7 and 9 had completely standardised factor loadings of only 0.24 and 0.17, respectively. Although no items had previously been flagged as potentially poor items after the reliability analysis was performed, the fact that the loadings were < 0.30 caused much concern around the scientific utility of the prevailing factor structure. Consequently, a decision was made to remove Items 7 and 9 and perform a subsequent CFA on the remaining eight items of the ESA sub-scale in order to assess whether acceptable fit could now be achieved.

The results of the second CFA revealed a p-value Test of Close Fit (0.11) and the RMSEA (0.071) indicative that the null hypothesis of close fit is not rejected and the measurement model is said to show close fit. The results of the completely standardised lambda-X matrix reflecting the regression of X_i on ξ_i, is presented in

Table 4.34. The results of the fit indices for the final ESA structure are presented in section 4.4.4.

TABLE 4.34

COMPLETELY STANDARDISED LAMBDA-X MATRIX FOR THE REFINED ESA SUB-SCALE

```
                     ESA
                   -------
         Item 1     0.35
         Item 2     0.50
         Item 3     0.46
         Item 4     0.35
         Item 5     0.68
         Item 6     0.41
         Item 8     0.46
         Item 10    0.35
```

4.4.3.2 Evaluating the Measurement Model Fit of Emotional Expression

With regard to the Emotional Expression (EE) sub-scale of the Genos EI, a CFA was performed on all 10 items comprising this scale. The resultant path diagram of the fitted measurement model is presented in Figure 4.5. The CFA results appear to indicate that the data fails to fit the measurement model. Despite the RMSEA (0.076) falling within the required threshold, the reason for this conclusion is that the p-value Test of Close Fit (0.022) is insignificant and indicative that the null hypothesis of close fit cannot be rejected.
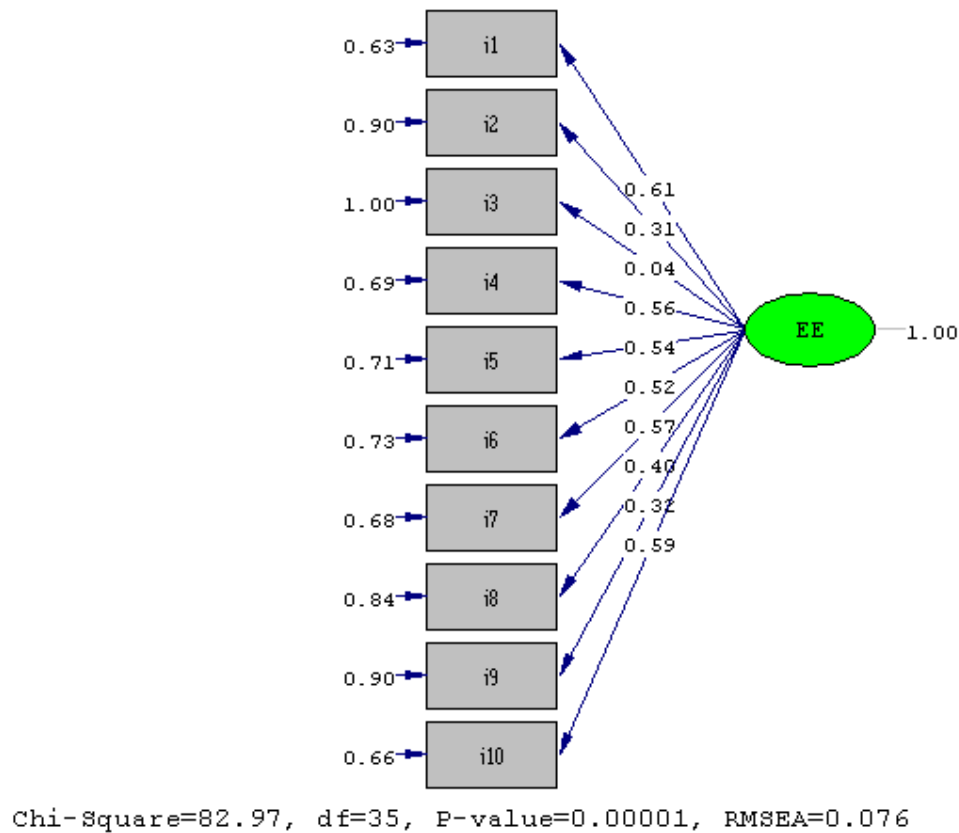
FIGURE 4.5

MEASUREMENT MODEL OF EMOTIONAL EXPRESSION

Subsequently, the next step was to perform an EFA on all the items comprising the sub-scale. Before performing the EFA, the suitability of the data for factor analyses was assessed. In light of this, the correlation matrix revealed numerous coefficients above 0.30. The KMO value was 0.777, exceeding the recommended value of 0.60 and the Bartlett's Test of Sphericity reaching statistical significance at 0.000 (Approx. Chi Square = 394.294; df = 45). The application of the eigenvalues-greater-than-unity rule indicated that three factors underlie the observed correlation matrix for the EE subscale as two eigenvalues >1.0 was obtained. The eigenvalues were found to be: eigenvalues one = 2.993 and eigenvalues two = 1.464 Table 4.35 presents the results of the factor loadings for EE.

TABLE 4.35

FACTOR LOADINGS FOR EE SUB-SCALE FOR GENOS EI

(ROTATED FACTOR MATRIX)

	Factor	
	1	**2**
Item 1	**.632**	.033
Item 2	.294	**.466**
Item 3	-.030	**.747**
Item 4	**.547**	.263
Item 5	**.537**	.234
Item 6	**.540**	.049
Item 7	**.578**	.078
Item 8	**.386**	.219
Item 9	.302	**.398**
Item 10	**.577**	.157

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.
Rotation converged in 6 iterations.

Apart from some complex items (i.e. items 2 and 9), Item 3 is the only item that loads strongly on Factor 2. Subsequently, Item 3 was removed from the sub-scale and a further CFA was performed on the remaining nine items. Upon inspection of the second CFA results, it appeared that good model fit had been achieved as the p-value Test of Close Fit (0.17) and the RMSEA (0.064) were significant. This indicated that the null hypothesis of close fit is not rejected and thus, the measurement model is said to show close fit. The results of the completely standardised LAMBDA-X matrix are shown in Table 4.36. Therefore, it can be assumed the uni-dimensionality has been achieved and there is no need to further analyse the data. A full description of the measurement model fit indices is provided for in section 4.4.4.

TABLE 4.36

COMPLETELY STANDARDISED LAMBDA-X MATRIX FOR THE REFINED EE SUB-SCALE

	EE

Item 1	0.61
Item 2	0.31
Item 4	0.56
Item 5	0.54
Item 6	0.53
Item 7	0.57
Item 8	0.39

```
Item 9          0.32
Item 10         0.59
```

4.4.3.3 Evaluating the Measurement Model Fit of Emotional Awareness of Others

The CFA results of the EAO sub-scale revealed good fit between the data and the measurement model as the p-value Test of Close Fit (0.40) and RMSEA (0.053) were appropriate. However, a concern emerged over the completely standardised factor loadings for Items 2 (0.21), 3 (0.09) and 6 (0.16) as these items failed to load significantly on the latent variable. Item 3 had also previously been flagged as a poor item in the reliability analysis. The resultant path diagram of the fitted measurement model is depicted in Figure 4.6.
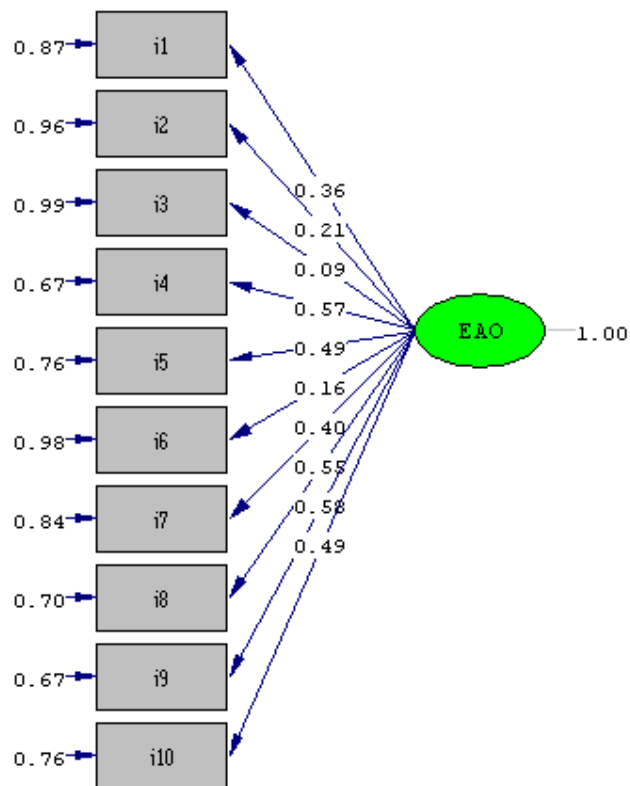
Chi-Square=57.97, df=35, P-value=0.00865, RMSEA=0.053

FIGURE 4.6

MEASUREMENT MODEL OF EMOTIONAL AWARENESS OF OTHERS

Despite the basic indices indicating acceptable fit, a decision was made to perform a further CFA on the sub-scale items excluding Items 2, 3 and 6. Examination of the

subsequent CFA results indicated that after the removal of Items 2, 3 and 6, good model fit had been achieved as the p-value Test of Close Fit (0.34) and the RMSEA (0.057) indicated that the null hypothesis of close fit is not rejected. The results of the completely standardised LAMBDA-X matrix, reflecting the regression of X_i on ξ_i is presented in Table 4.37. The results of the fit indices for the final EAO structure is presented and discussed in section 4.4.4.

TABLE 4.37

COMPLETELY STANDARDISED LAMBDA-X MATRIX FOR THE REFINED EAO SUB-SCALE

	EAO
Item 1	0.36
Item 4	0.55
Item 5	0.49
Item 7	0.39
Item 8	0.56
Item 9	0.59
Item 10	0.50

4.4.3.4 Evaluating the Measurement Model Fit of Emotional Reasoning

The initial CFA results of the ER sub-scale (see path diagram of the fitted measurement model depicted in Figure 4.7) revealed good fit between the data and the measurement model as the p-value Test of Close Fit (0.15) and the RMSEA (0.064) index is within the acceptable threshold. Although the two important fit indices indicate that model fit has been achieved, examination of the completely standardised factor solution revealed that Items 4 (0.10) and 10 (0.24) were potentially poor items as they failed to load significantly on the specific latent variable. Moreover, the previously reliability analysis had implicated both Item 4 and Item 10 as poor items.
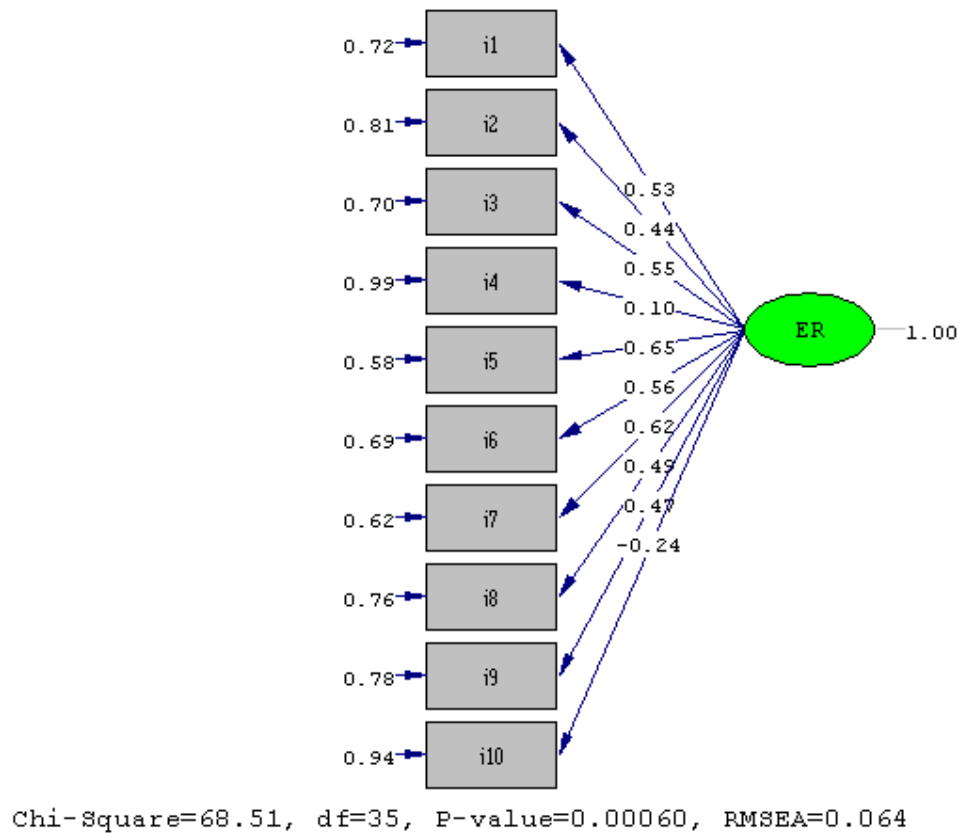
FIGURE 4.7

MEASUREMENT MODEL OF EMOTIONAL REASONING

Consequently, a decision was made to delete Items 4 and 10 and perform a subsequent CFA on the eight remaining items. After the removal of Items 4 and 10, the CFA results revealed that although the RMSEA was significant (0.093), the model failed to fit the data as the p-value Test of Close Fit = 0.0045. This implied that the null hypothesis of close fit could not be rejected. The failure to reach appropriate model fit meant that, as a last resort, the data would need to be examined further by means of EFA, using SPSS. Before performing the EFA, the suitability of the data for factor analyses was assessed. In light of this, the correlation matrix revealed numerous coefficients above 0.30. The KMO value was 0.782, exceeding the recommended value of 0.60 and the Bartlett's Test of Sphericity reaching statistical significance at 0.000 (Approx. Chi Square = 408.990; df = 45). The application of the eigenvalues-greater-than-unity rule indicated that two factors underlie the observed correlation matrix for the ER subscale as two eigenvalues >1.0 was obtained. The eigenvalues were found to be: eigenvalues one = 3.122, eigenvalues two = 1.141 and eigenvalues

three = 1.102. Table 4.38 illustrates the factor structure of the items comprising the ER sub-scale.

TABLE 4.38

FACTOR LOADINGS FOR ER SUB-SCALE FOR GENOS EI

(ROTATED FACTOR MATRIX)

	Factor		
	1	2	3
Item 1	**.446**	-.374	-.386
Item 2	**.500**	-.319	-.138
Item 3	**.545**	-.347	-.390
Item 4	**.258**	.014	.037
Item 5	**.517**	-.484	-.403
Item 6	.277	**-.616**	-.237
Item 7	.192	**-.938**	-.334
Item 8	**.435**	-.337	-.346
Item 9	.333	-.319	**-.476**
Item 10	-.014	.145	**.553**

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.
Rotation converged in 21 iterations.

As can be seen from the above matrix, Items 6 and 7 load significantly on Factor 2, while Item 9 and 10 appear to load significantly on Factor 3. Due to the fact that only two items significantly load on Factor 2 and 3 respectively, Items 6, 7, 9 and 10 were subsequently removed from the sub-scale. Item 4 was also removed as it failed to load significantly on any of the three identified factors. Consequently, a subsequent CFA was performed on the remaining items. After the removal of Items 4, 6, 7, 9 and 10, a final CFA was performed on the refined ER sub-scale, revealing good model fit in that the p-value Test of Close Fit (0.89) and the RMSEA (0.00) indicated that the null hypothesis of close fit is not rejected and thus, the measurement model is said to show close fit. The results of the completely standardised LAMBDA-X matrix, reflecting the regression of X_i on ξ_i, is presented in Table 4.39. The results of the fit indices for the final ER structure is presented and discussed in section 4.4.4.

**TABLE 4.39**

COMPLETELY STANDARDISED LAMBDA-X MATRIX FOR THE REFINED ER

SUB-SCALE

```
                   ER
                 ------
        Item 1    0.58
        Item 2    0.51
        Item 3    0.59
        Item 5    0.58
        Item 8    0.51
```

4.4.3.5 Evaluating the Measurement Model Fit of Emotional Self Management

CFA was initially carried out on the 10 items of the ESM sub-scale. The relevant fit indices indicated that model fit had been achieved, as the p-value Test of Close Fit (0.43) and the RMSEA (0.052) were within the required ranges needed to reject the null hypothesis of close fit. However, inspection of the completely standardised factor solution revealed that Items 1 (0.29) and 3 (0.05) failed to load significantly on the latent variable. Item 3 had also previously been flagged as a poor item as per reliability results. The resultant path diagram of the fitted measurement model is presented in Figure 4.8.
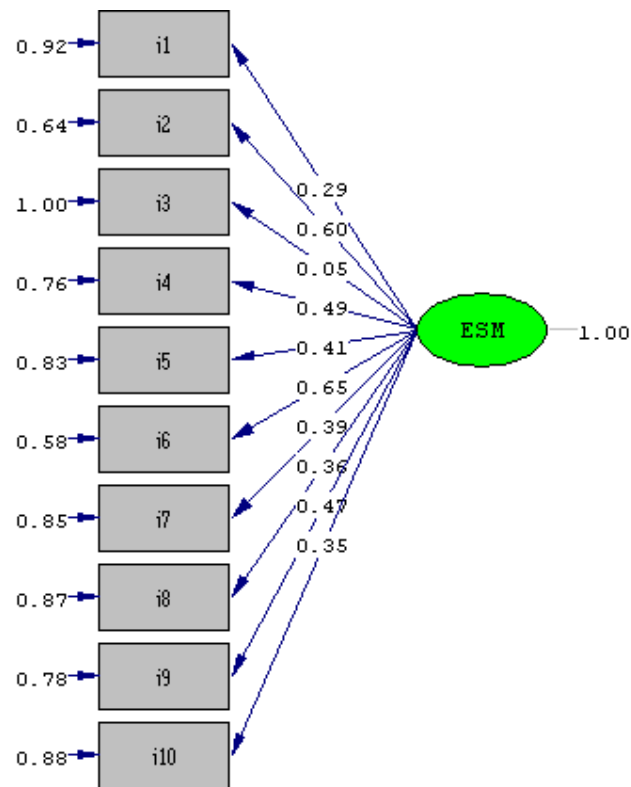
FIGURE 4.8

MEASUREMENT MODEL OF EMOTIONAL SELF MANAGEMENT

The concern surrounding the ability of the items to successfully represent the latent variable reasoned for further analysis of the ESM sub-scale items. Subsequently, an additional CFA was performed on the remaining eight items in order to assess whether measurement model fit had been improved through the deletion of the two identified items. After the removal of Items 1 and 3, the results of the second CFA revealed good model fit in that the p-value Test of Close Fit (0.088) and the RMSEA (0.073) indicated that the null hypothesis of close fit is not rejected. The results of the completely standardised LAMBDA-X matrix (see Table 4.40) reflecting the regression of X_i on ξ_i, is presented in Table 4.10. The results of the fit indices for the final ESM structure is presented and discussed in section 4.4.4.

TABLE 4.40

COMPLETELY STANDARDISED LAMBDA-X MATRIX FOR THE REFINED ESM

SUB-SCALE

	ESM
Item 2	0.60
Item 4	0.48
Item 5	0.41
Item 6	0.67
Item 7	0.40
Item 8	0.34
Item 9	0.45
Item 10	0.36

4.4.3.6   *Evaluating the Measurement Model Fit of Emotional Management of Others*

CFA was initially carried out on all 10 items comprising the EMO sub-scale. The CFA results revealed that poor fit between the data and the measurement model had been achieved, as the p-value Test of Close Fit (0.021) was insignificant (p-value < 0.05). This implied that the null hypothesis of close fit could not be rejected; invariably rendering the model invalid, despite a significant RMSEA value (0.076). Figure 4.9 presents the resultant path diagram.
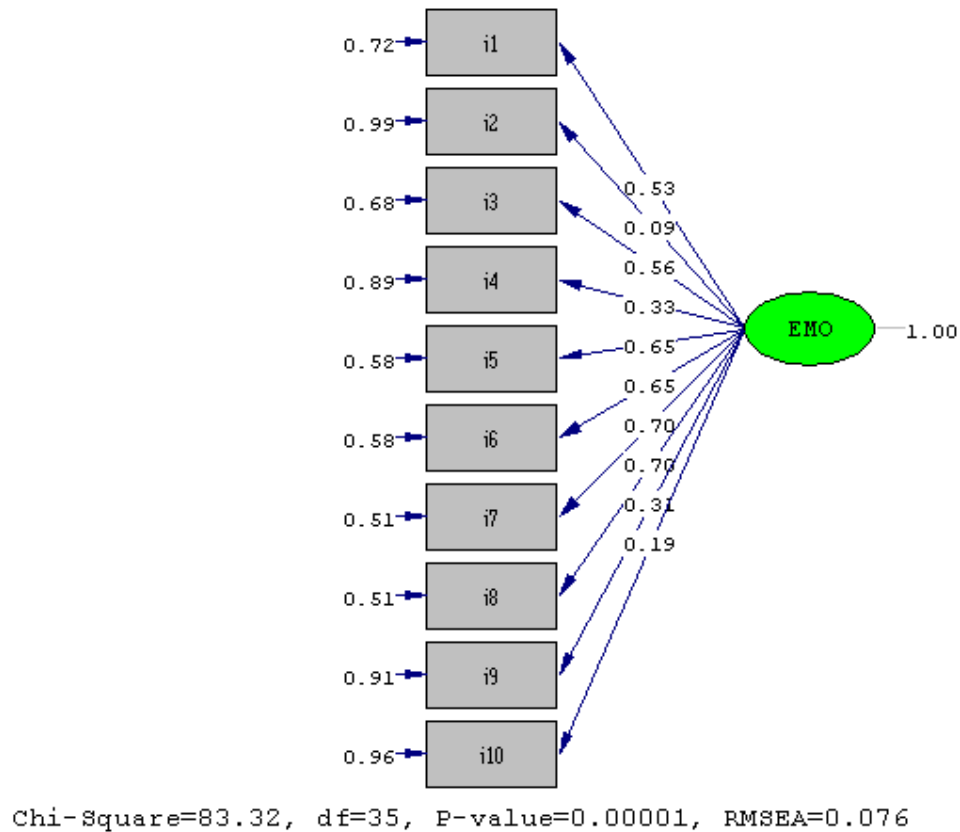
FIGURE 4.9

MEASUREMENT MODEL OF EMOTIONAL MANAGEMENT OF OTHERS

As a result of the unsatisfactory fit between the EMO structure and the responses of the present sample, the decision to analyse all the items comprising the EMO sub-scale further via EFA was deemed necessary. However, before an EFA could be performed, the suitability of the data was assessed. In light of this, the correlation matrix revealed numerous coefficients above 0.30. The KMO value was 0.786, exceeding the recommended value of 0.60 and the Bartlett's Test of Sphericity reaching statistical significance at 0.000 (Approx. Chi Square = 509.393; df = 45). The application of the eigenvalues-greater-than-unity rule indicated that two factors underlie the observed correlation matrix for the EMO subscale as three eigenvalues >1.0 was obtained. The eigenvalues were found to be: eigenvalues one = 3.300, eigenvalues two = 1.382 and eigenvalues three = 1.074. Table 4.41 illustrates the factor structure of the items comprising the EMO sub-scale.

TABLE 4.41

FACTOR LOADINGS FOR EMO SUB-SCALE FOR GENOS EI

(ROTATED FACTOR MATRIX)

	Factor		
	1	2	3
Item 1	.427	.321	**-.486**
Item 2	.122	**.384**	.038
Item 3	.370	.114	**-.753**
Item 4	**.407**	.252	-.076
Item 5	.520	.218	**-.625**
Item 6	**.662**	.155	-.407
Item 7	**.723**	.227	-.423
Item 8	**.696**	.076	-.500
Item 9	.274	.484	-.198
Item 10	.131	**.596**	-.135

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.
Rotation converged in 12 iterations.

Table 4.41 clearly indicates that Items 2 and 10 are the only items to load strongly on Factor 2. Item 2 had also previously been flagged as a poor item, as per reliability analysis results. Thus, it was decided to remove these items in hope of achieving a more uni-dimensional sub-scale. Consequently, a subsequent CFA was performed on the data, not including Items 2 and 10. The results of the second CFA revealed good model fit in that the p-value Test of Close Fit (0.44) and the RMSEA (0.051) indicated that the null hypothesis of close fit is not rejected and the measurement model is said to show close fit. The results of the completely standardised LAMDA-X matrix are presented on Table 4.42. The results of the fit indices for the final ESM structure is presented and discussed in section 4.4.4.

TABLE 4.42

**COMPLETELY STANDARDISED LAMBDA-X MATRIX (Λ_X) FOR THE REFINED**

EMO SUB-SCALE

	EMO

Item 1	0.39
Item 3	0.51
Item 4	0.31
Item 5	0.53
Item 6	0.60
Item 7	0.62
Item 8	0.62

Item 9	0.31

4.4.3.7 *Evaluating the Measurement Model Fit of Emotional Self Control*

The 10 items of the last and final Genos EI sub-scale, ESC, underwent a CFA procedure. The CFA results however, revealed that although RMSEA (0.072) was significant, poor fit between the data and the measurement model prevailed, as the p-value Test of Close Fit (0.047) was insignificant (p-value < 0.05). Refer to the path diagram of fitted measurement model in Figure 4.10.

Chi-Square=77.81, df=35, P-value=0.00004, RMSEA=0.072
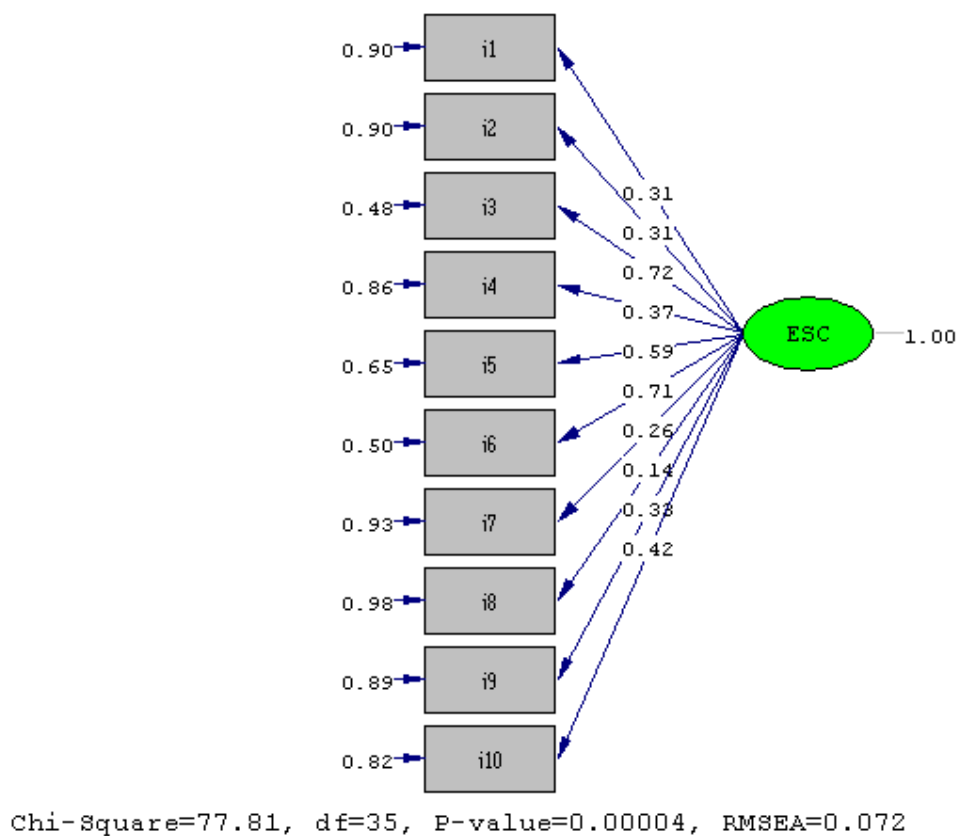
FIGURE 4.10

MEASUREMENT MODEL OF EMOTIONAL SELF CONTROL

As a result of the unsatisfactory fit between the ESC measurement model and the responses of the present sample, a decision was made to perform an EFA on all the items of the ESC sub-scale. Before performing the EFA, the suitability of the data for factor analyses was assessed. In light of this, the correlation matrix revealed numerous

coefficients above 0.30. The KMO value was 0.708, exceeding the recommended value of 0.60 and the Bartlett's Test of Sphericity reaching statistical significance at 0.000 (Approx. Chi Square = 365.025; df = 45). The application of the eigenvalues-greater-than-unity rule indicated that three factors underlie the observed correlation matrix for the ESC subscale as three eigenvalues >1.0 was obtained. The eigenvalues were found to be: eigenvalues one = 2.764, eigenvalues two = 1.310 and eigenvalues three = 1.050. Table 4.43 illustrates the results of the factor loadings for ESC.

TABLE 4.43

FACTOR LOADINGS FOR ESC SUB-SCALE FOR GENOS EI

(ROTATED FACTOR MATRIX)

	Factor		
	1	2	3
Item 1	.171	**.531**	.272
Item 2	.223	.242	**.382**
Item 3	**.728**	.290	.245
Item 4	.219	**.765**	.245
Item 5	**.575**	.126	.415
Item 6	**.742**	.228	.285
Item 7	**.235**	.121	.119
Item 8	**.170**	-.064	.049
Item 9	.242	.205	**.826**
Item 10	**.444**	.080	.144

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.
Rotation converged in 7 iterations.

Inspection of the above table, illustrates that only two items load significantly on Factor 2 (Item 1 and Item 4) and Factor 3 (Item 2 and Item 9) respectively. Moreover, Items 7 (0.235) and 8 (0.170) fail to significantly load on any of the factors. Consequently, Items 1, 2, 4, 7, 8 and 9 were deleted from the sub-scale. In line with the reliability results, Item 8 had previously been flagged as a poor item, further justifying the decision to remove it. It was decided that a subsequent CFA be performed on the remaining items.

The results of the second CFA revealed good model fit in that the p-value Test of Close Fit (0.098) indicated that the null hypothesis of close fit is not rejected and the measurement model is said to show close fit. The ESC measurement model however,

had an RMSEA value > 0.08 (0.11), which indicated that although the model had a poorer fit with the data, when compared to the other Genos EI measurement model; it did however manage to obtain a moderately good fit with the data. In light of the ESC measurement model, the decision was to taken to overlook the RMSEA value and place greater emphasis on the p-value Test of Close Fit (0.093), as this index is said to be the superior criterion of the two fit indices. Table 4.44 presented the results of the completely standardised LAMBDA-X matrix. The results of the fit indices for the final ESC structure is presented and discussed in section 4.4.4

TABLE 4.44
COMPLETELY STANDARDISED LAMBDA-X MATRIX FOR THE REFINED ESC SUB-SCALE

	ESC
Item 3	0.74
Item 5	0.58
Item 6	0.72
Item 10	0.45

4.4.4   Goodness-Of-Fit: Genos EI

Having distilled the most meaningful factor structures within the responses of the present sample, the final step in the analysis was to analyse the individual fit of each measurement model, in terms of the goodness-of-fit indices that were obtained after the final CFA on the refined sub-scales. In order to do this, information was obtained from the final CFA's performed separately on the modified dimensions of the Genos EI. The respective fit indices are illustrated in Table 4.45. As the theory behind each of the above mentioned statistics has already been elaborated on, only the level of goodness-of-fit of each dimension will be presented in this section.

TABLE 4.45

CONFIRMATORY FACTOR ANALYSIS FIT INDICES OBTAINED FOR THE

REFINED GENOS EI MEASUREMENT MODELS

INDICES	ESA	EE	EAO	ER	ESM	EMO	ESC
ABSOLUTE FIT MEASURES							
χ^2/df	1.505	1.431	1.514	0.574	1.529	1.494	3.665
Root Mean Square Error of Approx. (RMSEA)	0.071	0.064	0.057	0.0	0.073	0.051	0.11
P-Value for Test of Close Fit (RMSEA < 0.05)	0.11	0.17	0.34	0.89	0.088	0.44	0.093
Root Mean Square Residual (RMR)	0.048	0.053	0.034	0.018	0.049	0.037	0.053
Standardised RMR	0.058	0.053	0.046	0.023	0.058	0.048	0.042
Goodness of Fit Index (GFI)	0.96	0.95	0.97	0.99	0.95	0.95	0.98
INCREMENTAL FIT MEASURES							
Normed Fit Index (NFI)	0.90	0.93	0.95	0.99	0.91	0.95	0.97
Non-Normed Fit Index (NNFI)	0.95	0.97	0.99	1.02	0.96	0.97	0.93
Adjusted Goodness of Fit (AGFI)	0.92	0.92	0.97	0.98	0.92	0.92	0.88
Comparative Fit Index (CFI)	0.96	0.98	0.99	1.00	0.97	0.98	0.98
Incremental Fit Index (IFI)	0.97	0.98	0.99	1.01	0.97	0.98	0.98
Relative Fit Index (RFI)	0.86	0.91	0.92	0.97	0.88	0.94	0.90

Results: Absolute Fit Measures

A comparison of the indices reported in Table 4.45 indicates that the newly refined structure of each respective dimension, presents an acceptable fit with the data. In terms of the Goodness-of-Fit indices, the majority of the χ^2/df ratio's for the refined measurement models have unfortunately failed to come close to the 2-5 range (0.574 – 3.665) required for acceptable fit, except for ESC (3.665). Although somewhat disappointing, this index is not the only indicator of model fit. As recommended by Kelloway (1998), it is important to not rely solely on the χ^2/df ratio, but rather take into account a range of indices.

The RMSEA index, a measure of closeness of fit, shows how well the model, with unknown but optimally chosen parameter values, would fit the population covariance matrix if it were available (Diamantopoulos & Siguaw, 2000). RMSEA indices below

0.08 indicate a reasonable to good fit with the data, and indices below 0.05 a very good fit to the data (Kelloway, 1998). In this instance, the various RMSEA indices for the respective models varies between 0.00 – 0.11, indicating that the fit of each measurement model could be regarded as good and that the null hypothesis of close fit is not rejected. The p-value for Test of Close Fit (RMSEA < 0.05) ranges from 0.093 – 0.89, further supporting the conclusion that the null hypothesis of close fit is not rejected and the various measurement models can be said to show close fit.

The reported RMR indices range from 0.018 – 0.053. Although the required value of 0.08 or less is indicative of good model fit, it is important to note that this index is sensitive to the unit of measurement of model variables (Diamantopolous & Siguaw, 2000). In order to overcome this problem, it is important to report the standardised RMR as it provides a more stable result. With regard to this study, the standardised RMR indices range from 0.023 – 0.058, indicative of satisfactory model fit for all measurement models except for ESA and ESM that fall marginally outside of the criterion for good fit. The GFI indices for each of the measurement models, is close to 1.0 (0.95 – 0.99) indicative that good fit has been achieved for each measurement model as each dimension has reached the required > 0.90 level.

Results: Incremental Fit Measures

The results of the incremental fit measures indicate that, when compared to a baseline model, all seven measurement models achieve NFI, NNFI, AGFI, IFI, CFI and RFI indices that are > 0.90, which represents good fit. However, ESC only achieved an AGFI index of 0.88, while ESA and ESM only achieved RFI indices of 0.86 and 0.88 respectively. Although these values are marginally below the required 0.90, they are still considered to represent satisfactory fit. These relative or comparative indices therefore, appear to portray a positive picture of model fit. The results further seem to indicate that the model can be ascribed to more than chance.

Conclusion:

For each of the seven measurement models of the refined Genos EI, the null hypothesis of exact fit is rejected (H_0: $\Sigma = \Sigma(\Theta)$), and the null hypothesis of close fit is not rejected (H_0: RMSEA $\leq$ 0.05). This indicates that each of the separate

measurement models 'fits' the data well, in that the model can reproduce the observed sample covariance matrix to a degree of accuracy that can be explained solely in terms of sampling error. Thus, the seven respective measurement models, comprising the refined Genos EI, can be said to provide a credible explanation of the observed covariance matrices.

4.4.5   **Investigating Measurement Model Fit of the RTDI**

4.4.5.1   *Evaluating the Measurement Model Fit of Perceptual Depth (Positive and Negative)*

One of the measures of diversity complexity comprised of Perceptual Depth. In this study, Perceptual Depth was measured on two levels: Positive Perceptual Depth (PD_POS) and Negative Perceptual Depth (NEG_PD), of which each sub-scale comprised of five items. In order to further assess the degree to which the items measure the respective variable it claims to measure, a CFA, via LISREL, was performed on all the sub-scale items comprising both PD_POS and PS_NEG simultaneously. The results appear to denote that good fit has been achieved between the data and the measurement model. The p-value for Test of Close Fit (0.24) and the RMSEA (0.059) indicate that the null hypothesis of close fit can be rejected, and thus the measurement model is said to closely fit the data. All items comprising each of the sub-scales appeared to load significantly on the respective latent variables. The path diagram of the fitted measurement model for PD_POS and PD_NEG is presented in Figure 4.11.
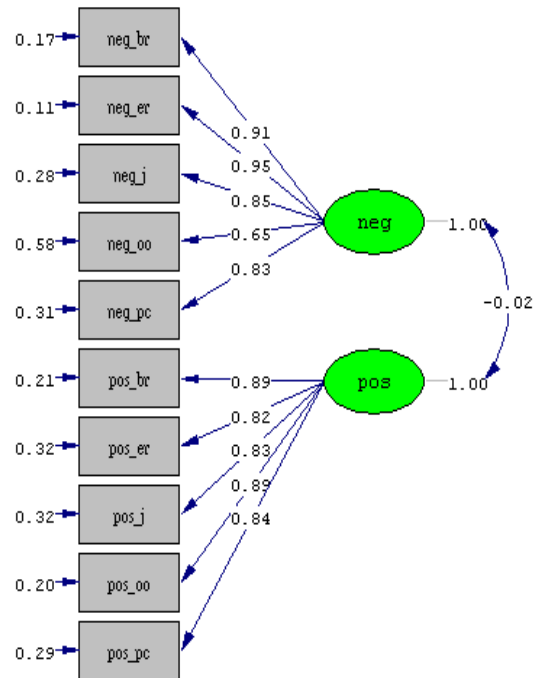
Chi-Square=62.08, df=34, P-value=0.00229, RMSEA=0.059

FIGURE 4.11

MEASUREMENT MODEL OF PERCEPTUAL DEPTH (POSITIVE AND NEGATIVE)

The fact that the CFA results proved to be satisfactory, implied that there was no need to further analyse the data. The LAMBDA-X matrix is presented in Table 4.46, while the fit indices for the Perceptual Depth sub-scale is presented and discussed in Section 4.4.6.

TABLE 4.46

COMPLETELY STANDARDISED LAMDBA-X MATRIX FOR PD_POS AND PD_NEG

	neg	pos
neg_br	0.91	- -
neg_er	0.95	- -
neg_j	0.85	- -
neg_oo	0.65	- -
neg_pc	0.83	- -
pos_br	- -	0.89
pos_er	- -	0.82
pos_j	- -	0.83
pos_oo	- -	0.89
pos_pc	- -	0.84

4.4.5.2   Evaluating the Measurement Model Fit of Perceptual Breadth

In this study, Perceptual Breath was assessed on two levels: category breadth and cell breadth, of which each sub-scale comprised of only one item. According to the decision rules of the present study, at least four items are needed to define a factor sufficiently. As such, factor analysis could not be performed on this particular measure of diversity complexity to test its measurement model. This is a limitation of the present study and any further analyses regarding perceptual breadth should be interpreted with caution.

4.4.6: Goodness-Of-Fit: Perceptual Depth

Due to the fact that factor analysis could only be performed on only one of the diversity complexity measures, the goodness-of-fit statistics for Perceptual Depth are tabulated in Table 4.47 and is discussed in the subsequent section. In line with the previous goodness-of-fit discussions for the CDBS and the Genos EI, only the level of goodness-of-fit for Perceptual Depth will be discussed in this section as the theory behind each of the listed indices has already been elaborated on.

TABLE 4.47

CONFIRMATORY FACTOR ANALYSIS FIT INDICES OBTAINED FOR

PERCEPTUAL DEPTH (POSITIVE AND NEGATIVE)

INDICES	Perceptual Depth (POS and NEG)
ABSOLUTE FIT MEASURES	
χ^2/df	1.83
Root Mean Square Error of Approx. (RMSEA)	0.059
P-Value for Test of Close Fit (RMSEA < 0.05)	0.24
Root Mean Square Residual (RMR)	0.088
Standardised RMR	0.088
Goodness of Fit Index (GFI)	0.99
INCREMENTAL FIT MEASURES	
Normed Fit Index (NFI)	0.98
Non-Normed Fit Index (NNFI)	0.99
Adjusted Goodness of Fit (AGFI)	0.99
Comparative Fit Index (CFI)	0.99
Incremental Fit Index (IFI)	0.99
Relative Fit Index (RFI)	0.97

Results: Absolute Fit Measures

Examination of the reported indices, indicate that satisfactory fit has been achieved between PD_POS and PD_NEG, as determined by the instrument's authors and the responses to the present sample. Most notably, the RMSEA (0.059) and the p-value Test of Close Fit (0.24) achieved values indicative of close or good fit. Thus, the null hypothesis of close fit is not rejected. Unfortunately, the χ^2/df ratio (1.83) for the CFA derived measurement model fails to near the required 2-5 range, which indicates that poor fit has been achieved in terms of this index. What is more, is that both the RMR value (0.088) and the standardised RMR value (0.088) have failed to reach the required level indicative of good fit, raising doubts regarding the quality of the fit. However, the GFI (0.99) noticeably exceeds 0.9, which indicates that the model comes close to perfectly reproducing the sample covariance matrix and therefore suggests good model fit.

Results: Incremental Fit Measures

The indices of relative or incremental fit given in Table 4.47 all exceed the critical value of 0.90 and therefore indicate good comparative fit when compared to the independence model. These indices include the NFI (0.98), NNFI (0.99), IFI (0.99), CFI (0.99) and RFI (0.97). The results further seem to indicate that the model can be ascribed to more than chance.

Conclusion:

The measurement model of the RTDI indicates that, the null hypothesis of exact fit is rejected (H_0: $\Sigma = \Sigma(\Theta)$), and the null hypothesis of close fit is not rejected ($H_{0:}$ RMSEA ≤ 0.05). This implies that the measurement model 'fits' the data well, in that the model can reproduce the observed sample covariance matrix to a degree of accuracy that can be explained solely in terms of sampling error. Thus, the measurement model, comprising the RTDI, can therefore be said to provide a credible explanation of the observed covariance matrices.

4.5   ASSESSING   THE   OVERALL   GOODNESS-OF-FIT   OF   THE STRUCTURAL MODEL

4.5.1   Goodness-Of-Fit

An important part of model evaluation concerns the assessment of the overall fit of the model to the data. According to Jöreskog and Sörbom (1996), the goodness of fit of the whole model may be judged by means of four measures of overall fit: chi-square (χ^2); goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI); and root mean square residual (RMR). The full spectrum of the indices provided by LISREL to assess the absolute and comparative fit of the data is shown in Table 4.48 below, and will be discussed in the subsequent section.

TABLE 4.48

GOODNESS-OF-FIT STATISTICS

```
                    Degrees of Freedom = 11
           Minimum Fit Function Chi-Square = 25.39 (P = 0.0080)
   Normal Theory Weighted Least Squares Chi-Square = 25.47 (P = 0.0078)
           Satorra-Bentler Scaled Chi-Square = 25.48 (P = 0.0077)
          Chi-Square Corrected for Non-Normality = 24.12 (P = 0.012)
              Estimated Non-centrality Parameter (NCP) = 14.48
           90 Percent Confidence Interval for NCP = (3.46 ; 33.19)

                    Minimum Fit Function Value = 0.11
            Population Discrepancy Function Value (F0) = 0.063
          90 Percent Confidence Interval for F0 = (0.015 ; 0.14)
         Root Mean Square Error of Approximation (RMSEA) = 0.075
         90 Percent Confidence Interval for RMSEA = (0.037 ; 0.11)
             P-Value for Test of Close Fit (RMSEA < 0.05) = 0.12

               Expected Cross-Validation Index (ECVI) = 0.26
          90 Percent Confidence Interval for ECVI = (0.21 ; 0.34)
                     ECVI for Saturated Model = 0.24
                    ECVI for Independence Model = 1.50

     Chi-Square for Independence Model with 21 Degrees of Freedom = 333.01
                       Independence AIC = 347.01
                          Model AIC = 59.48
                        Saturated AIC = 56.00
                      Independence CAIC = 378.20
                         Model CAIC = 135.22
                       Saturated CAIC = 180.75

                    Normed Fit Index (NFI) = 0.92
                   Non-Normed Fit Index (NNFI) = 0.91
               Parsimony Normed Fit Index (PNFI) = 0.48
                  Comparative Fit Index (CFI) = 0.95
                  Incremental Fit Index (IFI) = 0.96
                   Relative Fit Index (RFI) = 0.85

                       Critical N (CN) = 227.07

             Root Mean Square Residual (RMR) = 0.056
                      Standardized RMR = 0.056
                 Goodness of Fit Index (GFI) = 0.97
             Adjusted Goodness of Fit Index (AGFI) = 0.92
           Parsimony Goodness of Fit Index (PGFI) = 0.38
```

The results of the *absolute fit measures* indicate that the p-value associated with the χ^2 value in Table 4.48 clearly indicates significant test statistics. A non-significant χ^2 indicates model fit in that the model can reproduce the observed covariance matrix (Kelloway, 1998). In this particular instance, the model is not able to reproduce the observed covariance matrix to a degree of accuracy that can be attributed to sampling error only. In other words, H_{01a}: $\Sigma = \Sigma(\Theta)$ is rejected in favour of H_{a1a}: $\Sigma \neq \Sigma(\Theta)$ (Kelloway, 1998). Thus, by implication, H_{01a}: RMSEA = 0 is also rejected in favour of H_{a1a}: RMSEA > 0. Furthermore, the evaluation of fit on the basis of the Satorra-Bentler Scaled chi-square statistic χ^2/df (χ^2/df = 2.32) for the structural model,

suggests that the model fits the data well (refer to section 3.7 for a more in-depth interpretation of this ratio).

The Root Mean Square Residual (RMR) is the simplest fit index provided by LISREL. According to Kelloway (1998, p. 27):

> The RMR is the square root of the mean of the squared discrepancies between the implied and observed covariance matrices. The lower bound of the index is 0, and low values are taken to indicate good fit.

The reported RMR index (0.056) indicates that the model fits the data reasonably well (RMR < 0.08). One problem with the interpretation of this index is the fact that it is sensitive to the scale of measurement of the model variables and consequently is difficult to determine what a low value actually is (Diamantopoulous & Siguaw, 2000). As a result of this and in order to overcome this dilemma, the Standardized RMR (the fitted residuals divided by their estimated standard errors) is thought to provide a more stable result. This index has a lower bound of 0 and an upper bound of 1, with values less than 0.05 generally regarded as indicating good fit to the data (Kelloway, 1998). Although the standardized RMR (0.056) index, as per Table 4.48, is marginally >0.056, the model is still regarded as fitting the data reasonably well.

In conjunction with the above mentioned indexes, LISREL also reports the Root Mean Squared Error of Approximation (RMSEA), which is based on the analysis of residuals, with smaller values indicating a better fit to the data. According to Steiger (as cited by Spangenberrg & Theron, 2004), the RMSEA expresses the difference between the observed and estimated covariance matrices in terms of the degrees of freedom of the model. This is a measure of closeness of fit. Diamantopoulous and Siguaw (2000) contend that, values smaller than 0.05 are indicative of good fit, values of between 0.05 and 0.08 indicate reasonable fit, while values between 0.08 and 1.0 indicate mediocre fit and values greater than 1.0 are indicative of poor fit. In this model, the RMSEA (0.075) value signifies reasonably good fit. Furthermore, the 90% confidence interval for RMSEA (0.037 – 0.11), as shown in Table 4.48, contains the critical 0.05 value. A test of the significance of the obtained value is performed by LISREL by testing H0: RMSEA ≤ 0.05 against Ha: RMSEA > 0.05. Table 4.48 indicates that the obtained RMSEA value of 0.075 is not significantly different from

the target value of 0.05 (i.e., the close fit null hypothesis is not rejected; p > 0.05) and since the confidence interval does include the target value of 0.05, a good fit appears to have been achieved. In addition to this, the p-value (0.12) for test of close fit (RMSEA < 0.05) supports the assumption of good fit, as a p-value > 0.05 is indicative that the model fits the data well.

The goodness-of-fit index (GFI) measures according to Kelloway (as cited by Spangenberg and Theron, 2004), are based on a ratio of the sum of the squared discrepancies to the observed variances. The GFI ranges from 0 to 1, with values exceeding 0.9 indicative of good fit to the data (Diamantopoulous & Siguaw, 2000). However, Kelloway (1998, p. 27) cautions that:

> It should be noted that this guideline is based on experience. Like many of the fit indices that will be presented, the GFI has no known sampling distribution. As a result, "rules" about when an index indicates a good fit to the data are highly arbitrary and should be treated with caution.

The obtained GFI (0.97) value, as cited in Table 4.48, indicates that there is a good fit between the model and the data. The adjusted GFI (AGFI), adjusts the GFI for degrees of freedom in the model, and ranges from 0 to 1, with values greater than 0.90 indicating good fit to the data (Diamantopoulous & Siguaw, 2000). A discrepancy between the GFI and AGFI (which in this instance is minimal) typically indicates the inclusion of trivial and often non-significant parameters. The AGFI (0.92) value in this instance indicates good fit.

In light of the *incremental fit measures*, when compared to a baseline model, this particular model achieves NFI (0.92), NNFI (0.91), CFI (0.95) and IFI (0.96) indices that are > 0.90, which indicates a good comparative fit relative to the independence model.

Assessing the *parsimonious fit* acknowledges that model fit can be improved by adding more paths to the model and estimating more parameters until perfect fit is achieved in the form of a saturated or just-identified model with no degrees of freedom (Kelloway, 1998). However, Jöreskog and Sörbom (1993) contend that satisfactory fit should be achieved with as few model parameters as possible; thus the

objective in model building is to find the most parsimonious model. Jöreskog and Sörbom further contend that the indices of parsimonious fit relate the benefit that accrues in terms of improved fit to the cost incurred (in terms of degrees of freedom lost) to affect the improvement in the fit. The Parsimonious goodness-of-fit index (PGFI) adjusts the GFI for the degrees of freedom in the model, while the Parsimonious normed fit index (PNFI) adjusts the NFI for model parsimony. Although there is no recommendation as to how high these scores should be in order for them to indicate parsimonious fit, both these indices range from 0 to 1. Kelloway (1998) contends that it is unlikely that the PGFI and the PNFI will reach the usually quoted cut off score of 0.90 for other indices. Nevertheless, these indices are best used when comparing two alternative models in order to choose the model with the highest level of parsimonious fit.

4.5.2 Overall Results: Goodness-of-Fit

After examination and interpretation of the various model fit indices, as presented in Table 4.49, the conclusion would have to be drawn that the structural model fits the data reasonably well. The null hypothesis of exact fit is rejected in favour of the null hypothesis of close fit, in that it is assumed that this model approximately reproduces the observed covariance matrix. In social science research, it is implausible that any model used is anything more than an approximation to reality. The null hypothesis of exact fit is somewhat unrealistic and as such, an attempt to get a fit as close as possible to an exact fit is a more pragmatic approach to model fit. However, because the structural model has only been found to fit the data reasonably well, it is necessary to further investigate the standardised residuals and modification indices in order to determine the exact extent of success with which the model explains the observed covariance's amongst the manifest variables (Jöreskog & Sörbom, 1993).

4.6   AN EXAMINATION OF STRUCTURAL MODEL RESIDUALS

The difference between the values of the observed covariance matrix and the values of the reproduced covariance matrix, predicted by the parameter estimates of the fitted structural model, is represented in the standardised residual covariance matrix (Table 4.49). Residuals, and especially standardised residuals, provide diagnostic information

on sources of lack of fit in models (Kelloway, 1998). According to Jöreskog and Sörbom (1993), a standardized residual is a fitted residual divided by the standard error of the residual. Standardised residuals can be interpreted as standard normal deviates (i.e., z-scores), with residuals being considered large if they exceed -2.58 or +2.58 (Diamantopoulous & Siguaw, 2000). A large positive residual would indicate that the model underestimates the covariance between two variables. Underestimation indicates that the model should be modified by adding additional paths, which could better account for the covariance between the variables. On the other hand, a large negative residual is indicative that the model overestimates the covariance between variables, and should be modified by trimming paths that are associated with the particular covariance term (Jöreskog & Sörbom, 1993). The standardized residuals, as a result of the covariance estimates derived from the estimated model parameters, are presented in Table 4.49, while a summary of the standardised residuals is presented in Table 4.50.

TABLE 4.49

STANDARDIZED RESIDUALS

STANDARDIZED RESIDUALS

	V_I_D	aff_act	comp_adv	per_br	pd_pos	pd_neg
V_I_D	- -					
aff_act	- -	- -				
comp_adv	- -	1.60	- -			
per_br	-0.38	-2.03	-0.36	- -		
pd_pos	- -	1.31	2.60	- -	- -	
pd_neg	-0.37	-2.94	-0.51	- -	0.28	- -
em_int	- -	0.55	2.40	- -	- -	- -

STANDARDIZED RESIDUALS

	em_int
em_int	- -

TABLE 4.50

SUMMARY STATISTICS FOR STANDARDIZED RESIDUALS

Smallest Standardized Residual = -2.94
Median Standardized Residual =   0.00
Largest Standardized Residual =   2.60
Largest Negative Standardized Residuals
Residual for pd_neg and aff_action   -2.94
Largest Positive Standardized Residuals
Residual for pd_pos and comp_adv   2.60

Inspection of the standardised residuals confirm that one large positive and one large negative residual indicate that two observed covariance terms in the observed sample covariance matrix being poorly estimated by the derived model parameter estimates. However, with regard to the variables associated with the poor standardised residuals noted above, there appears to be no clear suggestion for model modification. Despite this, the modest number of extreme residuals corroborates the earlier conclusion that the model fits the data reasonably well. Further evidence of reasonable model fit is provided by the stem-leaf plot (Figure 4.12) and the Q-plot. The stem-leaf plot is indicative of a good model when standardized residuals are clustered approximately around zero. In this case, the standardized residuals indicate that the structural model fits the data reasonably well, however the distributed appears to be slightly negatively skewed. Although the medium residual is 0.00, the slight negative trail of residuals suggests that the model tends to overestimate the covariance terms in the observed covariance matrix.

```
- 2|90
- 1|
 - 0|54440000000000000000
  0|36
  1|36
  2|46
```
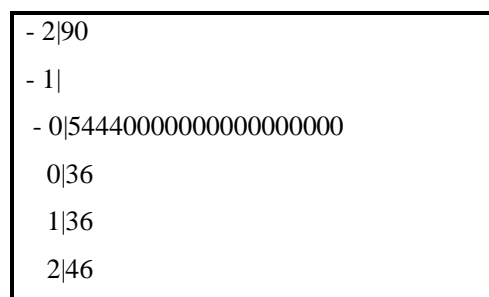
FIGURE 4.12

STEM-LEAF PLOT

The Q-plot can be used to assess model fit by examining the degree to which the data points fall on the 45-degree reference line or not. The closer the data points are to the 45-degree reference line, the greater the chances of good model fit. The model fit would be less satisfactory if the data points deviate away from the 45-degree reference line. Figure 4.13 indicates that the observed variables tend to moderately depart from the 45-degree reference line. The deviation is, however, not pronounced and is this indicative of a relatively good model fit.
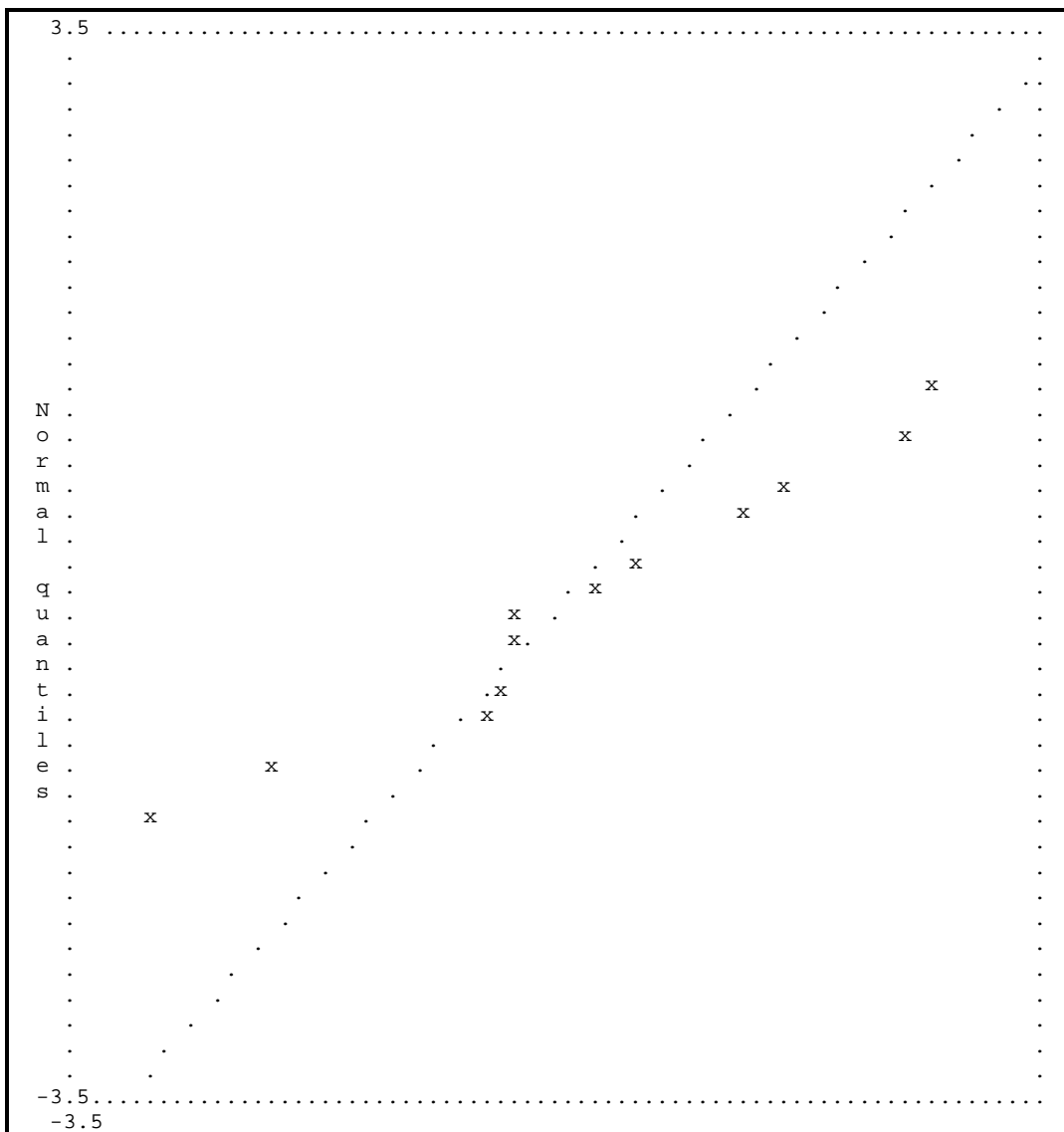
FIGURE 4.13

Q-PLOT OF STANDARDIZED RESIDUALS

4. 7   RELATIONSHIPS BETWEEN THE LATENT VARIABLES

So far, it has been concluded that the structural model adequately fits the data, as judged by the overall goodness-of-fit measures. However, further assessment of the structural model is necessitated by the need to determine whether the theoretical relationships, specified at the conceptualisation stage, are indeed supported by the data. In light of this need, the focus is on the linkages between the various exogenous and endogenous variables. Diamantopoulos and Siguaw (2000), identify three impending issues relevant to further assessment of the structural model. Firstly, it is important to assess whether the signs of the parameters representing the paths between latent variables are in agreement with the nature of the causal effect hypothesised to exist between the latent variables. Secondly, it is imperative to assess whether the parameter estimates are significant (at the very least, these parameters should be significant ($p < 0.05$) as indicated by t-values in excess of $|1.96|$). Assuming that the parameter estimates are significant, it is essential to assess the magnitude of the parameter estimates indicating the strength of the hypothesised relationships. Lastly, it is important to evaluate the squared multiple correlations (R^2), indicating the amount of variance in each endogenous latent variable that is explained by the latent variables linked to it in terms of the hypothesised structural model.

The parameters of interest in assessing the structural model are the freed elements of the gamma (Γ) and beta (B) matrices. The unstandardized Γ matrix, illustrated in Table 4.51, is used to assess the significance of the estimated path coefficients γ_{ij}, expressing the strength of the influence of ξ_j on η_i. Unstandardized γ_{ij} estimates are significant ($p<0.05$) if $t > |1.96|$ (Diamantopoulos & Siguaw, 2000). Moreover, a significant γ estimate would imply that the corresponding H_0-hypothesis will be rejected in favour of the relevant H_a-hypothesis. With regard to this study, the hypotheses that are relevant to the Γ matrix are H_{03}, H_{05}, H_{06} and H_{07}.

TABLE 4.51
UNSTANDARDIZED GAMMA (Γ) MATRIX

	PD_NEG	EM_INT
	-------	-------
V_I_D	– –	**0.17**
		(0.06)
		2.64*
AFF_ACT	– –	– –
COMP_ADV	– –	– –
PER_BR	**0.53**	**0.02**
	(0.06)	(0.05)
	9.61*	0.31
PD_POS	– –	**0.14**
		(0.07)
		2.18*

Note: Completely standardized path coefficients in bold type; standard error estimates in brackets; t-values $\geq \mid 1.96 \mid$ indicate significant parameter estimates ($p < 0.05$) *

The values in the matrix (Table 4.51) indicate that, the null hypothesis, that negative perceptual depth (ξ_2) has no significant positive effect on perceptual breadth (η_1) (hypothesis 3, H_{03}: $\gamma_{12} = 0$), can be rejected in favour of H_{a3}: $\gamma_{12} > 0$. Evidently, a significant ($p < 0.05$) relationship is, therefore, apparent between negative perceptual depth (ξ_2) and perceptual breadth (η_1). Thus, the proposed relationship between these two latent variables is corroborated.

Evidently, Table 4.51 further indicates that the null hypothesis, that emotional intelligence (ξ_1) has no significant positive effect on perceptual breadth (η_1) (hypothesis 5, H_{05}: $\gamma_{11} = 0$), cannot be rejected. An insignificant ($p > 0.05$) relationship is therefore evident between emotional intelligence (ξ_1) and perceptual breadth (η_1). As a result, the proposed relationship between the two latent variables is not corroborated. Invariably, the question arises as to what extent this is due to the inability to successfully operationalise the perceptual breadth latent variable.

However, the results indicate that the null hypothesis, that emotional intelligence (ξ_1) has no statistically significant positive effect on positive perceptual depth (η_3) (hypothesis 6, H_{06}: $\gamma_{31} = 0$) can be rejected in favour of H_{a6}: $\gamma_{31} > 0$. Therefore, the relationship hypothesised between emotional intelligence (ξ_1) and positive perceptual depth (η_3) is significant ($p < 0.05$). Thus, the hypothesized relationship is corroborated, while the sign associated with the significant γ parameter estimate is consistent with the nature of the relationship hypothesized to exist between these latent variables.

Lastly, Table 4.51 indicates that the null hypothesis, that emotional intelligence (ξ_1) has no statistically significant positive effect on valuing individual differences (η_2) (hypothesis 7, H_{07}: $\gamma_{21} = 0$) can be rejected in favour of H_{a7} ($p < 0.05$). Thus, the relationship postulated between emotional intelligence (ξ_1) and valuing individual differences (η_2) in the structural model, is corroborated. In addition, the sign associated with the significant γ parameter estimate is consistent with the nature of the relationship hypothesized to exist between these latent variables.

In addition to the above research results, it is important to examine the unstandardized B matrix, which is used to describe the relationship(s) between the endogenous variables and reflects the slope of the regression of η_i and η_j. The results depicted in Table 4.52 can be used to evaluate the remaining statistical hypotheses formulated earlier in the study (see Table 3.7). As with the Γ matrix, each of the parameter estimates provides information which can be used when assessing the hypothesized relationships between the endogenous variables within the structural model. Unstandardized β_{ij} estimates are thus, also significant ($p < 0.05$) if $t > | 1.96 |$ (Diamantopoulos & Siguaw, 2000). A significant β estimate would imply that the corresponding H_0-hypothesis will be rejected in favour of the relevant H_a-hypothesis. The hypotheses which are relevant to the B matrix are: H_{02}, H_{04}, H_{08}, H_{09}, $H_{010.}$

TABLE 4.52

UNSTANDARDIZED BETA (B) MATRIX

	V_I_D	AFF_ACT	COMP_ADV	PER_BR	PD_POS
V_I_D	– –	– –	– –	– –	– –
AFF_ACT	**0.30** (0.06) 4.84*	– –	– –	– –	– –
COMP_ADV	**0.67** (0.06) 11.73*	– –	– –	– –	– –
PER_BR	**0.02** (0.05) 0.33	– –	– –	– –	**0.42** (0.05) 7.67*
PD_POS	**0.16** (0.07) 2.47*	– –	– –	– –	– –

Note: Completely standardized path coefficients in bold type; standard error estimates in brackets; t-values $\geq$ $|1.96|$ indicates significant parameter estimates ($p < 0.05$)*

The values in Table 4.52 indicate that the null hypothesis that, a positive and significant relationship exists between positive perceptual depth (η_3) and perceptual breadth (η_1) (hypothesis 2, H_{02}: $\beta_{13} = 0$), is rejected ($t = 7.67$, at $p < 0.05$) in favour of H_{a2}: $\beta_{13} > 0$. Therefore, the hypothesised relationship between positive perceptual depth (η_3) and perceptual breadth (η_1) is corroborated. The estimate of the slope of the regression of η_3 on η_1 ($\beta = 0.42$) suggests that perceptual breadth is significantly influenced by positive perceptual depth.

As Table 4.52 indicates, the null hypothesis that, valuing individual differences (η_2) has a significant positive relationship on perceptual breadth (η_1) (hypothesis 4, H_{04}: $\beta_{12} = 0$), cannot be rejected (t-value = 0.33). An insignificant ($p > 0.05$) relationship is therefore evident between valuing individual differences (η_2) and perceptual breadth (η_1). As a result, the proposed relationship between the two latent variables is not corroborated. Invariably, the question arises as to what extent this is due to the inability to successfully operationalise the perceptual breadth latent variable.

Conversely, the null hypothesis that valuing individual differences (η_2) has a significant positive influence on positive perceptual depth (η_3) (hypothesis 8, H_{08}: β_{32} = 0), is rejected (t = 2.47) in favour of H_{a4}: β_{12} > 0. Thus, the hypothesized causal relationship between these two latent variables (η_2 and η_3) is corroborated. The estimate of the slope of the regression of η_2 on η_3 (β = 0.16) suggests that positive perceptual depth is moderately influenced by valuing individual differences.

An additional conclusion that can be drawn from the above table is that the null hypothesis that, valuing individual differences (η_2) has a significantly positive effect on tolerance towards affirmative action (η_4) (hypothesis 9, H_{09}: β_{42} = 0) can be rejected, as the t-value falls above 1.96 (4.84). Therefore, β_{42} is significant resulting in the null hypothesis being rejected in favour of H_{a9}: β_{42} >0. Moreover, the estimate of the slope of the regression of η_2 on η_4 (β = 0.30) suggests that tolerance towards affirmative action is moderately influenced by valuing individual differences.

Lastly, the null hypothesis that, valuing individual differences (η_2) has a significantly positive effect on competitive advantage (η_5) (hypothesis 10, H_{010}: β_{52} = 0) can be rejected, in favour of H_{a10} β_{52} > 0. A further indication that the null hypothesis is rejected is the fact that the t-value falls above 1.96, thus, β_{52} is significant. The estimate slope of the regression of η on η (β = 0.67) suggests that competitive advantage is significantly influenced by valuing individual differences.

Diamantopoulos and Siguaw (2000) further suggest that additional insights can be obtained by looking at the completely standardised B and Γ parameter estimates, as these estimates are not affected by differences in the unit of measurement of the independent variables and can thus, be compared across equations. The completely standardised B and Γ parameter estimates reflect the average change, expressed in standard deviation units, in the endogenous latent variable directly resulting from one standard deviation change in an endogenous or exogenous latent variable to which it has been linked, holding the effect of all other variables constant (Diamantopoulos & Siguaw, 2000). Table 4.53 depicts the completely standardised B and Γ parameter estimates. A conclusion that can be drawn from this table is that of the two significant

effects, the effect of valuing individual differences on competitive advantage is more pronounced than the effect of negative perceptual depth on perceptual breadth.

TABLE 4.53

COMPLETELY STANDARDISED Β AND Γ PARAMETER ESTIMATES

```
GAMMA

              pd_neg      em_int
            --------    --------
     V_I_D     - -        0.17
   aff_act     - -         - -
  comp_adv     - -         - -
    per_br    0.54        0.02
    pd_pos     - -        0.14


BETA

              V_I_D     aff_act    comp_adv     per_br      pd_pos
            --------    --------    --------    --------    --------
     V_I_D     - -        - -         - -         - -         - -
   aff_act    0.30        - -         - -         - -         - -
  comp_adv    0.67        - -         - -         - -         - -
    per_br    0.02        - -         - -         - -        0.42
    pd_pos    0.16        - -         - -         - -         - -
```

4. 8   STRUCTURAL MODEL MODIFICATION INDICES

According to Jöreskog and Sörbom (1993), a modification index (MI) indicates the minimum decrease in the model's χ^2 value, if a previously fixed parameter is set free and the model is re-estimated. In other words, a modification index for a particular fixed parameter indicates that if this parameter were permitted to be freed in a subsequent model, then the chi-square goodness-of-fit value would be predicted to decrease by at least the value of the index (Schumacker & Lomax, 2004). Large modification index values (> 6.64) would be indicative of parameters, that if set free, would potentially improve the fit of the model (p< 0.01). However, one should take cognisance of the fact that any alteration to the model, as suggested by parameters with high MI values, should only be freed if it makes substantive sense to do so (Kelloway, 1998). The expected change for the parameter is the expected value of the parameter if it were freed (i.e., the extent to which it would change from its currently fixed value of zero). The standardised and completely standardised expected changes

are the expected values in the standardised and completely standardised solution if the parameter were freed.

In light of this, the proposed structural model (as depicted in Figure 3.1) appears to fit the data reasonably well. Examination of the modification indices calculated for the Beta matrix, as depicted in Table 4.54, suggests that there are no additional paths between any endogenous latent variables that would significantly improve the fit of the proposed structural model.

TABLE 4.54

MODIFICATION AND EXPECTED CHANGE CALCULATED FOR THE BETA MATRIX

```
Modification Indices for BETA

              V_I_D     aff_act   comp_adv    per_br     pd_pos
            --------   --------   --------   --------   --------
    V_I_D     - -        0.03       0.07       0.13       - -
  aff_act     - -        - -        1.69       3.99       1.66
 comp_adv     - -        1.74       - -        0.05       5.35
   per_br     - -        1.86       1.97       - -        - -
   pd_pos     - -        1.49       4.01       0.05       - -

       Expected Change for BETA

              V_I_D     aff_act   comp_adv    per_br     pd_pos
            --------   --------   --------   --------   --------
    V_I_D     - -       -0.02      -0.02      -0.04       - -
  aff_act     - -        - -        0.11      -0.13       0.08
 comp_adv     - -        0.07       - -       -0.01       0.12
   per_br     - -       -0.07      -0.09       - -        - -
   pd_pos     - -        0.08       0.17       0.02       - -

       Standardized Expected Change for BETA

              V_I_D     aff_act   comp_adv    per_br     pd_pos
            --------   --------   --------   --------   --------
    V_I_D     - -       -0.02      -0.02      -0.04       - -
  aff_act     - -        - -        0.11      -0.13       0.08
 comp_adv     - -        0.07       - -       -0.01       0.12
   per_br     - -       -0.07      -0.09       - -        - -
   pd_pos     - -        0.08       0.17       0.02       - -
```

The modification indices calculated for the Γ matrix, as depicted in Table 4.55, identify one additional path from Negative Perceptual Depth to Tolerance towards Affirmative Action (8.29), with a relatively large completely standardised expected change value for χ^2 (-0.18). Although this modification index shows that substantial improvement in model fit can be obtained if making the modification to the model, it

is however, not possible to construct a theoretical justification for making any post hoc modification to the model, as based on these results.

TABLE 4.55

MODIFICATION AND EXPECTED CHANGE CALCULATED FOR THE Γ MATRIX

```
Modification Indices for GAMMA

            pd_neg      em_int
           --------    --------
    V_I_D     0.14       - -
  aff_act     8.29       0.30
 comp_adv     0.13       4.72
   per_br     - -        - -
   pd_pos     0.12       - -


      Expected Change for GAMMA

            pd_neg      em_int
           --------    --------
    V_I_D    -0.02       - -
  aff_act    -0.18       0.03
 comp_adv    -0.02       0.11
   per_br     - -        - -
   pd_pos     0.02       - -


      Standardized Expected Change for GAMMA

            pd_neg      em_int
           --------    --------
    V_I_D    -0.02       - -
  aff_act    -0.18       0.03
 comp_adv    -0.02       0.11
   per_br     - -        - -
   pd_pos     0.02       - -
```

4.9   BIVARIATE CORRELATIONS AND REGRESSION ANALYSES

Making use of SPSS (version 17), the following statistical procedures were utilised to find answers regarding the direct relationships between the various constructs and the derived hypotheses: Pearson's product-moment correlation coefficient (r) and Standard Multiple Regression. The relationships were interpreted in terms of the actual size of Pearson's r and the amount of shared variance between the variables. As described in Chapter 3, the correlation coefficients were further analysed in terms of their effect size or practical significance, as well as their statistical significance.

The matrix of zero-order Pearson correlation coefficients between the seven latent variables and the corresponding conditional probabilities is portrayed in Table 4.57.

The convention proposed by Guilford (cited in Tredoux & Durrheim, 2002, p. 184), depicted in Table 4.56, was used to interpret sample correlation coefficients. Although somewhat arbitrary and despite it ignoring the normative question about the magnitude of the values typically encountered in a particular context, it nonetheless fosters consistency in interpretation.

TABLE 4.56

GUIDELINES FOR INTERPRETING PEARSON'S *r*

Absolute Value of *r* (+ or -)	Informal Interpretation
Less than .20	Slight, almost negligible relationship
.20 – .40	Low correlation; definite but small relationship
.40 – .70	Moderate correlation; substantial relationship
.70 – .90	High correlation; marked relationship; and
.90 – 1.0	Very high correlation: ; very dependable relationship
≥ .30	Practically significant relationship

TABLE 4.57

SUMMARY OF PEARSON CORRELATION COEFFICIENTS

		Affirmative Action	Valuing Individual Differences	Competitive Advantage	Emotional Intelligence	Negative Perceptual Depth	Positive Perceptual Depth	Perceptual Breadth
Affirmative Action	Pearson Correlation	1	.313**	.263**	.112	.016	.088	.079
	Sig. (2-tailed)		.000	.000	.086	.809	.178	.228
	N		237	237	237	237	237	237
Valuing Individual Differences	Pearson Correlation	.313**	1	.668**	.225**	.019	-.021	.085
	Sig. (2-tailed)	.000		.000	.000	.774	.752	.194
	N	237	237	237	237	237	237	237
Competitive Advantage	Pearson Correlation	.263**	.668**	1	.265**	-.007	.038	.097
	Sig. (2-tailed)	.000	.000		.000	.911	.564	.138
	N	237	237	237	237	237	237	237
Emotional Intelligence	Pearson Correlation	.112	.225**	.265**	1	-.038	-.066	-.040
	Sig. (2-tailed)	.086	.000	.000		.557	.309	.538
	N	237	237	237	237	237	237	237
Negative Perceptual Depth	Pearson Correlation	.016	.019	-.007	-.038	1	.048	.556**
	Sig. (2-tailed)	.809	.774	.911	.557		.464	.000
	N	237	237	237	237	238	238	238
Positive Perceptual Depth	Pearson Correlation	.088	-.021	.038	-.066	.048	1	.453**
	Sig. (2-tailed)	.178	.752	.564	.309	.464		.000
	N	237	237	237	237	238	238	238
Perceptual Breadth	Pearson Correlation	.079	.085	.097	-.040	.556**	.453**	1
	Sig. (2-tailed)	.228	.194	.138	.538	.000	.000	
	N	237	237	237	237	238	238	238

**. Correlation is significant at the 0.01 level (2-tailed)

From Table 4.57, it can be seen that no significant relationships could be found that could be classified as very dependable (i.e., r = .90-1.0) or as having a marked relationship (i.e., high correlations coefficients of between .70-.90). From the same table it can be seen that the following substantial relationships (i.e., moderate correlation coefficients ranging between .40-.70) were found:

- A positive relationship was found between negative perceptual depth and perceptual breadth (r = .556 and 31% explained variance);
- A positive relationship was found between positive perceptual depth and perceptual breadth (r = .453 and 21% explained variance);
- A positive relationship was found between valuing individual differences and competitive advantage (r = .668 and 45% explained variance).

The following definite but small relationship (i.e., low correlations between .30 and .40) was found:

- A positive relationship was found between valuing individual differences and affirmative action (r = .313 and 9.8% explained variance).

The remaining relationships were either found to be statistically, but not practically significant based on the criteria set by Guilford (as cited by Tredoux & Durheim, 2002, p. 184; or were not found to be statistically significant at all.

The bivariate correlation analyses lend support to the following hypotheses:

- Hypothesis 2 – (H_{a2}: $\beta_{13} > 0$)
- Hypothesis 3 – (H_{a3}: $\gamma_{12} > 0$)
- Hypothesis 7 – (H_{a7}: $\gamma_{21} > 0$)
- Hypothesis 9 – (H_{a9}: $\beta_{42} > 0$)
- Hypothesis 10 – (H_{a10} $\beta_{52} > 0$)

The bivariate correlation analyses lend no support to the following hypotheses:

- Hypothesis 4 – (H_{a4}: $\beta_{12} > 0$)
- Hypothesis 5 – (H_{a5}: $\gamma_{11} > 0$)
- Hypothesis 6 – (H_{a6}: $\gamma_{31} > 0$)
- Hypothesis 8 – (H_{a8}: $\beta_{32} > 0$)

In order to evaluate the predictive power of each independent variable, over and above that offered by all the other independent variables, standard multiple regression analyses were performed on the various dimensions of the constructs, as well as the total scores, where appropriate. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. The squared multiple correlations (R^2) of the indicators depicted in Tables 4.58-4.61 show the proportion of variance in an indicator that is explained by its underlying latent variable. A high R^2 value would indicate that variance in the indicator in question, to a large degree reflects variance in the latent variable to which it has been linked. The rest of the variance, not explained by the latent variable, can be ascribed to systematic and random measurement error (Diamantopoulos & Siguaw, 2000).

From Table 4.58 it can be concluded that for Perceptual Breadth the R^2 indicates that the independent variables explain 48.7% of its variance. The Beta coefficients indicate that Positive Perceptual Depth (0.534) makes the strongest unique contribution to explaining perceptual depth, followed by Negative Perceptual Depth (0.420). When using $p < 0.05$, both of these variables have p-values of 0.000, indicating that each variable makes a significantly unique contribution to the prediction of perceptual breadth. However, both emotional intelligence and valuing individual differences did not have significant predictive ability.

Table 4.58   Regression of Perceptual Breadth (η_1) on Positive Perceptual Depth (η_3), Negative Perceptual Depth (ξ_2), Emotional Intelligence (ξ_1) and Valuing Individual Differences (η_2)

Summary Statistics; DV: Perceptual Breadth: R = .697 R^2= .487 Adjusted R^2= .477 $F(4,229)$=54.174 p= 0.000						
	Beta	**Std.Err. - of Beta**	**B**	**Std.Err. of B**	**t(229)**	**p-value**
Intercept			7.882	1.329	5.929	0.000
P_Depth Pos	0.534	0.048	0.199	0.018	11.188	0.000
P_Depth Neg	0.420	0.049	0.105	0.012	8.620	0.000
EI	0.015	0.049	0.093	0.299	0.311	0.756
VID	0.016	0.049	0.060	0.179	0.333	0.739

From Table 4.59 it can be deduced that for Positive Perceptual Depth, the independent variables explain only 5.4% (R^2 = .054) of its variance. The Beta coefficients indicate that both Emotional Intelligence and Valuing Individual Differences contribute marginally towards explaining Positive Perceptual Depth. Valuing Individual Differences (0.161) makes the strongest unique contribution.

Table 4.59   **Regression of Positive Perceptual Depth (η_3) on Emotional Intelligence (ξ_1) and Valuing Individual Differences (η_2)**

Summary Statistics; DV: Pos Perceptual Depth: R = .232 R^2= .054 Adjusted R^2= .056 F(2,231)=6.577 p= 0.002						
	Beta	**Std.Err. - of Beta**	**B**	**Std.Err. of B**	**t(231)**	**p-value**
Intercept			-10.604	7.180	-1.477	0.141
EI	0.142	0.065	3.479	1.593	2.183	0.030
VID	0.161	0.065	2.381	0.960	2.480	0.014

For emotional intelligence, Table 4.60 indicates that the independent variables explained only 4.3% (R^2 = .043) of its variance. Negative Perceptual Depth (0.151; $p < 0.05$) made the strongest unique contribution to explaining emotional intelligence. None of the other independent variables made a significant contribution towards emotional intelligence.

Table 4.60   **Regression of Emotional Intelligence (ξ_1) on Positive Perceptual Depth (η_3), Negative Perceptual Depth (ξ_2) and Perceptual Breadth (η_1)**

Summary Statistics; DV: Emotional Intelligence: R = .206 R^2= .043 Adjusted R^2= .030 F(3,230)=3.4055 p= 0.018						
	Beta	**Std.Err. - of Beta**	**B**	**Std.Err. of B**	**t(230)**	**p-value**
Intercept			3.617	0.135	26.710	0.000
P_Depth Pos	0.098	0.081	0.006	0.005	1.214	0.226
P_Depth Neg	0.151	0.075	0.006	0.003	2.011	0.045
P_Breadth	0.033	0.090	0.005	0.015	0.365	0.716

Lastly, Table 4.61 Shows that the independent variables explain 5.6% (R^2 = .056) of the variance in valuing individual differences. The strongest unique contribution

appears to be that of negative perceptual depth (0.149; p < 0.05). Emotional intelligence (0.146; p < 0.05) also made a significant contribution.

Table 4.61 **Regression of Valuing Individual Differences on Positive Perceptual Depth (η_3), Negative Perceptual Depth (ξ_2), Perceptual Breadth (η_1) and Emotional Intelligence (ξ_1)**

Summary Statistics; DV: Valuing Individual Differences: R = .236 R^2= .056 Adjusted R^2= .039 F(4,229)=3.370 p= 0.011						
	Beta	**Std.Err. - of Beta**	**B**	**Std.Err. of B**	**t(229)**	**p-value**
Intercept			4.048	0.453	8.934	0.000
P_Depth Pos	-0.043	0.080	-0.004	0.008	-0.534	0.594
P_Depth Neg	0.149	0.075	0.010	0.005	1.976	0.049
P_Breadth	0.030	0.090	0.008	0.024	0.333	0.739
EI	0.146	0.066	0.243	0.109	2.231	0.027

4.10   SUMMARY

The purpose of this chapter was to report on the results obtained by this study. The following chapter will discuss in greater depth the general conclusions drawn from the research. Recommendations for future research and possible model modification options for this model will be presented in conclusion.

CHAPTER 5

DISCUSSIONS OF RESEARCH RESULTS, CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

5.1   INTRODUCTION

The purpose of this chapter is to provide a consolidated discussion of the conclusions and statistical results that were presented in the previous chapter. From what has been discussed in Chapter 3 and 4, it is apparent that the exploratory nature of the present study warrants conclusions of a tentative nature. The conclusions drawn in this chapter are therefore, presented as deductions that are considered valid in light of the obtained evidence, rather than irrefutable truth. Conclusions are furthermore drawn based on insights gained during the research process, as well as from the results obtained from the data. After the results obtained from this study are explicated, the limitations of this study as well as the recommendations for future research will be discussed.

5.2   PURPOSE OF THE STUDY

The primary purpose of this study was to determine the relationship between attitude towards diversity, emotional intelligence and diversity complexity in organisations. More specifically, the study aimed to evaluate and understand if and/how emotional intelligence and diversity complexity could, in any way, influence an individual's attitude towards diversity. In order to achieve this aim, available literature was used to build and propose the conceptual model. This model in turn, was subsequently investigated to obtain an enhanced understanding of the attitude towards diversity construct and its relationship with the chosen latent variables. In order to be able to achieve the primary aim of this study, a research initiating question driving the investigation was formulated in Chapter 1:

Does emotional intelligence and diversity complexity provide a valid and permissible account of the attitude towards diversity people maintain in the workplace?

In order to answer the primary research question of this study, three research objectives were further proposed and were discussed in Chapter 1. From these three research objectives, one over-arching hypothesis and nine substantive hypotheses were deduced in order to empirically evaluate the postulated relationships formulated on the basis of the literature study presented in Chapter 2. The results and findings of these hypotheses will be discussed in terms of the three research objectives formulated for the present study.

5.3   SUMMARY OF THE FINDINGS

The first research objective aimed to *explicate whether the measurement models of the various construct dimensions display acceptable fit on the data when fitted in separate, independent confirmatory factor analyses.* In order to fulfil this particular research objective, the dimensionality and factorial validity of each measurement instrument was first tested within the context of the present study. The reason for conducting such a procedure was to ensure that, for the purposes of the present study, the measurement scales that were used in the study to examine the relationships between the latent variables, were construct valid and internally reliable. Moreover, the need to establish valid and reliable measurement scales was warranted so as to ensure that the best possible statistical results would be attained when further analyses were to be conducted.

5.3.1   Conclusions Regarding Reliability Analysis

The reliability coefficients of the Cultural Diversity Beliefs Scale, the Genos EI and the Reaction-To-Diversity-Inventory were determined in order to confirm that each of the items from the various instruments succeed in contributing to an internally consistent description of the sub-scale in question. The selection, substitution or revision of items identified as failing to contribute to the internal consistency of the sub-scale, allowed for improved reliability. As such, Nunnaly (1978) recommends that only instruments with a modest reliability can be used to gather information to test hypotheses. For the purpose of this study, reliability coefficients greater than .60

were considered to be acceptable (Malhotra, 2004). Item-total correlations of above 0.2 were also considered as indicators of internal consistency.

The results indicate that the reliability analyses produced satisfactory results when these guidelines were used. Table 5.1 provides a summary of the final reliability scores for each of the measuring scales. In total seven items were removed from the sub-scales comprising the CDBS, while a total of 21 items were removed from the various sub-scales comprising the Genos EI. Despite this, the final measurement scales were found to be reliable for the purpose of the study ($\alpha > .80$). Each of the refined measuring instrument sub-scales were also viewed as acceptable ($\alpha > .60$) and were considered reliable for gathering information to test hypotheses.

TABLE 5.1

RELIABILITY RESULTS FOR THE REFINED MEASUREMENT SCALES

MEASUREMENT SCALE	NO OF ITEMS	TOTAL SCALE α	SUBSCALE α
CDBS	16	.81	.61 - .76
Genos EI	49	.82	.66 - .77
Positive Perceptual Depth	5	.92	.92
Negative Perceptual Depth	5	.91	.91
Perceptual Breadth	2	.61	.61

5.3.2   Conclusions Regarding the Measurement Models

The data obtained from the three measuring instruments was analysed by means of SEM, in order to determine measurement model fit. Measurement model fit refers to the extent to which a hypothesised model fits (is consistent with or describes) the data and provides information about the validities and reliabilities of the observed indicators (Diamantopolous & Sigauw, 2000). A decision was made, with regard to this study, to analyse the measurement model fit separately for each sub-scale of the various measuring instruments used in this study. In order to do this, a validation process using confirmatory factor analysis (CFA), and if necessary exploratory factor analysis (EFA), was utilised. Although this process was discussed in detail in Chapter 3, all of the sub-scales of the various measuring instruments used in the present study were analysed separately by means of a CFA procedure.

If the original structure, including all sub-scale items, produced a satisfactory fit with the data (in terms of p-value Test of Close Fit > 0.05; RMSEA < 0.08), but certain items displayed insignificant completely standardised factor loadings (<.30), a further CFA was performed on the data excluding the poor items identified. If model fit was achieved and factor loadings were significant, the factor analysis procedure would be concluded as all poor items would have been removed. If however, it was still found that certain items failed to load significantly on the latent variable, further CFA's were to be performed on the refined sub-scale items until all items demonstrate satisfactory factor loadings.

If however, after the initial CFA, model fit could not be achieved, in that either the p-value Test of Close Fit or the RMSEA indices were insignificant, the decision was taken to perform an EFA procedure on all the sub-scale items, in order to determine the uni-dimensionality of the sub-scale. Poor items were subsequently identified and removed as per the stated decision rules. A further CFA was performed on the modified sub-scale structure. Model fit was again evaluated and if it was found that model fit had been achieved, the next step required that each item be evaluated in terms of its completely standardised factor loadings. If it was found that all the remaining items loaded satisfactory (>0.30) on the latent variable, the factor analysis procedure was then completed. If however, an item was found to have an insignificant factor loading, the item was to be deleted. Thereafter, further CFA's were to be performed on the refined sub-scale items until all items demonstrate satisfactory factor loadings. It should be noted, that in all cases, CFA was carried out on the final accepted structure.

The following section presents a summary of the goodness-of-fit indices obtained from the Confirmatory Factor Analyses performed on each of the measurement models obtained from the data of the total sample (n=237). When assessing overall fit using both the absolute and incremental measures of fit, it would seem that the quality of fit, in all cases, is generally good.

5.3.2.1   *Absolute and Incremental Fit Measures*

A comparison of the indices reported in Table 4.33 indicates that the refined structure of each respective sub-scale of the CDBS presents a good fit with the data. However, in all three of the refined CDBS measurement models, the χ^2/df ratio (1.585 – 1.835) failed to come close to the 2-5 range indicative of acceptable fit. Although somewhat disappointing, the models still managed to achieve good fit in terms of the p-value Test of Close Fit (RMSEA < 0.05) (0.33 – 0.91) and the RMSEA (0.0 – 0.059). In all three cases, the null hypothesis of close fit is not rejected, indicating that each of the separate measurement models of the CDBS 'fits' the data well and can thus, reproduce the observed sample covariance matrix to a degree of accuracy that can be explained solely in terms of sample error. When compared to a baseline model, all three models achieved NFI, NNFI, IFI and CFI indices that are >0.90, which represents good fit.

In terms of the absolute fit indices of the seven measurement models comprising the redefined Genos EI, and as reported in Table 4.45, all the χ^2/df ratio's unfortunately failed to come close to the required 2-5 range indicative of acceptable fit (0.574 – 1.529). The ESC is the only measurement model that was able to achieve this level and thus indicates acceptable fit (χ^2/df = 3.665). In terms of the p-value Test of Close Fit (RMSEA < 0.05), all seven measurement models have obtained values indicative of good fit as values ranges between 0.093 and 0.89. In light of the relative RMSEA index (0.00 – 0.073), six of the seven measurement models have achieved good fit. The ESC measurement model however, had an RMSEA value > 0.08 (0.11), which indicated that although the model had a poorer fit with the data, when compared to the other Genos EI measurement model; it did however manage to obtain a moderately good fit with the data. In light of the ESC measurement model, the decision was to taken to overlook the RMSEA value and place greater emphasis on the p-value Test of Close Fit (0.093), as this index is said to be the superior criterion of the two fit indices.

When compared to a baseline model, all seven of the measurement models of the Genos EI, achieved NFI, NNFI, IFI and CFI indices that are >0.90, which represents good fit. However, it should be noted that both the ESA and ESM measurement models failed to reach the required >0.90 level with regards to the RFI index (0.86 and 0.88 respectively). Furthermore, the ESC measurement model was only able to obtain an AGFI index of 0.88. Despite these less than satisfactory incremental fit results, all seven of the measurement models of the Genos EI were able to reject the null hypothesis of exact fit (H_0: $\Sigma = \Sigma(\Theta)$), and at the same time, not reject the null hypothesis of close fit (H_0: RMSEA $\leq$ 0.05). This indicates that each of the separate measurement models 'fits' the data well, in that the model can reproduce the observed sample covariance matrix to a degree of accuracy that can be explained solely in terms of sampling error. Thus, the seven respective measurement models, comprising the refined Genos EI, can be said to provide a credible explanation of the observed covariance matrices.

Lastly, in terms of the goodness-of-fit indices for the positive and negative perceptual depth measurement model, as reported in Table 4.47, satisfactory fit had been achieved in terms of the p-value Test of Close Fit (0.24) and the RMSEA (0.059). Consequently, the null hypothesis of exact fit is rejected (H_0: $\Sigma = \Sigma(\Theta)$), while the null hypothesis of close fit is not rejected (H_0: RMSEA $\leq$ 0.05). Unfortunately, the poor result of the χ^2/df ratio (1.83) for the CFA derived measurement model has once again discredited the model fit. Moreover, despite all other indices indicating good fit, one concern is that both the RMR value (0.088) and the standardised RMR value (0.088) have failed to reach the >0.90 level required to indicate good fit. Nevertheless, one positive result which affirms good model fit is that of the GFI (0.99), which noticeably exceeds 0.9. In term of the incremental fit measures, the measurement model obtained NFI, NNFI, AGFI, CFI, IFI and RFI indices >0.90, which represents good fit.

5.3.3   Conclusions Regarding Construct Validity

On the basis of the internal reliability results, the CFA procedures and the required EFA procedures, it was decided that it would be appropriate to redefine each of the

measurement scales as it was shown in each case, to have achieved a higher level of construct validity and internal reliability within the present sample. It should however be noted that, the results of the present study do not claim that the derived measurement models are more valid or reliable measures of the constructs in general. In fact, because the exact configuration of the original measurement models was not replicated in the present sample, it offers a cautious warning to researchers deploying measurement instruments developed outside of South Africa. Indiscriminately using measurement instruments that have not been modified in terms of their factorial configuration on a South African sample, may cast doubt on the statistical findings and will most likely distort any future analyses conducted. Table 5.2 presents a summary of the final factor loadings obtained for each of the measurement models of the present study. In all cases, the completely standardised factor loading for each item comprising the measurement model succeeded in the >.30 level required to indicate that item successfully contributes to the coherency of the sub-scale in question.

TABLE 5.2

MEASUREMENT MODEL FACTOR LOADINGS

SCALE	NO OF ITEMS	FACTOR LOADINGS
CULTURAL DIVERSITY BELIEF SCALE		
Competitive Advantage (CA)	4	.43 - .68
Valuing Individual Differences (VID)	8	.44 - .71
Tolerance towards Affirmative Action (AA)	4	.48 - .76
GENOS EMOTIONAL INTELLIGENCE INVENTORY		
Emotional Self Awareness (ESA)	8	.35 - .68
Emotional Expression (EE)	9	.31 -.61
Emotional Awareness of Others (EAO)	7	.36 - .56
Emotional Reasoning (ER)	5	.51 - .59
Emotional Self Management (ESM)	8	.34 - .67
Emotional Management of Others (EMO)	8	.39 - .62
Emotional Self Control (ESC)	4	.45 - .74
PERCEPTUAL DEPTH		
Positive Perceptual Depth	5	.82 - .89
Negative Perceptual Depth	5	.65 - .95

5.3.4   Evaluation of the Structural Model

Once it was established that each of the measuring instruments being used for the purposes of the present study were considered to be both construct valid and internally reliable, the data obtained was further analysed in such a manner so as to address both the second and third research objectives of this study. The second objective stated that *the underlying structural model, upon which the study was based, needed to be explicated and the absolute fit of the model tested*; while the third research question investigated *the direct relationships existing between the various latent variable identified in the study and to evaluate the significance of the hypothesised paths in the model*.

All three of the research objectives of this study were followed with one aim in mind, to better understand how emotional intelligence and diversity complexity influence attitude towards diversity in the organisation. In light of this, various statistical techniques and methodologies were used in order to addressed the remaining research questions and gain insights into the relationships between the constructs. The statistical techniques utilised in this study include Pearson Correlation Coefficients, Standard Multiple Regression and Structural Equation Modelling (SEM). The goodness-of-fit indices for the structural model were presented in Table 4.48, interpreted and conclusions were made regarding the overall structural model fit and are presented in the following section.

5.3.4.1   Goodness-Of-Fit Indices for the Structural Model

After interpreting all the fit indices, the conclusion was drawn that the structural model fitted the data well. Integrating the results obtained on the full spectrum of fit statistics (see Table 4.48) seemed to suggest a reasonable fitting model that appeared to acknowledge the true complexity of the processes underlying attitude towards diversity. A summary of the most important fit indices is presented in Table 5.2. With regard to the results of the absolute and incremental fit measures, the evaluation of fit on the basis of the Satorra-Bentler Scaled chi-square statistic χ^2/df ($\chi^2/df = 2.32$) for

the structural model, suggests that the model fits the data well as it falls within the 2-5 range indicative of good model fit. Furthermore, Table 5.2 indicates that the obtained RMSEA value of 0.075 is not significantly different from the target value of 0.05 (i.e., the close fit null hypothesis is not rejected; $p > 0.05$) and since the confidence interval does include the target value of 0.05, a good fit appears to have been achieved. In addition to this, the p-value (0.12) for test of close fit (RMSEA < 0.05) supports the assumption of good fit, as a p-value > 0.05 is indicative that the model fits the data well. Both the reported RMR (0.056) and the standardised RMR (0.056) indicate reasonably good fit, while the obtained GFI (0.97) exceeds the 0.90 level required for good fit. When compared to a baseline model, the structural model achieves NFI, NNFI, CFI and IFI indices that are > 0.90.

TABLE 5.3

SUMMARY OF GOODNESS-OF-FIT INDICES FOR STRUCTURAL MODEL

INDICES	Structural Model
ABSOLUTE FIT MEASURES	
χ^2/df	2.32
Root Mean Square Error of Approx. (RMSEA)	0.075
P-Value Test of Close Fit (RMSEA < 0.05)	0.12
Root Mean Square Residual (RMR)	0.056
Standardised RMR	0.056
Goodness of Fit Index (GFI)	0.97
INCREMENTAL FIT MEASURES	
Normed Fit Index (NFI)	0.92
Non-Normed Fit Index (NNFI)	0.91
Comparative Fit Index (CFI)	0.95
Incremental Fit Index (IFI)	0.96

However, to ensure that a thorough assessment of the structural model was done, it was deemed necessary to investigate the standardised residuals and modification indices to determine the extent of success with which the model explained the observed covariance's amongst the manifest variables. One large positive residual and one large negative residual indicated two observed covariance terms in the observed sample covariance matrix being poorly estimated by the derived model parameter

estimates. However, with regard to the variables associated with the poor standardised residuals, there appeared to be no clear suggestion for model modification. Despite this, the modest number of extreme residuals corroborates the earlier conclusion that the model fits the data reasonably well. Examination of the stem-and-leaf plot, indicated that the medium residual is 0.00, which implies that the model neither under or overestimates the covariance terms in the observed covariance matrix. However, less than perfect model fit was indicated by the fact that the observed variables tend to moderately depart from the $45° -$ reference line in the Q-plot in both the upper and lower regions of the X-axis.. The deviation is, however, not pronounced and is this indicative of a relatively good model fit.

Given the acceptable structural model fit (see Table 5.2), an examination of the β and Γ matrices was undertaken in order to establish the significance of the theoretical linkages proposed by the study's structural model, as depicted in Figure 3.1. The interpretation of these results provided information with which to determine whether the theoretical relationships specified at the conceptualisation stage are indeed supported by the data. Here the interpretation is on the proposed causal linkages between the various endogenous and exogenous variables. A discussion regarding the interpretation of these results follows.

5.3.4.2   Gamma Matrix

The Relationship between Negative Perceptual Depth and Perceptual Breadth

It was postulated that a statistically significant positive relationship exists between negative perceptual depth (ξ_2) and perceptual breadth (η_1). Support was found in the present study that the relationship between these two constructs was indeed corroborated. Firstly, when considering the above bivariate relationship, the Correlation Coefficient showed that there was a substantial (as based on Guilford's guidelines) positive relationship between negative perceptual depth and perceptual breadth. The standard Multiple Regression analyses further indicated that negative perceptual depth was a significant predictor of perceptual breadth. When the postulated model, consisting of all the latent variables, was subjected to SEM, this path was found to be significant in the structural model. This subsequently led to the

rejection of the null hypothesis. Moreover, the sign associated with this significant γ parameter estimate was consistent with the nature of the relationship hypothesised to exist between these latent variables. Consequently, it can be concluded that the positive relationship between negative perceptual depth and perceptual breadth was confirmed on various levels using different techniques (i.e., some taking bivariate relationships into account and others taking multiple dependent variables and independent variables into account, as is the case with SEM).

Ultimately the complexity of diversity perceptions is based on the chronic awareness and ability to differentiate between the multiple aspects or dimensions of diversity, and to integrate on the basis of information relevant to a particular context. In this study, perceptual breadth was defined as the scope or range of one's perceptions of diversity. An individual's perception of diversity is said to be differentiated when it comprises of both positive and negative perceptions of diversity. However, instantaneous evaluations of others is said to largely contribute to the negative impressions and attributions one ascribes to the diversity of others. Human (1996b, p. 58) believes that, "if an individual is aware of his/her initial biases and preferences, thinking over one's initial judgments adds information and may overrule the unconscious thought". Failure to think further about initial judgments has the power to greatly influence the course of social interaction and the level at which an individual can integrate and understand that people differ in terms of a number of dimensions. As such, systematic differences in perceptions of diversity are derived from one's cognitive evaluations of others. Higher levels of differentiation, allows an individual to be more aware of his or her discrepant views of a person.

The Relationship between Emotional Intelligence and Perceptual Breadth

A positive relationship was postulated to exist between emotional intelligence (ξ_1) and perceptual breadth (η_1). From the SEM results of the integrated model, it became evident that this path was not found to be significant in the structural model and consequently, the null hypothesis that emotional intelligence has no statistically significant positive effect on perceptual breadth was not rejected. When only considering the bivariate relationship, an insignificant relationship was found for this relationship. Moreover, emotional intelligence was not able to predict perceptual

breadth when considering the Multiple Regression results. Invariably, the question arises as to what extent this is due to the inability to successfully operationalise the perceptual breadth latent variable.

It thus seems as if an individual with a high level of EI is not necessarily able to perceive a variety of negative and positive characteristics of diverse others. One questions whether this is because emotional intelligence is in essence, viewed as a melange of competencies and general dispositions for adaptive personal functioning and coping with environmental demands. The construct encompasses multiple aspects of emotional and personal knowledge and personal functioning that are rather closely related to emotions, including: motivation, personality traits, temperament, character and social skills. The inability to perceive both negative and positive characteristics of diverse others perhaps raises the question as to the relative magnitude of importance that direct diversity experiences play in the shaping of one's perceptual breadth. The more positive the interaction and the greater the opportunities for such interaction, the more likely diversity perceptions are going to be differentiated, in that perceived similarities with diverse others will be acknowledged and differences or dissimilarities will be better understood.

Individual's inevitably hold different orientations towards diversity and what becomes warranted in any organisational setting, is that individuals need to be able to structure their work behaviour differently, in ways that would either help to create opportunities for interaction between themselves and diverse co-workers. Choosing to engage in positive interactions with diverse individuals, coupled with personal knowledge of appropriate emotional management and control opens new possibilities for the establishment of perceptual breadth, by allowing for the creation of perceptions that embrace both positive and negative elements of diversity. Through direct experiences with diverse individuals, one can thus realise that an orientation towards a more objective view of diversity, can enhance one's wellbeing and interpersonal experiences.

The Relationship between Emotional Intelligence and Positive Perceptual Depth

A statistically significant positive relationship was postulated between emotional intelligence (ξ_1) and positive perceptual depth (η_3). When studying the SEM results, this path was found to be significant in the structural model. This subsequently led to the rejection of the null hypothesis. Moreover, the sign associated with this significant γ parameter estimate was consistent with the nature of the relationship hypothesised to exist between these latent variables. The standard Multiple Regression analyses further indicated that emotional intelligence was a predictor of positive perceptual depth, however, only marginally. When considering the bivariate relationship, the correlation coefficient that describes the relationship was not found to be significant.

The ability to manage (monitor, evaluate, and adjust to changing moods) and regulate one's own emotions and moods is said to result in positive and negative affective states. Carmeli (2003) contends that emotionally intelligent individuals are adept at placing themselves in positive affective states, and are able to experience negative affective states that have insignificant destructive consequences. According to Wright and Staw (1999), positive emotions tend to have positive consequences in all facets of life, including interpersonal relationships. This implies that people, who have an enhanced awareness and understanding of their emotional states and the reasons for their emotional reactions to situations, are more likely to have good relationships with their co-workers and may experience less interpersonal conflict than less emotionally intelligent employees simply because they tolerate the differences and similarities between themselves and others.

On the contrary, when one is unable to manage their own emotions, negative affective states are likely to occur more readily, and thus can problematically fortify negative emotional responses towards others. Thus, if one is able to manage their own emotional states by attempting to remain positive in the face of adversity, they will most likely be able to view diversity experiences in a more positive light and can consequently diminish any negativity associated with diversity. Goleman, Boyatzis and McKee (2002) confirmed this when it was found that emotional intelligence was an important factor in the relationship between an individual and diverse others, as the individual is able to anticipate a negative emotional reaction in both themselves and

another individual, and thus aims to avoid behaviours that could trigger the rippling effect of negative emotions. The results of the present study seem to emphasise that emotional intelligence in the fellow worker, may be important in increasing the tendency to view diversity, and the experiences emulating from diversity, in a more positive light.

The Relationship between Emotional Intelligence and Valuing Individual Differences

Support was found for the postulated relationship between emotional intelligence (ξ_1) and valuing individual differences (η_2). From the SEM results of the integrated model, this path was found to be significant in the structural model and the null hypothesis could thus be rejected. In addition, the sign associated with the significant γ parameter estimate is consistent with the nature of the relationship hypothesized to exist between these latent variables. The standard Multiple Regression results also indicated that a significant relationship exists between emotional intelligence and valuing individual differences.

This was an important contribution, as the results clearly support the notion that emotional intelligence can enhance the value found within others individuality. A possible reason for this conclusion is that emotions are thought to organise and coordinate ongoing psychological action (i.e., attention, motivation, memory, behavioural inclinations) so that individuals are able to respond more effectively to encountered events, the complexities characterising social life and behaviours at work. The study confirms Carmeli's (2003) statement that EI is a major contributing factor towards the development and maintenance of more positive attitudes, behaviours and outcomes and is a key ingredient in the process of developing and maintaining social relationships. Emotionally intelligent individuals are able to master their interactions with diverse others in a more effective manner, and as a result, find greater value in individual differences.

From the Correlation analyses of the bivariate relationships, emotional intelligence was found to be statistically significantly positively correlated with valuing individual differences, but this relationship could not be described as practically significant

(r<.30). A possible reason for this finding is that although attitudes go hand-in-hand with emotions, it is unlikely that increasing one's level of emotional intelligence alone, will solely contribute towards greater value in individual differences. Certain life experiences, such as negative historical experiences (i.e., Apartheid), exposure to diversity, experiences of positive contact and situational factors may play a significant role in the development of attitudes towards diversity. Nevertheless, the study succeeded in illustrating that to some degree, emotional intelligence does play an important role in shaping and influencing the value placed on individual differences.

5.3.4.3   Beta Matrix

In addition to the above results, the unstandardized B matrix, reflecting the slope of the regression of η_i and η_j was reported and interpreted as a means to describe the relationship(s) between the endogenous variables. The results are presented below:

The Relationship between Positive Perceptual Depth and Perceptual Breadth
It was postulated that a statistically significant relationship exists between positive perceptual depth (η_3) and perceptual breadth (η_1) and support was found for this notion. From the SEM results based on the complete conceptual model, it was evident that this path was found to be significant in the structural model and thus, the null hypothesis could be rejected. In addition, the sign associated with this significant β parameter estimate was consistent with the nature of the relationship hypothesised to exist between these latent variables. When considering the bivariate relationships, a substantial correlation was found in terms of Guilford's guidelines. Furthermore, from the Standard Multiple Regression results, it was evident that positive perceptual depth significantly predicts perceptual breadth.

The significance of this relationship is emulated in the fact that it would appear that the ability to differentiate between various individual identities and to integrate identities on the basis of information relevant to a particular context is imperative to the development of a more complex perception of diversity. This study confirms that notion that understanding oneself and the extent to which unidimensional and value-laden thinking can both perpetuate dysfunctional social interaction and affect one's

performance and motivation in the organisation, can significantly alter the way in which diversity is viewed. This involves an active process of controlling how one thinks about others (Human, 2005), as well as an awareness and acceptance of the individual's similarities (e.g., commonness of being human) and dissimilarities (e.g., race, gender, culture, etc.) (Miville, Gelso, Pannu, Liu, Touradji, Holloway, & Fuertes, 1999).

The Relationship between Valuing Individual Differences and Perceptual Breadth

The study postulated that a statistically significant relationship exists between valuing individual differences (η_2) and perceptual breadth (η_1). The SEM path was found to be insignificant in the structural model and the null hypothesis could thus not be rejected. Support for the hypothesis was therefore not corroborated. Considering the bivariate results, no significant correlation was fond to exist between these two variables. Furthermore, in terms of the Multiple Regression results, valuing individual differences failed to significantly predict perceptual breadth.

A possible explanation for this result is that simply valuing individual differences might not necessarily imply that one will have a greater range or scope of diversity perceptions. In fact, the possibility exists that one may choose to only see the positive aspects of diversity, which in essence is not optimal as it becomes very difficult in a social situation to extract the best qualities of each diverse individual. The failure to have even a casual awareness of both positive and negative diversity perspectives, permits one to build an alliance with others on the basis of similarities, while at the same time being to accept and value others for being different to oneself (Miville et al., 2000). Therefore, valuing individual differences does not automatically imply that one has a realistic appreciation of others.

Despite the present study's failure to support the hypothesised linkage between valuing individual differences and perceptual breadth, it did find some support for the notion that maintaining a positive perception towards diversity, along emotional, behavioural and cognitive lines, enables one to differentiate or perceive a phenomenon in terms of multiple aspects (Brewer & Pierce, 2005). Perhaps it can be said that valuing individual differences is a necessary component to achieving a

greater range of diversity perception, insofar as not valuing individual differences would make if far more difficult to diversify one's already negative perception of diversity.

The Relationship between Valuing Individual Differences and Positive Perceptual Depth

A statistically significant relationship was postulated to exist between valuing individual differences (η_2) and positive perceptual depth (η_3). The SEM results confirmed that a significant path existed between the two variables, thus the null hypothesis could be rejected. In terms of the Multiple Regression results, valuing individual differences was found to predict positive perceptual depth. This implies that the ability to understand and find value in the individual differences of people directly increases the degree to which diversity, in itself, is viewed in a positive light. This is extremely important within the organisational environment, as a congruent understanding of other's views should enable one to more accurately infer other's intentions and meanings, facilitating fluent, efficient interaction and helping them utilise their diverse abilities to accomplish their collective goals. According to Human (1996b, p. 58), "such individuals tend to base part of their evaluations of others on (perceived) internal motivation rather than on purely external characteristics". As a result, the reasons they find for the behaviours of others is both more positive and diverse in nature.

Similarly, the present study confirmed Hunsberger, Lea, Pancer, Pratt and McKenzie (1992) avocation that understanding, accepting and appreciating the diversity of others may reflect the neurological or cognitive capacity to think of others in a more multidimensional manner, or a knowledge bias that influences complex thought (i.e., one consciously makes an effort to acknowledge and accept the non-overlapping memberships of their multiple in-groups). The ability to value individual differences thus is said to enable an individual to become more aware of his or her discrepant views, more open to disconfirming information and more appreciative of the similarities and differences shared among people.

Although the study has demonstrated that a definite relationship exists between valuing individual differences and positive perceptual depth, the correlation coefficients of the bivariate relationship, illustrated valuing individual differences had failed to correlate significantly with positive perceptual depth. One reason for this pertains to Riordan and Shore's (1997) statement that the individual, by nature, is instinctively attracted to a social unit that is composed of others whose demographic profiles are consistent with the categories that the individual has chosen to categorize him or herself. For example, if an individual uses gender as a category for self-definition, the individual may be most attracted to and satisfied in groups that are composed of the same gender category because the group contains an important part of the individual's existing self-identity (Tsui et al., 1992).

Thus, a situational setting such as a work group, in which an individual is dissimilar to a majority of the members, may make the individual uncomfortable, because of the increased awareness that the characteristics of his or her social identity are different from others, resulting in more negative attitudes and behaviours (Sanchez-Burks et al., 2009). Likewise, the similarity-attraction paradigm proposes that similarity between individuals within a group leads to a high degree of interpersonal attraction among members (Byrne, 1971). This interpersonal attraction in turn, is thought to be positively related to many group-related processes, such as cohesiveness, desire to maintain group affiliation, friendship ties, and communication (Riordan & Shore, 1997). Consequently, if an individual is dissimilar to other work group members, little attraction will exist, which in turn, can negatively affect the individual's attitude towards that group. One possible solution to this problem again resides in the need to promote positive diversity experiences within the work environment.

If, according to Crush (2008, p. 4), "the single biggest mitigator of negative stereotyping is personal familiarity", then developing a more complex perception of diversity, and hence, a more positive attitude towards diversity, involves the need to become more socially familiar with diverse individuals. The more socially familiar one becomes with diverse members within the organisation, the more likely their attitude towards these individuals will begin to change positively as they begin to take note of the shared similarities while understanding and appreciating their existing differences.

The Relationship between Valuing Individual Differences and Tolerance towards Affirmative Action

A significantly positive relationship was postulated to exist between valuing individual differences (η_2) and tolerance towards affirmative action (η_4). The results of the SEM revealed that the path coefficients were significant and thus the null hypothesis was rejected. Moreover, the Correlation coefficient revealed that a practically significant relationship exists between these two constructs ($r > .30$).

According to Montei et al. (1995), one's value ascribed to individual differences, and invariably one's attitude towards diversity, refers to the degree to which one is able to accept minorities, primarily women and the disabled, as well as the various racial groups in the workplace. This includes acceptance of such individuals as co-workers, supervisors and any other persons in work-related roles. Moreover, valuing individual differences includes the degree, to which one accepts the increased hiring of minorities. The present study has good reason to support and confirm Moneti et al's (1996), statement and is particularly prevalent as it implies that the more one is able to value others individuality, the more likely one will be able to understand and accept affirmative action in the workplace.

The Relationship between Valuing Individual Differences and Diversity as a Competitive Advantage

A significantly positive relationship was postulated to exist between valuing individual differences (η_2) and diversity as a competitive advantage (η_5). Again, the SEM results revealed that the path coefficients were significant between these two constructs and thus the null hypothesis was rejected. In addition, the sign associated with this significant β parameter estimate was consistent with the nature of the relationship hypothesised to exist between these latent variables. Moreover, the Correlation coefficient revealed that a practically significant relationship exists between these two constructs ($r > .30$).

Diversity has serious implications for organisations; when managed properly a diverse workforce that has the ability to find value in the individuality of others, leads to a competitive advantage for the organisation (Montei et al., 1996). This study has

clearly confirmed this statement and further supports the viewpoint of Cox and Blake (as cited by Rentsch et al., 1995, p. 3) who suggest that valuing diversity in organisations should include all cultural groups respecting, valuing and learning from one another, integrating cultural groups across the organization, all organizational members identifying with organizational goals, and eliminating prejudice and discrimination. The greater value one can ascribe to diversity, the more likely one will be able to find value in the individual differences of others. Differences in this instance not only emphasising demographics such as age, race or gender, nationality or religion, but also individual differences such as skills, language and experiences. This in turn implies that one will thus be able to comprehend the added value diverse perspectives, skills, abilities and even personalities could bring to the organisation that will encourage proactive behaviour in terms of capitalising on individual differences, and is therefore likely to follow with a heightened sense of unity, respect and understanding and enhanced organisational performance (Johnson & Johnson, 2006).

5.3.4.4 Possible Modification to Structural Model

Overall, it was found that the proposed structural model fits the data reasonably well. Examination of the modification indices calculated for the Beta matrix, suggested that there was no additional paths between any endogenous latent variables that would significantly improve the fit of the proposed structural model. However, the modification indices calculated for the Γ matrix, identified one additional path from negative perceptual depth to tolerance towards affirmative action, which might improve the fit of the structural model. Although this particular modification index showed substantial improvement in model fit if modification is made to the model, it was however, not possible to construct a theoretical justification for making any post hoc modification to the model.

5.4 LIMITATIONS OF THE STUDY

Even though there is confidence in the results obtained through the present study, these results need to be presented within the required perspective of the study's

known limitations. It is imperative to acknowledge that all studies in the social sciences are plagued, to a greater or lesser degree, by limitations. By no means was the present study exempt. The most pertinent of these limitations are thus presented below.

The first apparent limitation pertains to the fact that a non-probability sampling procedure, as well as an *ex post facto* research design, were utilised in the present study. This may have reduced the ability to generalise the results of the findings in the study. A related issue concerning the data gathering process and which is indeed relevant to this study is that of mono-method bias or common method variance. The fact that the source of data for the predictors was not separated from the outcomes implies that it is plausible to argue that the relationships among the study variables could have been inflated as all the latent variables were measured from a single source (i.e., the individual). Moreover, given that a convenient sample was used, it is further plausible to propose that subjects who volunteered to participate in the study differed, with regard to the variables included in the study, to those that did not volunteer. It may thus be noted that there is a possibility that the respondents were not entirely characteristic of all employees and that the conclusions drawn may differ somewhat, should a subsequent study be conducted on a different population. However, given the nature of the constructs included in the study, as well as the theoretical reasons for the relationships, it was necessary to assess these variables from the perspective of a single individual. Consequently, control for method variance could not be achieved as individual ratings are the theoretically appropriate means of assessing attitude towards diversity, emotional intelligence and diversity complexity.

A further limitation to the study concerns the cross-sectional (correlational) nature of the data. Since the data was gathered at one (single) point in time, the internal validity of the study is threatened as causal direction inferences is prohibited, and which may have exacerbated same-source or common method bias. Longitudinal designs are suggested as an alternative to cross-sectional designs as these designs are better for testing causality. One concern is that readers unfamiliar with SEM may erroneously conclude that causal relationships can be inferred from the results. One should always keep in mind that proof of causality cannot be made from statistical results alone. Only sound theory, appropriate experimental designs, and corroborating statistical

results can permit one to make causal inferences. There is evidently a need to move away from the practice of measurement at a single point in time, especially with regard to attitude towards diversity within organisations.

Another limitation of this study pertains to error variance. A major source of error variance may have been the many moderating variables that affect the relationships between the variables under investigation in this study. For example, personality, biographical variables, degree of contact, social identity complexity, organisational influences and influences could have easily have had hidden influences of unknown size on the results of the relationships between the variables under investigation in this study. Important workplace factors, such as organisational culture, were not controlled for in the analyses. Consequently, one needs to admit that knowledge and understanding of attitudes towards diversity in organisations is still largely incomplete.

The operationalisation of diversity complexity (RTDI, Hostager and De Meuse, 2002) is perhaps another limitation of the current study. This measure presented a few difficulties when capturing, analysing and reporting the data. One of the concerns regarding this measuring instrument pertains to Perceptual Breadth. This particular sub-scale unfortunately is only defined in terms of two items, namely cell breadth and category breadth. This is a limitation of the study as the stipulated criteria presented in this study, clearly recommends that at least four items are needed to successfully define a factor. Consequently, factor analysis could not be performed on this measure of diversity complexity. A possible explanation for the lack of significant linkages between emotional intelligence and perceptual breadth, as well as between valuing individual differences and perceptual breadth, was considered to be the inability of the study to successfully operationalise the perceptual breadth latent variable. A different study, using a different measuring instrument to measure diversity complexity, may obtain more significant results when investigating these various direct relationships.

Despite the fact that certain limitations pertaining to the present study were uncovered, the research still succeeded in making important theoretical contributions towards the field of diversity and organisational psychology in particular. It is argued that novel theoretical links were conceptualised and evaluated in this study, with the

aim of contributing valuable knowledge to the apparent lack of South African literature related to the chosen constructs of this study.

5.5   SUGGESTIONS FOR FUTURE RESEARCH

The results of the study provided valuable insight into the relationship between attitude towards diversity, emotional intelligence and diversity complexity. It is foreseen that this study will hopefully serve as a stimulus for other researchers to further explore these relationships on both a conceptual and practical level. There are however, several recommendations regarding the methodology that should be used in future studies. The complete proposed integrated model needs to be empirically tested on other samples. Furthermore, in order to make more convincing casual inferences, it is suggested that a longitudinal study of the proposed conceptual model should be undertaken. In addition to this, future studies should avoid using a convenient sample, and rather opt for a sample that is more representative of the general South African organisational population. A cross-validation study on a sample of different respondents taken from the same population should be examined in order to assess the stability of the model.

What is further recommended is that future research should consider the possibility of expanding the model, by formally incorporating additional latent variables like social identity complexity, direct and indirect cultural experiences, values and history of conflict, in an attempt to explain additional variance in attitude towards diversity. The idea that differences in attitude towards diversity is as a result of differences in emotional intelligence and diversity complexity alone, is highly unlikely. Moreover, although attitudes go hand-in-hand with emotions, it is unlikely that increasing one's level of emotional intelligence alone, will solely contribute towards a more positive attitude towards diversity. Therefore, incorporating latent variables such as degree of exposure to diversity or "contact" and personality (particularly agreeableness and openness to experience) should be considered. In addition, future research should also consider combining both individual and situational factors in the same study.

On a conceptual level, greater refining of the relationships between the constructs as well as the measuring instruments used in this study is required. With regard to the

complexity of diversity perceptions, measures such as the RTDI which was used in this study, should be investigated further in terms of the most recent research undertakings using this particular instrument (see Hostager & De Meuse, 2008), in order to explore gains in the complexity of individual diversity perceptions, yielding measures of perceptual depth and breadth. Furthermore, additional research is needed to establish explicit and systematic connections between the diversity perceptions people bring to a setting, the nature and contents of the diversity learning experiences to which one is exposed to, the effects of these experiences on one's diversity perceptions, and the role these perceptions play in guiding an individuals behaviour and influencing organisational outcomes. Future studies should further explore the implication of incorporating social identity complexity into the model as it is thought to yield more significant results as it may allow for more accurate explanations of how one's attitude towards diversity is developed and possibly even maintained. Moreover, the Cultural Diversity Belief Scale (Rentsch et al., 1995) might not have been the most suitable measure to use for the assessment of the attitude towards diversity construct, as it might be considered to be slightly outdated. The use of more recent measures, such as the UDO (Milville et al., 2000) should be investigated as an alternative.

Specifically in South Africa, more research needs to be conducted in the field of diversity attitudes. Although much research has been conducted on diversity management, there is a lack of South African research that links diversity with attitudes and emotions. Research in this particular domain is of importance as organisations are increasingly finding the need to design training programmes to enhance and develop attitudes and skills that are vital to successful interactions with others. Thus identifying characteristics of those who maintain a more positive attitude towards diversity and training managers in skills related to those characteristics may ultimately improve contextual organisational performance.

5.6   PRACTICAL IMPLICATIONS OF THE STUDY AND CONLUDING REMARKS

In order to compete in an increasingly diverse environment and maintain competitive advantage from a human resource perspective, organisations must ensure that every

individual comprising their workforce is able to interact successfully with diverse others. By far the strongest practical contribution of this study rests on the fact that if management can identify the positive and negative aspects spanning the realms of emotion, cognition and behaviour, organisations can effectively assist their employees in developing and enhancing skills that are vital to promoting successful interaction in the workplace, thereby improving organisational outcomes. Diversity is a growing reality and practitioners need to be able to manage this phenomenon successfully with a systematic approach to mitigate the possible negative outcomes originating from individual differences. It would appear that in many organisational settings, people's negative attitude towards diversity is the dynamic factor that hinders many opportunities for positive contact within the workplace.

The strongest practical implication of the present study has to do with the fact that attitudes, emotions and perceptions are all malleable concepts that can be altered, developed or 'fine-tuned'. The implication of this study is that management should establish explicit systematic connections between the attitudes, emotions and diversity perceptions individual's bring to a particular setting and the role they play in guiding behaviour and influencing organisational outcomes. The ability to discover multidimensionality within the individual's environment will enable him or her to become more open and flexible to the process of differentiation and integration, which, in turn, would lead to the management of inappropriate stereotypes. Individuals with the skills to counter inappropriate stereotypes and negative communication in the work situation will facilitate greater multidimensionality in themselves as well as in the person they are interacting with. This, in turn, may lead to communication enhancement and personal empowerment, as well as an appreciation of differences and an understanding of similarities.

To the extent that a person is attuned to his or her own feelings and to the feelings of others, and is able to cognitively manage, integrate emotions and reason such that emotions are used to facilitate cognitive processes, begs the question as to whether heightened levels of EI may contribute to a more positive attitude towards diversity. This study demonstrated that there is indeed a significant relationship between emotional intelligence and attitude towards diversity. The implication for organisations is that they should provide organisational members with adequate

opportunities for education, training and development in emotional intelligence. This type of development could enhance members understanding, appreciation and acceptance of other's individuality. Thus prompting an organisational culture cultivated in an environment where cultural awareness, sensitivity, fairness and integrity prosper.

REFERENCES

Adams, H., & Moodley, K. (1993). *The Negotiated Revolution*. Johannesburg: Jonathan Ball Publishers.

Afolabi, O.A., & Ehigie, B.O. (2005). Psychological diversity and team interaction processes: A study of oil-drilling work teams in Nigeria. *Team Performance Management, 11*(7/8), 280-301.

Aghazadeh, S. (2004). Managing workforce diversity as an essential resource for improving organizational performance. *International Journal of productivity and Performance Management*, *53*(6), 521-531.

Allen, C.T., Machleit, K.A., & Kleine, S.S. (1992). A comparison of attitudes and emotions as predictors of behavior at diverse levels of behavioral experience. *Journal of Consumer Research, 18*(3), 493-504.

Allport, G.W. (1954). *The Nature of Prejudice*. Reading, MA: Addison-Wesley.

Allport, G. W. (1979). *The Nature of Prejudice.* Cambridge, MA: Perseus Books.

Anastasi, A., & Urbina, A. (1997). *Psychological Testing*. United States of America: Prentice-Hall.

Antonakis, J., Ashkansy, N.M., & Dasborough, M.T. (2009). Does leadership need emotional intelligence? *Leadership Quarterly, 20*, 247-261.

Ashkanasy, N.M., & Daus, C.S. (2004). Rumors of the death of emotional intelligence in organizational behaviour are vastly exaggerated. *Journal of Organizational Behavior, 26*(4), 441-452.

Ashkanasy, N.M., & Hooper, G. (1999). *Perceiving and managing emotion in the workplace: A research agenda based on neurophysiology*. Paper presented at

the Third Australian Industrial and Organisational Psychology Conference. Brisbane, Australia.

Austin, E.J., Saklofske, D.H., & Egan, V. (2005). Personality, well-being and health correlates of trait emotional intelligence. *Personality and Individual Differences, 38*, 547-558.

Babbie, E., & Mouton, J. (2006). *The Practice of Social Research*. Cape Town: Oxford University Press Southern Africa.

Badenhorst, A., & Smith, D. (2007). Misconceptions about emotional intelligence: Deploying emotional intelligence in one's life dimensions. *South African Journal of Human Resource Management, 5*(3), 1-10.

Bagby, R.M., Taylor, G.J., & Parker, J.D.A. (1994). The twenty-item Toronto alexithymia scale – II: Convergeny, discriminant and concurrent validity. *Journal of Psychosomatic Research, 38*(1), 33-40.

Bagshaw, M. (2000). Emotional Intelligence – training people to be affective so that they can be effective. *Industrial and Commercial Training*, *32*(2), 61-65.

Bar-On, R. (1997). Development of the BarOn EQ-i: a measure of emotional and social intelligence. Paper presented at the 105th Annual Convention of the American Psychological Association in Chicago.

Bar-On, R., Brown, J.M., Kirkcaldy, B.D., & Thome, E.P. (2000). Emotional expression and implications for occupational stress; an application of the Emotional Quotient Inventory (EQ-i). *Personality and Individual Differences, 28*, 1107-1118.

Bar-On, R., & Parker, J.D.A. (2000). *The Handbook of Emotional Intelligence: theory, development, assessment and application at home, school, and in the workplace.* San Francisco: Jossey Bass.

Boyatzis, R.E., Goleman, D., & Hay/McBer. (1999). *Emotional competence inventory.* Boston: Hay Group.

Boyatzis, R.E., Goleman, D., & Rhee, K. (2000). Clustering competence in Emotional Intelligence. Insights from the Emotional Competence Inventory (ECI). In R. Bar-On & D.A. Parker (Eds.), *Handbook of Emotional Intelligence*. San Francisco: Jossey – Bass.

Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin, 17*, 475–482.

Brewer, M.B., & Gardner, W. (1996). Who is this "we"? Levels of collective identity and self representations. *Journal of Personality and Social Psychology, 71*(1), 83-93.

Brewer, M.B., Pierce, K.P. (2005). Social Identity Complexity and Outgroup Tolerance. *Social Psychology Bulletin*, *31*(3), 1-10.

Briggs, S.R., & Cheek, J.M. (1986). The role of factor analysis in the development and evaluation of personality scales. *Journal of Personality, 54*(1), 107-148.

Brown, R. (1995). *Prejudice: Its social psychology*. Oxford: Blackwell.

Brown, R., & Hewstone, H. (2005). An integrative theory of intergroup contact. In M. Zanna (Ed.), *Advances in Experimental Social psychology* (pp. 255–343). San Diego, CA: Academic Press.

Brown, R. and Brooks, I. (2002). Emotion at work: identifying the emotional climate of night nursing. *Journal of Management in Medicine, 16*(5), 327-44.

Byrne, D.E. (1971). *The Attraction Paradigm*. New York: Academic Press.

Byrne, B.M (2001). Structural *Equation Modeling with AMOS: Basic Concept, Applications and Programming.* Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.

Carmeli, A. (2003). The relationship between emotional intelligence, work attitudes, behavior and outcomes: An examination among senior managers. *Journal of Managerial Psychology, 18*(8), 788-813.

Carr-Ruffino, N. (2005). *Making Diversity Work.* New Jersey: Pearson Education, Inc.

Caruso, D. (2004). Emotional Intelligence: Issues and Common Misunderstandings: Defining the Inkblot called Emotional Intelligence. http://www.eiconsortium.org. Accessed on the 20 August, 2009.

Caruso, D.R., Mayer, J.D., & Salovey, P. (2002). Relation of an Ability Measure of Emotional Intelligence to Personality. *Journal of Personality Assessment*, *79*(2), 306-320.

Caruso, D.R., & Salovey, P. (2004). *The Emotional Intelligent Manager.* Jossey-Bass: San Francisco.

Chatman, J. A., & Flynn, F. J. (2001). The influence of demographic heterogeneity on the emergence and consequences of cooperative norms in work teams. *Academy of Management Journal*, *44*, 956-974.

Chattopadhyay, P., Tluchowska, M., & George, E. (2004). Identifying the ingroup: A closer look at the influence of demographic dissimilarity on employee social identity. *Academy of Management Review*, *29*(2), 180-202.

Cherniss, C., & Goleman, D. (2001). Training for emotional intelligence: A model. In C. Cherniss & D. Goleman (Eds.), *The Emotionally Intelligent Workplace* (pp. 3-12). San Francisco: Jossey-Bass.

Ciarrochi, J.V., Chan, A.Y.C., & Caputi, C.P. (2000). A critical evaluation of the emotional intelligence construct. *Personality and Individual Differences, 28*, 539-561.

Cohen, G.L., & Garcia, J. (2005). I am us: Negative stereotypes as collective threats. *Journal of Personality and Social Psychology, 89*(4), 566-582.

Cohen, L. L., & Swim, J. K. (1995). The differential impact of gender ratios on women and men: Tokenism, self-confidence and expectations. *Personality and Social Psychology Bulletin, 21,* 876–884.

Cottrell, C.A., & Neuberg, S.L. (2005). Different emotional reactions to different groups: A sociofunctional threat-based approach to "prejudice". *Journal of Personality and Social Psychology, 88*(5), 770-789.

Cox, T.H. (1994). *Cultural Diversity in Organizations: Theory, Research and Practice*. San-Francisco: Berrett-Koehler.

Cox, T.H., & Blake, S. (1991). *Managing Cultural Diversity: Theories, reseach and practice*. San Francisco: Berrett-Koehler.

Crush, J. (2008). Immigration, Xenophobia and Human Rights in South Africa [Electronic Version]. Southern African migration Project: Migration Policy Series No. 22. *http://www.queensu.ca/policyseriess.*

De Meuse, K.P., & Hostager, T.J. (2001). Developing an instrument for measuring attitudes toward and perceptions of workplace diversity: An initial report. *Human Resource Development Quarterly, 12*(1), 33-52.

Davies, M., Stankov, L., & Roberts, R.D. (1998). Emotional Intelligence: In search of an elusive construct. *Journal of Personality and Social Psychology, 75*, 989-1015.

Dawda, D., & Hart, S.D. (2000). Assessing emotional intelligence: reliability and validity of the Bar-On Emotional Quotient Inventory (EQ-i) in university students. *Personality and Individual Difference, 28*, 797-812.

DeGuara, D., & Stough, C. (2002). *Examining the relationship between emotional intelligence and workplace performance.* Organisational Psychology Research Unit: Swinburne University, Australia.

Derksen, J., Krammer, I., & Katzko, M. (2002). Does a self-report measure of emotional intelligence assess something different than general intelligence? *Personality and Individual Differences, 32*, 37-48.

Diamantopoulos, A., & Siguaw, J.A. (2000). *Introducing LISREL.* London: Sage Publications.

Dijker, A.J.M. (1987). Emotional reactions to ethnic minorities. *European Journal of Social Psychology, 17*, 305-325.

Dittes, J. E. (1959). Attractiveness of a group as a function of self-esteem and acceptance by group. *Journal of Abnormal and Social Psychology, 59,* 77–82.

Downey, L.A., Papageorgiou, V., & Stough, C. (2006). Examining the relationship between leadership, emotional intelligence and intuition in senior female managers. *Leadership and Organisation Development*, *27*, 250-264.

Dulewicz, V., & Higgs, M. (1999). Can emotional intelligence be measured and developed? *Leadership and Organization Development Journal, 20*(5), 242-252.

Dulewicz, V., & Higgs, M. (2000). Emotional intelligence: A review and evaluation study. *Journal of Managerial Psychology, 15*(4), 341–372.

Duncan, N. (2003). 'Race' talk: discourses on 'race' and racial difference. *International Journal of Intercultural Relations, 27*(2), 135-156.

Elfenbein, H.A., & Ambady, N. (2002). Predicting workplace outcomes from the ability to eavesdrop on feelings. *Journal of Applied Psychology, 87*(5), 963-971.

Ellemers, N., Spears, R., & Doosje, B. (1997). Sticking together or falling apart: In-group identification as a psychological determinant of group commitment versus individual mobility. *Journal of Personality and Social Psychology, 72*, 617-626.

Ellis, C., & Sonnenfeld, J.A. (1994). Diverse approaches to managing diversity. *Human Resource Management, 33*, 79-109.

Ely, R.J., & Roberts, L.M. (2008). Shifting frames in team-diversity research: From difference to relationships. In A.P., Brief (Ed.), *Diversity at Work* (pp. 175-201). Cambridge: Cambridge University Press.

Fishbein, M. (1967). *Readings in Attitude Theory and Measurement*. United States of America: John Wiley & Sons, Inc.

Fiske, S.T., & Lee, T.L. (2008). Stereotypes and prejudice create workplace discrimination. In A.P. Brief (Eds.), *Diversity at Work*. Cambridge: Cambridge University Press.

Fiske, S. T., & Taylor, S. E. (1991). *Social cognition*. San Francisco: McGraw-Hill.

Florack, A., Bless, H., & Pointkowski, U. (2003). When do people accept cultural diversity?: Affect as determinant. *International Journal of Intercultural Relations, 27*(4), 627-640.

Frable, D.E., Blackstone, T., & Scherbaum, C. (1990). Marginal and mindful: Deviants in social interaction. *Journal of Personality and Social Psychology, 59*(1), 140-149.

Franchi, V. (2003). Across or beyond the racialized divide? Current perspectives on race', racism and 'intercultural' relations in 'post-apartheid' South Africa. *International Journal of Intercultural Relations, 27*, 125-133.

Franchi, V., & Swart, T.M. (2003). From apartheid to affirmative action: the use of 'racial' markers in past, present and future articulations of identity among South African students. *International Journal of Intercultural Relations, 27*(4/5), 209-236.

Fuertes, J.N., Miville, M.L., Mohr, J.J., Sedlacek, W.E., & Gretchen, D. (2000). Factor structure and short form of Miville-GuzmanUniversity-Diversity Scale. *Measurement and Evaluation in Counseling and Development, 33*(4), 157-169.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences.* New York: Basic Books.

Gardner, L., & Stough, C. (2002). Examining the relationship between leadership and emotional intelligence in senior level managers. *Leadership & Organization development Journal, 23*(2), 68-78.

Gignac, G. E. (2005). Determining the dimensionality of a self-report emotional intelligence inventory (SUEIT) and testing its unique factorial validity. Unpublished doctoral dissertation. Swinburne University of Technology: Melbourne, Australia.

Gignac, G.E. (2008). *Genos Emotional Intelligence Inventory: Technical Manual.* Unpublished manuscript, Genos Head Office, Sydney, Australia.

Gilbert, J.A., & Ones, D.S (1999). Development of the diversity practices survey. *Psychological Reports*, *85*(1), 101-104.

Goleman, D. (1995). *Emotional intelligence: why it can matter more than IQ*. London: Bloomsbury.

Goleman, D. (1998). *Working with emotional intelligence*. London: Bloomsbury Publishing.

Goleman, D. (2001). Emotional intelligence: issues in paradigm building. In G. Cherniss, & D. Goleman (Eds.), *The Emotionally Intelligent Workplace* (pp. 13-26). San Francisco: Jossey-Bass.

Goleman, D., Boyatzis, R., & McKee, A. (2002). *The New Leaders: Transforming the Art of Leadership into the Science of Results*. London: Little Brown.

Gravetter, F.J., & Forzano, L.B. (2006). *Research Methods for the Behavioral Sciences* (2nd ed.). United States of America: Thomson Wadsworth.

Gross, J.J. (1998). The emerging field of emotion regulation: An integrated review. *Review of General Psychology, 2*(3), 271-299.

Hair, J.F. Jr., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). *Multivariate Data Analysis* (5th ed). Upper Saddle River, New Jersey: Prentice Hall.

Harvey, C.P., & Allard, M.J. (2005). *Understanding and Managing Diversity: Readings, Cases and Exercises.* New Jersey: Pearson Prentice Hall.

Hayes, J., & Allinson, C.W. (1994). Cognitive styles and its relevance for management practice. *British Journal of Management, 5*, 53-71.

Hay/McBer (2002). *Emotional Competence Inventory Technical Manual*. Boston: Hay/McBer Group.

Heine, S.J., Proulx, T., & Vohs, K.D. (2006). The meaning maintenance model: On the coherence of social motivations. *Personality and Social Psychology Review, 10*(2), 88-110.

Hogg, M., & Turner, J.C. (1985). Interpersonal attraction, social identification and psychological group formation. *European Journal of Social Psychology, 15*, 51-66.

Homan, A.C., van Knippenberg, D., Van Kleef, G.A., & De Dreu, C.K.W. (2007). Bridging Faultlines by Valuing Diversity: Diversity Beliefs, Information Elaboration, and Performance in Diverse Work Groups. *Journal of Applied Psychology, 92*(5), 1189-1199.

Hostager, T.J., & De Meuse, K.P. (2002). Assessing the complexity of diversity perceptions: Breadth, depth and balance. *Journal of Business and Psychology*, *17*(2), 189-206.

Hostager, T.J., & De Meuse, K.P. (2008). The effects of a diversity learning experience on positive and negative diversity perceptions. *Journal of Business and Psychology, 23*(2), 127-139.

Hoyle, R.H. (1995). *Structural Equation Modeling: Concepts, Issues and Applications*. Thousand Oaks, California: Sage Publications.

Hu, L.T., & Bentler, P.M. (1995). Evaluating model fit. In R.H. Hoyle (Eds.), *Structural Equation Modeling: Concepts, Issues and Applications*. Thousand Oaks, California: Sage Publications.

Human, L. (1996a). Managing workforce diversity: a critique and example from South Africa. *International Journal of Manpower*, *17*(4/5), 46-64.

Human, L. (1996b). *Contemporary Conversations*: *Understanding and managing diversity in the modern world*. Senegal: Gorée Institute.

Human, L. (2005). *Current issues and practices for global diversity*. Paper presented at the American Society for Training and Development global conference and exhibition. Cape Town, February 2-4.

Humphrey, R. H., Sleeth, R. G. & Kellet, J. B. (2001). *Emotional competence, complex task choice, and leadership emergence.* Unpublished Paper, Virginia Commonwealth University, School of Business.

Hunsberger, B, Lea, J., Pancer, S.M., Pratt, M., & McKenzie, B. (1992). Making life complicated: Prompting the use of integratively complex thinking. *Journal of Personality, 60*(1), 95-114.

Jackson, S.E., Brett, J.F., Sessa, V.I., Cooper, D.M., Julin, J.A., & Peyronnin, K. (1991). Some differences make a difference: Individual dissimilarity and group heterogeneity as correlates of recruitment, promotions, and turnover. *Journal of Applied Psychology, 76*, 675-689.

Janovics, J., & Christiansen, N.D. (2001). Emotional intelligence at the workplace. Paper presented at the 16th Annual Conference of the Society of Industrial and Organizational Psychology, San Diego, CA, April.

Jehn, K.A., Northcraft, G.B., & Neale, M.A. (1999). Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. *Administrative Science Quarterly, 44*, 741-763.

Johnson, D.W., & Johnson, F.P (2006). *Joining Together: Group Theory and Group Skills,* (9th ed.). Boston: Pearson International Edition.

Jonker, C.S., & Vosloo, C. (2008). The psychometric properties of the Schutte Emotional Intelligence Scale. *South African Journal of Industrial Psychology, 34*(2), 21-30.

Jordan, P. J., & Troth, A. C. (2004). Managing emotions during team problem solving: Emotional intelligence and conflict resolution. *Human Performance, 17*, 195-218.

Jöreskog, K.G. (1993). Testing structural equation models. In K.A.. Bollen & J.S. Long (Eds.), *Testing Structural Equation Models*. Newbury Park, CA: Sage

Jöreskog, K.G., & Sörbom, D. (1993). *LISREL 8: Structural Equation Modeling with the SIMPLIS Command Language*. United States of America: Scientific Software International, Inc.

Jöreskog, K.G., & Sörbom, D. (1996). *LISREL 8: User's reference guide*. Chicago: Scientific Software International.

Kelloway, E.K. (1998). *Using LISREL for Structural Equation Modeling: A Researcher's Guide*. United States of America: SAGE.

Kenny, T. (1994). From Vision to Reality through Values. *Management Development Review, 7*(3), 17-20.

Kerlinger, F.N. (1973). *Foundations of Behavioural Research* (2nd ed.). United States of America: Holt, Rinehart and Winston, Inc.

Kerlinger, F.N., & Lee, H.B. (2000). *Foundations of Behavioural Research* (4th ed.). Fort Worth: Harcourt College.

Konrad, A.M., & Linnehan, F. (1995). Race and sex differences in line managers' reactions to equal employment opportunity and affirmative action interventions. *Group & Organization Management, 20*(4), 409-439.

Kossek, E., & Zonia, S. (1993). Assessing diversity climate: A field study of reactions to employer efforts to promote diversity. *Journal of Organizational Behavior*, *14*, 61–81.

Licht, M.H. (1995). Multiple regression and correlation. In L.G. Grimm & P.R. Yarnold (eds.), *Reading and Understanding Multivariate Statistics* (pp. 19-64). Washington, D.C: American Psychological Association.

Liebkind, K., Haaramo, J., & Jasinskaja-Lahti, I. (2000). Effects of contact and personality on intergroup attitudes of difference professionals. *Journal of Community and Applied Social Psychology, 10*(3), 171-181.

Lohr, S.L. (1999). *Sampling: Design and Analysis*. United States of America: Brooks/Cole Publishing Company.

Malhorta, N.K. (2004). *Marketing research: An applied orientation* (4th Ed.). Upper Saddle River, NJ: Pearson Education Inc.

Martin, R., Hewstone, M., & Martin, P. (2003). Resistance to persuasive messages as a function of majority and minority source status. *Journal of Experiential Social Psychology, 39*, 585-593.

Mayer, J.D., Caruso, D.R., & Salovey, P. (1999). *Instruction Manual for the MSCEIT: Mayer Salovey Curuso Emotional Intelligence Test*, Multi-Health Systems, Toronto.

Mayer, J.D., Caruso, D.R., & Salovey, P. (2000). Selecting a measure of emotional intelligence: The case for ability scales. In R. Bar-On, & J.D.A. Parker (Eds.). *The Handbook of Emotional Intelligence: Theory, Development, Assessment and Application at Home, School and in the Workplace*. San Francisco: Jossey-Bass.

Mayer, J.D., & Salovey, P. (1993). The intelligence of emotional intelligence. *Intelligence*, 17, 433-42.

Mayer, J.D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey, & D. Sluyter (Eds.), *Emotional development and emotional intelligence: implications for educators* (pp. 3–31). New York: Basicbooks, Inc.

Mayer, J.D., Salovey, P., & Caruso D.R. (2000). Models of emotional intelligence. In R.J. Sternberg (Ed.). *Handbook of Intelligence*. (pp. 396-420) New York: Cambridge.

Mayer, J.D., & Salovey, P., & Caruso, D.R. (2002). *The Mayer, Salovey, Caruso Emotional Intelligence Test (MSCEIT): Users' manual.* Toronto: Multi-Health Systems.

McCrae, R.R., & Costa, P.T. (1997). Personality trait structure as a human universal. *American Psychologist, 52*(4), 509-16.

McFarlin, D.B., Coster, E.A., & Pretorius, C.M. (1999). South African management development in the twenty first century: Moving toward an Africanized model. *Journal of Management Development, 18*(1), 63-78.

Mels, G. (2003). *A workshop on structural equation modelling with LISREL 8.54 for Windows*. Chicago: Scientific Software International.

Miville, M.L., Gelso, C.J., Pannu, R., Liu, W., Touradji, P., Holloway, P., & Fuertes, J.N. (1999). Appreciating similarities and valuing differences: The Miville-Guzman Universality Diversity Scale. *Journal of Counseling Psychology*, 46(3), 291-307.

Montei, M.S., Adams, G.A., & Eggers, L.M. (1996). Validity of scores on the Attitudes towards Diversity Scale (ATDS). *Educational and Psychological Measurement*, 56(2), 293-302.

Mor-Barak, M.E., Cherin, D.A., & Berkman, S. (1998). Organizational and personal dimensions in diversity climate: Ethnic and gender differences in employee perceptions. *Journal of Applied Behavioral Science, 34*(1), 82-104.

Muchinsky, P.M., Kriek, H.J., & Schreuder, D. (2005). *Personnel Psychology* (3rd ed.). Cape Town: Oxford University Press.

Murphy, A., & Janeke, H.C. (2009). The relationship between thinking styles and emotional intelligence: An exploratory study. *South African Journal of Psychology, 39*(3), 357-375.

Nel, H., & De Villiers, W.S. (2004). The relationship between emotional intelligence and job performance in a call centre environment. *SA Journal of Industrial Psychology, 30*(3), 75-81.

Nunnally, J.C. (1967). *Psychometric Theory.* New York: McGraw-Hill.

Nunnally, J.C. (1972). *Introduction to Psychological Measurement.* NY: McGraw-Hill.

Nunnaly, J.C. (1978). *Psychometric Theory* (2nd Ed.). New York: McGraw-Hill.

Nyambegera, S.M. (2002). Ethnicity and human resource management practices in sub-Saharan Africa: the relevance of the managing diversity discourse. *International Journal of Human Resource Management, 13*(7), 1077-1090.

Offermann, L. R., Bailey, J. R., Vasilopoulos, N. L., Seal, C., & Sass, M. (2004). The relative contribution of emotional competence and cognitive ability to individual and team performance. *Human Performance, 17*, 219-243.

Olukemi O., Sawyerr, O.O., Strauss, J., & Yan, J. (2005). Individual value structure and diversity attitudes: The moderating effects of age, gender, race, and religiosity. *Journal of Managerial Psychology, 20*(6), 498-521.

Oosthuizen, F.J., Coetzee, J.E., Kruger, J.M., & Meyer, D. (2005). *An Overview of Human Resource Management: A South African Perspective.* Roodepoort: Future Dreams Consultants.

Oyserman, D., Kemmelmeier, M., Fryberg, S., Brosch, H., & Hart-Johnson, T. (2003). Racial-ethnic self-schemas. *Social Psychology Quarterly, 66*, 333-347.

Pallant, J. (2007). *SPSS Survival Manual: A step-by-step guide to data analysis using SPSS for Windows* (Version 15) (3rd ed.). Australia: Allen & Unwin.

Palmer, B., Gardner, L., & Stough, C. (2003). The relationship between emotional intelligence, personality and effective leadership. Paper presented at the *5th Australia Industrial and Organisational Psychology Conference*. Melbourne, June 26-29.

Palmer, B., & Stough, C. (2001). *Workplace SUEIT: Swinburne University Emotional Intelligence Test – Descriptive Report*, Organisational Psychology Research Unit, Swinburne University, Australia.

Palmer, B., & Stough, C. (2002). Swinburne University Emotional Intelligence Test (Workplace SUEIT). Interim technical manual (Version 2). Victoria: Swinburne University of Technology.

Palmer, B.R., Stough, C., Harmer, R., & Gignac, G.E. (2008). Genos emotional intelligence inventory. In C. Stough, D. Saklofske, & J. Parker (Ed.), *Advances in the Measurement of Emotional Intelligence*. New York: Springer.

Percival, G., Crous, F., & Schepers, J.M. (2003). Cognitive potential and job complexity as predictors of flow. *SA Journal of Industrial Psychology, 29*(2), 60-71.

Perez, J.C., Petrides, K.V., & Furnham, A. (2005). Measuring trait emotional intelligence. In R. Schultze and R.D. Roberts (Eds.). *International Handbook of Emotional Intelligence.* Cambridge: Hogrefe & Huber.

Petrides, K.V., & Furnham, A. (2000). On the dimensional structure of emotional intelligence. *Personality and Individual Differences, 29*, 313-320.

Piogett, T.D (2001). A review of methods for missing data. *Educational Research & Evaluation, 7*(4), 353-383.

Pfeifer, S.I. (2001). Emotional intelligence: Popular but elusive construct. *Roeper Review, 23*(3), 138-143.

Plaut, V.C. (2002). Cultural models of diversity in America: The psychology of difference and inclusion. In R.A. Shweder, M. Minow, and H.R. Markus (Eds.), *Engaging Cultural Differences: The Multicultural Challenge in Liberal Democracies* (pp. 365-395). New York: Russel Sage Foundation.

Polzer, J.T., & Caruso, H.M. (2008). Identity negotiation processes amidst diversity. In A.P. Brief (Eds.), *Diversity at Work* (pp. 89-126). Cape Town: Cambridge University Press.

Polzer, J.T., Milton, L.P., & Swann, W.B. (2002). Capitalizing on diversity: Interpersonal congruence in small work groups. *Administrative Science Quarterly, 47*(2), 296-324.

Raghunathan, T.E. (2004). What do we do with missing data? Some options for analysis of incomplete data. *Annual Review of Public Health, 25*(1), 99-117.

Ramsay, L.J. (2005). *Expectations and frustrations: Cross group reactions to workplace affirmative action in South Africa*. Paper presented at the 12th European Congress on Work and Organizational Psychology, Istanbul, Turkey.

Ratzburg, W.H. (2002). Group Cohesiveness. In Ratzburg, W. (Ed.). Organizational Behavior. Parker Educational Books: Illuios

Rentsch, J.R., Turban, D.B., Hissong, A.A., Jenkins, N.M., & Marrs, M.B. (1995). *Development of the Cultural Diversity Beliefs Scale*. Paper presented at the Tenth Annual Conference of the Society for Industrial and Organizational Psychology, Orlando, Florida.

Riordan, C.M., & Shore, L.M. (1997). Demographic Diversity and Employee Attitudes: An Empirical Examination of Relational Demography within Work Units. *Journal of Applied Psychology*, *82*(3), 342-358.

Roberson, Q.M., & Stevens, C.K. (2006). Making Sense of Diversity in the Workplace: Organizational Justice and Language Abstraction in Employees' Accounts of Diversity-Related Incidents. *Journal of Applied Psychology, 91*(2), 379-391.

Roberts, R.D., Zeidner, M., & Matthews, G. (2001). Does emotional intelligence meet traditional standards of intelligence? Some new data and conclusions. *Emotions, 1*(3), 196-231.

Roccas, S., & Brewer, M.B. (2002). Social Identity Complexity. *Personality and Social Psychology Review, 6*(2), 88-106.

Rokeach, M. (1973). *The Nature of Human Values*. New York: Free Press.

Roodt, A. (1999). Diversity – threat or asset? *Management Today, 15*(6), 8-14.

Rosenberg, M.J., & Hovland, C.I. (1960). Cognitive, affective and behavioural components of attitude. In M.J. Rosenberg, C.I. Hovland, W.J. McGuire, R.P. Abelson, & J.H. Brehm, Attitude Organization and Change (pp. 1-14). New Haven, CT: Yale University Press.

Sadri, G., & Tran, H. (2002). Managing your diverse workforce through improved communication. *Journal of Management Development, 21*(3), 227-237.

Salamonson, Y., Everett, B., Andrew, S., Koch, J., & Davidson, P. (2009) Differences in universal diverse orientation among nursing students in Australia. *Nursing Outlook*, *55*(6), 296-302.

Salovey, P. and Mayer, J.D. (1990). Emotional intelligence. *Imagination, Cognition and Personality, 9*(3), 185-211.

Salovey, P. and Mayer, J.D., Goldman, S., Turvey, G., & Palfai, T. (1995). Emotional attention, clarity and repair: Exploring emotional intelligence using the Trait Meta-Mood scale. In J.W. Pennebaker (Eds.). *Emotion, Disclosure and Health* (pp. 125-145). Washington, D.C: American Psychological Association.

Sanchez-Burks, J., Blount, S., & Bartel, C.A. (2009). Performance in intercultural interactions at work: Cross-cultural differences in response to behavioral mirroring. *Journal of Applied Psychology, 94*(1), 216-223.

Sawyerr, O.O., Strauss, J., & Yan, J. (2005). Individual value structures and diversity attitudes: The moderating effects of age, gender, race, religiosity. *Journal of Managerial Psychology, 20*(6), 498-521.

Schafer, J.L. (1999). Multiple imputation: A primer. *Statistical Methods in Medical Research, 8,* 3-15.

Schmitt, N. (1996). Uses and abuses of coefficient alpha. *Psychological assessment, 8*(4), 350-353.

Schumacker, R.E., & Lomax, R.G. (2004). *A Beginner's Guide to Structural Equation Modelling* (2nd Ed.). New Jersey: Routledge.

Schutte, N.S., & Malouff, J.M. (1998). *Measuring Emotional Intelligence and Related Constructs.* Levinston: Mellen Press.

Schutte, N.S., Malouff, J.M., Hall, L.E., Haggerty, D.J., Cooper, J.T., Golden, C.J., & Dornheim, L. (1998). Development and validation of a measure of a measure of emotional intelligence. *Personality and Individual Differences, 25,* 167-177.

Sevinc, L. (2001). The effect of emotional intelligence on career success: Research on the 1990 graduates of Business Administration Faculty of Istanbul University. Unpublished Master's Thesis. Istanbul: Istanbul University.

Seymen, O.A. (2006). The cultural diversity phenomenon in organisations and different approaches for effective cultural diversity management: a literary review. *Cross Cultural Management: An International Journal, 13*(4), 296-315.

Spangenberg, H.H., & Theron, C. (2004). Development of a Questionnaire for Assessing Work Unit Performance. *SA Journal of Industrial Psychology, 30 (1), 19-28.*

STATSSA (2009). *Mid-year population estimates, South Africa: 2008. Accessed on the   10th   Feb   2009.* http://www.statssa.gov.za/publications/P0302/P03022008.pdf

Stauffer, J. M., & Buckley, M. R. (2005). The existence and nature of racial bias in supervisory ratings. *Journal of Applied Psychology, 90*(3), 586–591.

Strauss, J.P., Connerley, M.L.,& Ammermann, P.A. (2003). The "threat hypothesis," personality, and attitudes toward diversity. *Journal of Applied Behavioral Science, 39*(1), 32-52.

Steiner, C. (1984). Emotional literacy. *Transactional Analysis Journal*, *14*, 162-173.

Stephenson, K., & Lewin, D. (1996). Managing workforce diversity: macro and micro level HR implications of network analysis. *International Journal of Manpower, 17*(4/5), 168-196.

Streufert, S., & Swezy, R. (1986). *Complexity, Managers and Organisations*. Orlando: Academic Press.

Sternberg, R.J. (1997). *Thinking Styles.* London: Cambridge University Press.

Steyn, H.S. (2002). Practical significant relationships between two variables. *South African Journal of Industrial Psychology, 28*(30), 10-15.

Stough, C., Palmer, B.R., Gardner, L., Papageorgiou, V., & Redman, S. (2002). The development of a workplace measure of emotional intelligence – The Swinburne University Emotional Intelligence Test (SUEIT). *Symposium presented at the Third Conference on Emotional and Organisational Life, Gold Coast, Queensland, Australia.* 14-16 June.

Strauss, J. P., Connerley, M. L., & Ammermann, P. A. (2003). The "Threat Hypothesis," personality, and attitudes toward diversity. *Journal of Applied Behavioral Science, 39(1),* 32–52.

Suliman, A.M., & Al-Shaikh, F.N. (2007). Emotional intelligence at work: links to conflict and innovation. *Employee Relations, 29*(2), 208-220.

Tabachnick, B.G., & Fidell, L.S. (2001). *Using Multivariate Statistics* (4th ed.). Boston: Allyn and Bacon.

Tan, D.L., Morris, L., & Romero, J. (1996). Changes in attitudes after diversity training. *Training & Development, 50*(9), 54-55.

Tajfel, H. (1978). Social categorisation, social identity, and social comparison. In H. Tajfel (Eds.), *Differentiation between Social Categories: Studies in Social Psychology* (pp. 61-76). Cambridge: Cambridge University Press.

Tajfel, H. (1987). *Rediscovering the Social Group: A Self-categorization Theory.* Oxford: Basil Blackwell.

Terry, D.J., & Hogg, M.A. (2000). *Attitudes, Behavior and Social Context: The Role of Norms and Group Memberships.* Mahwah: Lawrence Erlbaum Associates, Inc.

Tett, R., Wang, A., Thomas, M., Griebler, J., & Linkovich, T. (1997). *Testing a Model of Emotional Intelligence.* Paper presented at the 1997 Annual Convention of South-eastern Psychological Association, Atlanta, GA.

Theron, C. (2007). *Research Methodology Class Notes*. University of Stellenbosch.

Theron, C. (2008). Intermediate Statistics & Computer usage Class Notes. University of Stellenbosch.

Thorndike, E. L. (1920, March). Intelligence and its uses. *Harper's Magazine, 140 (4),* 227–235.

Tredoux, C.G., & Durrheim, K.L (2002). *Numbers, Hypotheses and Conclusions.* Cape Town: Juta.

Tsui, A.S., Egan, T.D., & O'Reilly, C.A. (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly, 37*, 547-679.

Turner, R.N., Hewstone, M., Voci, A., & Vonofakou, C. (2008). A test of the extended intergroup contact hypothesis: The mediating role of intergroup anxiety, perceived ingroup and outgroup norms, and inclusion of the outgroup in the self. *Journal of Personality and Social Psychology, 95*(4), 843-860.

Vakola, M., Tsaousis, I., & Nikolaou, I. (2004). The role of emotional intelligence and personality variables on attitude toward organisational change. *Journal of Managerial Psychology, 19*(2), 88-110.

Van Aswegen, L. (2008). Diversity Explored: The Nature and Impact of Diversity Interventions at LSAM (PTY) ltd. Amsterdam: Rozenberg Publishers.

Vanbeselaere, N. (1991). The different effects of simple and crossed categorizations: A result of the category differentiation process or of differential category salience? In W. Stroebe and M. Hewstone (Eds.), *European review of social psychology* (pp. 247–278). Chichester, England: Wiley.

Van de Zee, K., Vos, M., & Luijters, K (2009). Social identity patterns and trust in demographically diverse work teams. *Social Science Information, 48*(2), 175-198.

Van Knippenberg, D., De Dreu, C.K.W., & Homan, A.C. (2004). Work group diversity and group performance: An integrative model and research agenda. *Journal of Applied Psychology, 89*(6), 1008-1022.

Van Rooy, D.L., Viswesvaran, C., Pluta, P. (2005). An evaluation of construct validity: What is this thing called emotional intelligence? *Human Performance, 18*(4), 445-462.

Vos, H.D. (1998). *An industrial psychological study of the diversity phenomenon amongst managers in selected organisations*. Unpublished doctoral thesis, University of Stellenbosch.

Vrba, M. (2007). Emotional intelligence skills and leadership behaviour in a sample of South African first-line managers. *Management Dynamics, 16*(2), 25-35.

Walsh, J. P., & Ungson, G. R. (1991). Organizational memory. *Academy of Management Review, 16,* 57–91.

Werner, A. (2003). Individual differences in the workplace. In H. Schultz (Eds.). *Organisational Behaviour: A contemporary South African perspective* (p. 37-49). Pretoria: Van Schaik Publishers.

Williams, K.Y., & O'Reilly, C.A. (1998). Demography and diversity in organizations. In B.M. Staw and R.M. Sutton (Eds.), *Research in Organizational Behavior* (pp. 77-140). Stamford: JAI Press.

Wong, D.S., & Law, K.S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The Leadership Quarterly, 13*(3), 243-274.

Wright, T. A., & Staw, B. M. (1999). Affect and favorable work outcomes: Two longitudinal tests of the happy–productive worker thesis. *Journal of Organizational Behavior, 20,* 1–23.

Zeidner, M., Matthews, G., & Roberts, R.D. (2004). Emotional intelligence in the workplace: A critical review. *Applied Psychology: An International Review, 53*(3), 371-399.

Zulu, P.S., & Parumasur, S.B. (2009). Employee perceptions of the management of cultural diversity and workplace transformation. *SA Journal of Industrial Psychology, 35*(1), 1-35.