Constructing a psychological career profile for staff retention

by

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DECLARATION

I, Nadia Ferreira, student number 48329150, declare that this dissertation entitled **"Constructing a psychological career profile for staff retention"** is my own work, and that all the sources that I have used or have quoted from have been indicated and acknowledge by means of complete reference. It has not in part or in whole, been previously submitted for any other degree or examination at this or any other university.

I further declare that ethical clearance to conduct the research has been obtained from the Department of Industrial and Organisational Psychology, University of South Africa.

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ABSTRACT / SUMMARY

CONSTRUCTING A PSYCHOLOGICAL CAREER PROFILE FOR STAFF RETENTION

by

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DEPARTMENT : Industrial and Organisational Psychology

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The research focused on constructing a psychological career profile for staff retention practices by investigating the relationship between employees' psychological career meta-competencies (psychological career resources, career adaptability and hardiness) and their retention-related dispositions (job embeddedness and organisational commitment). A quantitative survey was conducted on a convenience sample of employed adults (N = 355) at managerial and staff levels in the human resource management field. A canonical correlation analysis indicated a significant overall relationship between the psychological career meta-competencies and the retention-related dispositions. Multiple regression analyses indicated the psychological career meta-competencies as significant predictors of the retention-related dispositions variables. Structural equation modelling indicated a good fit of the data with the canonical correlation-derived measurement model. Moderated hierarchical regression analyses showed that gender and marital status significantly moderated the relationship between the participants' psychological career meta-competencies and the retention-related disposition job-embedded fit. Tests for mean differences revealed that males and females differed significantly regarding their self/other skills and hardy-commitment while the marital status groups differed signifcantly regarding their behavioural adaptability and hardiness. On a theoretical level, the study deepened understanding of the cognitive, affective, conative and interpersonal behavioural dimensions of the hypothesized psychological career profile. On an empirical level, the study produced an empirically tested psychological career profile in terms of the various behavioural dimensions. On a practical level, organisational staff retention practices in terms of the behavioural dimensions of the psychological career profile were recommended.

KEY TERMS

Psychological career meta-competencies, retention-related dispositions, career development, psychological contract, employability, retention, psychological career resources, career adaptability, hardiness, job embeddedness, organisational commitment.

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CHAPTER 1: SCIENTIFIC OVERVIEW OF THE RESEARCH

This research focuses on constructing a psychological career profile for staff retention purposes. The aim of this chapter is to provide the background to and rationale for the study and to formulate the problem statement and research questions. On the basis of the aforementioned, the aims of the research are then stated. The paradigm perspectives, which guide the research, are discussed, while the research design and method with their different steps, which give structure to the research process, are formulated. The layout of the chapters is indicated, followed by a chapter summary.

1.1   BACKGROUND AND RATIONALE FOR THE RESEARCH

The context of this research is staff retention in the South African multi-cultural organisational context. The research examines the relationship between a composite set of psychological career meta-competencies (comprising of the constructs psychological career resources, career adaptability and hardiness) and a composite set of retention-related dispositions (comprising of the constructs job embeddedness and organisational commitment). An investigation into the psychological career meta-competencies that influence individuals' retention-related dispositions (job embeddedness and organisational commitment) has become crucial in the light of the changing nature of careers and the global skills scarcity (Ferreira, Basson & Coetzee, 2010). Knowledge of the overall relationship between these constructs will allow the researcher to construct an overall psychological career profile that may potentially inform human resource retention practices in South African organisations.

For decades, managers and human resource practitioners have been concerned with employees' psychological attachment to the organisation, which can be described in terms of their affective (emotional attachment to the organisation), continuance (the price of leaving) and normative commitment (the obligation to stay with the organisation) and the forces (i.e. job embeddedness) that keep people in their current employment situations (Allen & Meyer, 1990; Feldman & Ng, 2007). Three factors have been identified as key forces in job embeddedness. These include the following: (1) fit, which is the extent to which a person's job meshes with or complements other areas of his or her life; (b) links, which involve extent of an individual's ties with other people and activities at work; and (3) sacrifices, which relate to the ease with which links can be broken (i.e. what individuals would have to give up if they were to leave their current position) (Feldman & Ng 2007; Mitchell, Holtom & Lee, 2001).

The changes in the career and work context are reflected in the changing definitions of work, careers and job structure, all of which mirror widespread downsizing, subsequent losses in job security, highly divergent and diverse career paths, shifts in organisational loyalties and an emphasis on career agency (Baruch, 2004b; Marshall & Bonner, 2003; Sinclair, 2009; Suutari & Taka, 2004). Economic events such as mergers, acquisitions and layoffs, undoubtedly influence the relationship between employees and the organisation (Baruch, 2004a; Bentein, Vandenberghe, Vandenberg & Stinglhamber, 2005). Given the demands of free-market capitalism, the infusion of technology and the global skills scarcity, which are reducing the need for many types of workers, on the one hand, and increasing the concerns about retaining valuable skilled staff as a scarce resource, on the other, it is likely that there are not enough intrinsically motivating jobs and meaningful work options available to the majority of people (Coutinho, Dam & Blustein, 2008**)**.

Swanepoel, Erasmus, Van Wyk and Schenk (2003) indicate that the global economy and technological revolution stimulate new international competition, which imposes new demands and challenges on the organisation. Organisations are changing and make use of flatter organisational structures, focusing on processes instead of functions and utilising work teams. Organisations focus less on command and control and narrowly defined jobs. These changing factors seem to have major implications for careers. Individuals are expected to assume greater ownership of their careers – hence a greater focus on psychological career-related attributes or career meta-competencies and retention-related dispositions. Not taking ownership of one's career, can make one feel less committed to one's organisation (Ferreira & Coetzee, 2010). Organisations, industrial psychologists and Human Resource (HR) practitioners are in need of career development support frameworks that will help to explain individual career behaviour and how to retain talented staff (Ferreira *et al.*, 2010; Lumley, Coetzee, Tladinyane & Ferreira, 2011).

 A number of trends relating to the changing nature of careers have been identified. Careers are becoming more recurring, lateral and widespread as opposed to upwardly mobile, and individuals are taking more ownership of their own careers, with the organisation playing a supportive role (Hall & Mervis, 1995a). Continuous learning and development are essential to live up to new opportunities (Schein, 1993). New kinds of employment relationships are emerging as increasingly more people are becoming casual providers of skills and services (Rousseau & Wade-Benzoni, 1995). While career development is becoming more holistic in

its focus, employability as opposed to employment are becoming a source of security (Coetzee & Schreuder, 2011; Kanter, 1990).

The current changes in the career and organisational context are causing individuals to have diverse goals and expectations about job satisfaction and what can be expected in their jobs. Faithfulness or commitment towards organisations seem to be directly associated with how well people observe the way they have been treated in times of uncertainty and change, and how their career predictions look at a specific time in the organisation (Holbeche, 1997; Hughes & Half, 2009) and their career predictions at a specific time in the organisation (Baruch, 2006; Holbeche, 1997). According to Grobler, Warnich, Carel, Elbert and Hatfield (2011) uncommitted individuals purposely regard work as a necessary evil and a painful system in which they earn money merely to support themselves and their families. These uncommitted individuals tend to never experience fulfilment in their jobs. The feeling of unfulfilment can have an impact on their feelings of commitment towards the organisation. Commitment forms part of the basis of what this research investigates. Individuals or employees tend to strive to meet their career-related desires through their work (Grobler *et al.*, 2011), and this could have a positive effect on staff retention.

Commitment has been studied extensively in the last 20 years. Organisational commitment is defined as a psychological condition that binds the employee to the organisation (Allen & Meyer, 1990). One of the reasons for the attractiveness of organisational commitment may be its vital location in human resource management policies and retention practices. Commitment plays a key role in the employee-organisation relationship. The feeling of belonging helps to connect individuals to a specific organisation. Organisational commitment usually stimulates the aspiration to remain an employee of the organisation, the intention to reside, retention of membership, presence and possibly performance (Chow, 1994).

Encouraging improvements in the commitment levels of individuals may foster behavioural consequences as well as indirect results in order to improve employee satisfaction (Bashir & Ramay, 2008). Feelings about job performance, which refer to commitment and satisfaction, as well as being in a profession and organisation that match an individual's values and goals, influence an employee's intention to leave or remain with a particular organisation (Bashir & Ramay, 2008). Hence an individual's organisational commitment may be influenced by his or her feelings, values and goals in the job he or she is currently doing.

Nowadays, careers are regarded as a part of the social processes through which people interact (Coetzee, 2008). In the framework of careers, both sensible practical intellect and imaginative intellect are necessary to put into practice career options and ensure that people function in innovative and original ways (Coetzee, 2008). Sensible practical intellect and imaginative intellect can help individuals manage their own careers.

Research has shown that from the individual's perspective, the turbulent career context has led to a growing concern for developing a range of psychological career resources or career meta-competencies that enable people to take ownership of their careers and be proactive agents in managing their careers and enhancing their employability (Baruch, 2004; Coetzee, 2008; Fugate, Kinicki, & Ashforth, 2004; Sinclair, 2009).

According to McQuaid and Lindsay (2005) the responsibility for employability has now shifted from the organisation to the employee. This means that the main responsibility for growth and continued professional development lies with the individual. Fugate *et al.* (2004) contend that employees are responsible for career information, expertise and capabilities, as well as other abilities required by present and potential employers to sustain their employability in both existing and future situations. Employability refers not only to people's ability to gain entrance to, adjust to and be dynamic in the place of work, but also to their constant ability to perform, obtain or create work through the best possible use of both occupation-related and career meta-competencies (Coetzee & Roythorne-Jacobs, 2012; Hall & Chandler, 2005; Herr, Cramer, & Niles, 2004; Van der Heijde & Van der Heijden, 2006). The emphasis on career agency and employability may potentially influence people's psychological attachment to their organisations and reduce their job embeddedness (Mitchell *et al.*, 2001a).

Career meta-competencies are regarded as a set of psychological career resources critical to the career development process. These psychological career resources include attributes and abilities such as behavioural adaptability, self-knowledge, career orientation awareness, sense of purpose, self-esteem and emotional literacy, all of which allow individuals to be self-sufficient learners in the management of their own career (Briscoe & Hall, 1999; Coetzee, 2008; Coetzee & Roythorne-Jacobs, 2012; Hall & Chandler, 2005; Herr *et al.*, 2004). Living a proactive life and successfully managing one's career, say, through a strong sense of purpose, commitment to individual goals and focused psychological resources and attempts, predict how psychologically balanced and fulfilled individuals would feel in three years' time (Gottfredson & Duffy, 2008).

Individuals' repertoire of career adaptability, psychological career resources and hardiness (as an aspect of their general psychological career wellbeing) has the function of organising their career-related experiences, identifying their long-term contributions and establishing criteria for success whereby they can measure themselves. In addition to helping them understand the motives for choosing an occupation, the notion of career preferences, values and career-related skills and behavioural attributes (or career meta-competencies) provide a useful framework for examining the way in which individuals' psychological career resources relate to their job embeddedness and organisational commitment levels (Ferreira, 2009). Research indicates that individuals' career motives, values and psychological resources have an impact on their career decision making and their psychological attachment to an occupation (Feldman & Bolino, 2000; Ferreira, 2010; Kniveton, 2004; Schein, 1996). Career preferences and values are key determinants of an individual's career choice. Individuals often become aware of their career preferences and values when their self-image is boosted or damaged by compulsory career moves such as promotion or discharge (Schein, 1996).

Koen, Klehe, Van Vianen, Zikic, and Nauta (2010) suggest that the degree to which individuals use different job-seeking strategies, will depend on an individual's mental willingness and resources to seek employment, which in turn refer to his or her career adaptability. Career adaptability is defined as the ability to adjust and fit into a new career-related situation (Koen *et al.*, 2010). It is further conceptualised as plan-fullness, exploration, decision making, information and realism (Super, 1974), career planning and career exploration (Zikic & Klehe, 2006), a boundaryless mindset (McArdle, Waters, Biscoe, & Hall, 2007) of career planning, career decidedness and career confidence (Skorikov, 2007). Savickas (1997, 2002) proposed the concept of career adaptability which may be particularly useful in understanding the job search process. Savickas's (1997) conceptualisation of career adaptability signifies the willingness and diverse adaptive resources that may assist individuals to prepare for and manage career transitions such as a move from unemployment to re-employment (Koen *et al.*, 2010). According to Savickas (1997, 2002, 2005), career adaptability involves looking forward to one's future career (planning), knowing what career to follow (decision making), looking around at different career options (exploration) and having a feeling of self-efficacy to effectively perform the activities needed to accomplish one's career objectives (confidence). These four dimensions characterise the multidimensional measure of career adaptability (Creed, Fallon, & Hood, 2009; Hirschi, 2009).

Career adaptability includes an individual's capability to face, track or acknowledge changing career roles and to effectively handle career shifts (Savickas, 1997, 2002, 2005), such as concluding a condition of joblessness by searching for a job. Career adaptability can also be significant in finding appropriate re-employment. It can be argued that the four dimensions of career adaptability (career planning, decision making, exploration and confidence) refer to an individual's preparation and psychological willingness to use diverse job search strategies, which in turn may influence his or her re-employment results (Koen *et al.*, 2010; Savickas, 1997, 2002, 2005; Super, 1990). By understanding an individual's career adaptability profile, staff retention in an organisation can be managed effectively, by increasing his or her organisational commitment.

Careers that were once deemed to be safe and sound, including those within the professional, technical and managerial classification, are at risk (Ito & Brotheridge, 2005; Sullivan, 1999). To manage this risk, employees are being encouraged to enhance their career adaptability by means of a combination of career hardiness (London, 1983, 1993), growth activities and networking. Career adaptability improves employability both within and outside an organisation (Arthur, 1994; Ellig, 1998; Hall, 1996b; Ito & Brotheridge, 2005; London, 1983, 1993; Waterman, Waterman, & Collard, 1994).

Organisations that assist their employees with their personal growth plans and career development in the organisation, will possibly gain more benefits by ensuring that employees truly recognise how to proactively manage their career development (Holbeche, 1997). Ironically, the fear of losing valuable employees repeatedly surfaces because the reason for this fear may be that individual personal growth plans are not made accessible to employees, which means that the organisation fails to support individuals in terms of their career development .

Highly determined individuals are described as being intellectually inquisitive and may be more success oriented, hardworking and persistent (Komarraju & Karau, 2005). Describing an individual as highly determined fits well within the definition of a "hardy personality" (Kobasa, 1979a). "Hardy personality" type persons may be more difficult to retain because they are far more success driven. The following authors have identified a positive correlation between hardiness and perfectionism: Maddi, Khoshaba, Persico, Lu, Harvey, and Bleecker (2002), Ramanaiah and Sharpe (1999) and Sheard and Golby (2007). However, in theory, Sansome, Wiebe, and Morgan (1999) differ in this regard.

In their original work, Kobasa, Maddi and colleagues (Breed, Cilliers & Visser, 2006; Kobasa, 1979; Kobasa, Maddi, & Kahn, 1982, Kobasa, Maddi, & Zola, 1983) defined hardiness as a collection of personality characteristics that function as a flexible resource during encounters with demanding life events. Individuals who are high in hardiness engage themselves in whatever they are doing (commitment), trust and perform as if they can influence the actions forming their lives (control) and believe change to be not only normal but also an incentive for development (challenge) (Hystad, Eid, Laberg, Johnsen & Bartone, 2010; Kobasa *et al.*, 1983).

Hardiness explains a generalised style of functioning, characterised by a strong sense of commitment, control and challenge that serves to alleviate the negative effects of stress (Azeem, 2010; Delahaij, Gaillard, & Van Dam, 2010; Hystad *et al.*, 2010; Zhang, 2010). Hardiness has been conceptualised as a combination of three attitudes labelled as the "three Cs" – *commitment, control* and *challenge* (Kobasa, 1979a). Hardy-commitment refers to those individuals who are committed to and feel deeply involved in the activities of their lives. Hardy-control reflects an individual's desire to continue to have an influence on the outcomes going on around him or her, no matter how difficult the situation becomes. Hardy-challenge demonstrates an expectation that life is unpredictable, that changes will encourage personal development and that potentially stressful situations are evaluated as thrilling and inspiring instead of intimidating (Maddi, 2006). These three attitudes may have an effect on retention in an organisation, because they could impact on whether or not an individual would like to remain with an organisation.

Over the years, research has established and extended the original hardiness research across a number of groups, including army and police officers, nurses, teachers, emergency personnel and professional athletes, and consistently found that hardiness moderates the stress-health relationship (Barton, Vrij & Bull, 2004; Bartone *et al,* 1989; Bohle, 1997; Chan, 2003; Golby & Sheard, 2004; Hystad *et al.*, 2010; Zach, Raviv & Inbar, 2007). Several studies headed by Kobasa found a comparable protecting effect of hardiness, as well as a moderating effect on stress (Kobasa *et al.*, 1982; Kobasa & Puccetti, 1983). Analysis of these investigations led Kobasa to propose that hardy individuals have a clear sense of direction, a dynamic approach in demanding situations and a sense of self-belief and control that moderate the intensity of possible threats and dangers (Zakin, Solomon & Neria, 2003).

It appears from the literature review that the constructs of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment are essential to study in the retention context. Investigating the relationship between these constructs may help to construct a psychological career profile of individuals that could inform retention practices.

1.2   PROBLEM STATEMENT

Industrial psychologists and human resource practitioners are challenged to produce empirically tested and systematically improved approaches to the retention of key talent that address individuals' psychological career meta-competencies and retention-related dispositions. The problem is that there seems to be a dearth of research that investigates the career-related psychological preferences, behaviour and attributes that may potentially influence an individual's job embeddedness and commitment or psychological attachment to the organisation, and by implication, his or her potential retention, especially in the South African multicultural work context.

Investigating the relationship between individuals' psychological career meta-competencies (psychological career resources, career adaptability, hardiness) and their retention-related dispositions (job embeddedness and organisational commitment) may help to construct a theoretical and empirically tested career-related psychological profile that constitutes those attributes, behaviours and preferences that may potentially influence the potential retention of talented staff. The research is a starting point in adopting a dynamic approach towards exploring the relationship dynamics between individuals' psychological career meta-competencies (psychological career resources, career adaptability, hardiness) and their retention-related dispositions (job embeddedness and organisational commitment) and how their biographical characteristics (age, gender, race, marital status and employment status) contribute to the dynamic interplay between these variables.

A review of the current literature on psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment indicates the following research problems:

- Theoretical models do not clarify the relationship dynamics between individuals' psychological career meta-competencies (psychological career resources, career adaptability and hardiness) and their retention-related dispositions (job embeddedness and organisational commitment).

- In the context of talent retention, industrial psychologists, as well as human resource practitioners, require knowledge of the nature of the theoretical and empirically observed relationship between these variables, because the knowledge that may be gained from the research may potentially bring new insights that could inform organisational retention strategies.

- There seems to be a paucity of research that investigates the career-related psychological preferences, behaviours and attributes that potentially influence people's job embeddedness and organisational commitment, and how their biographical characteristics (age, gender, race, marital status and employment status) contribute to the dynamic interplay between these variables, especially in the South African multicultural work context.

Research on the relationship dynamics between the psychological career meta-competencies construct variables (psychological career resources, career adaptability, and hardiness), and the retention-related dispositions construct variables (job embeddedness and organisational commitment) in an organisational change context could make a vital contribution to the disciplines of industrial and organisational psychology and human resource management, particularly with regard to the potential retention of talented staff. Finally, the empirical results of this study could stimulate further research to facilitate the possible emergence of a new genre of retention practices flowing from understanding employees' psychological career profiles and the career development interventions required to improve their retention in an organisation.

The problem statement leads to the following general research question and a set of subsequent specific research questions outlined below:

What are the relationship dynamics between individuals' psychological career meta-competencies (psychological career resources, career adaptability, and hardiness) and their retention-related dispositions (job embeddedness and organisational commitment), and can an overall psychological career profile be constructed to inform staff retention practices in the multi-cultural South African organisation context?

1.2.1 Research questions relating to the literature review

In terms of the literature review, the specific research questions are as follows:

Research question 1:   How does the literature conceptualise individual career behaviour and retention in the 21st century?

Research question 2: How are the psychological career meta-competencies constructs of psychological career resources, career adaptability and hardiness conceptualised in the literature and how do individuals' biographical characteristics influence the development of these competencies?

Research question 3:   How are the retention-related dispositions constructs of job embeddedness and organisational commitment conceptualised in the literature and how do individuals' biographical characteristics influence the development of these dispositions?

Research question 4: What is the theoretical relationship between the psychological career meta-competencies constructs (psychological career resources, career adaptability, and hardiness) and the retention-related disposition constructs (job embeddedness and organisational commitment)?

Research question 5:   Based on the theoretical relationship between the psychological career meta-competencies and retention-related dispositions constructs, can an integrated psychological career profile of the career agent be constructed that may be used to inform retention practices?

Research question 6: What are the implications of the psychological career profile for talent retention practices?

1.2.2 Research questions relating to the empirical study

In terms of the empirical study, the specific research questions are as follows:

Research question 1: What are the empirical inter-relationships between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as manifested in a sample of respondents in the South African context?

Research question 2: What is the nature of the overall statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) as the set of independent latent variables and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as the set of dependent latent variables?

Research question 3: Do the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) positively and significantly predict the retention-related dispositions construct variables (job embeddedness and organisational commitment)?

Research Question 4: Based on the statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment), is there a good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model?

Research question 5: Do the biographical variables (age, gender, race, marital status, job level and employment status) significantly moderate the relationship between the psychological career meta-competencies construct variate (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variate (job embeddedness and organisational commitment)?

Research Question 6: Do significant differences exist between the sub-groups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates?

Research question 7: What recommendations can be made for industrial and organisational and human resource management talent retention practices and future research?

1.3 AIMS OF THE RESEARCH

On the basis of the above research questions, the following aims were formulated:

1.3.1 General aims of the research

The general aim of this research is to investigate the relationship dynamics between individuals' psychological career meta-competencies (psychological career resources, career adaptability, and hardiness) and their retention-related dispositions (job embeddedness and organisational commitment), and to determine whether an overall psychological career profile be constructed to inform staff retention practices in the multi-cultural South African organisation context.

1.3.2 Specific aims of the research

The following specific aims were formulated for the literature review and the empirical study:

1.3.2.1 Literature review

In terms of the literature review, the specific aims are as follows:

Research aim 1: To conceptualise individual career behaviour and retention in the 21st century.

Research aim 2: To conceptualise the psychological career meta-competencies constructs of psychological career resources, career adaptability and hardiness and how individuals' biographical characteristics influence the development of these competencies.

Research aim 3: To conceptualise the retention-related dispositions constructs of job embeddedness and organisational commitment and how individuals' biographical characteristics influence the development of these dispositions.

Research aim 4: To conceptualise the theoretical relationship between the psychological career meta-competencies constructs (psychological career resources, career adaptability, and hardiness) and the retention-related disposition constructs (job embeddedness and organisational commitment).

Research aim 5: Based on the theoretical relationship between the psychological career meta-competencies and retention-related dispositions constructs, to construct a theoretical integrated psychological career profile of the career agent that may be used to inform retention practices.

Research aim 6: To outline the implications of the psychological career profile for talent retention practices.

1.3.2.2 Empirical study

In terms of the empirical study, the specific aims are as follows:

Research aim 1: To assess the empirical inter-relationships between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as manifested in a sample of respondents in the South African context.

Research aim 2: To conduct an empirical investigation into the overall statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) as the set of independent latent variables and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as the set of dependent latent variables.

Research aim 3: To empirically investigate whether the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) positively and significantly predict the retention-related dispositions construct variables (job embeddedness and organisational commitment).

Research aim 4: Based on the overall statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment), to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

Research aim 5: To assess whether the biographical variables (age, gender, race, marital status, job level and employment status) moderate the relationship between the psychological career meta-competencies construct variate (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variate (job embeddedness and organisational commitment).

Research aim 6: To empirically investigate whether significant differences exist between the sub-groups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.

Research aim 7: To formulate recommendations for the discipline of industrial and organisational psychology and human resource management talent retention practices and future research.

1.4 STATEMENT OF SIGNIFICANCE

The factors underlying the problem of developing a psychological career profile for staff retention appear to be varied and complex. Many factors hinder or promote the development of a psychological career profile for staff retention. The role of career-related attributes such as psychological career resources, career adaptability, and hardiness, and retention-related dispositions such as job embeddedness and organisational commitment in the development of a psychological career profile for staff retention is complex and not yet well researched in the South African multi-cultural organisational context.

This research is a starting point in investigate the relationship dynamics between psychological career resources (as defined by Coetzee, 2008), career adaptability (as defined by Savickas, 1997), hardiness (as defined by Kobasa, 1983), job embeddedness (as defined by Mitchell *et al.,* 2001a) and organisational commitment (as defined by Meyer & Allen, 1997) in the retention context.

1.4.1 Potential contribution at a theoretical level

At a theoretical level, this study may prove useful because of the relationship identified between a set of psychological career meta-competencies, namely psychological career resources, career adaptability, and hardiness (as a composite set of independent variables) and a set of retention-related disposition, namely job embeddedness and organisational commitment (as a composite set of dependent variables). If significant relationships are found, then the findings should prove useful in the development and proposal of a psychological career profile for staff retention purposes.

In terms of the psychological career meta-competencies, a psychological career profile may point to an expression of self-concordant goals relating to employees' core self-evaluations and inner career needs, values and interests which could evoke higher levels of job/career satisfaction and commitment (Coetzee & Esterhuizen, 2010). In terms of the retention-related dispositions, job embeddedness and organisational, a psychological career profile versus retention may point to job roles that are closely aligned with career aspirations, which generally enhance employee career self-management, organisational citizenship behaviour and psychological attachment to the organisation. In addition, by exploring how individuals' biographical characteristics influence the manifestation and development of these meta-competencies and dispositions, may proof to be useful in understanding retention in a multi-cultural context.

1.4.2 Potential contribution at an empirical level

At an empirical level, the research may contribute to constructing an empirically tested psychological career profile that may be used to inform retention practices. If no relationships are found between the variables, then the usefulness of this study will be restricted to the elimination of psychological career resources, career adaptability and hardiness as predictors

of job embeddedness and organisational commitment. Researchers could then focus their energy on other research studies and avenues that could yield significant proof for solving the problem of how career-related psychological variables influence people's job embeddedness and organisational commitment.

In addition, the study may highlight whether individuals with a different age, gender, race, marital status and employment status differ in terms of their psychological career meta-competencies and retention-related dispositions. In light of the current organisational multi-cultural context, which is characterised by cultural and generational diversity, the results may be valuable in the retention of valuable and talented staff by identifying differences in terms of biographical information that address the needs of a diverse group of staff members.

1.4.3   Potential contribution at a practical level

At a practical level, if industrial psychologists and human resource practitioners could develop a better understanding of the psychological career meta-competencies constructs of psychological career resources, career adaptability, and hardiness, and the retention-related dispositions constructs job embeddedness and organisational commitment in considering the psychological career profile of an individual that could positively influence the retention of valuable talented employees, then the outcomes would be significant enough to justify the continuation of this study. Positive outcomes of the proposed research could include raising awareness of the fact that individuals in the workplace have different psychological career resources, career adaptability and hardiness, and that each individual needs to be treated in a manner that is appropriate to him or her in order to promote job and career satisfaction, which will culminate in job embeddedness and organisational commitment. Another positive outcome may be the realisation of the way in which employees' psychological career meta-competencies influence their level of embeddedness and commitment towards the employing organisation. The importance of mentoring and succession planning in career development and retention practices may be emphasised and fully realised.

Where empirically tested practical significant relationships are found, the findings could prove useful for future researchers in exploring the possibility of overcoming the effects of low commitment and job embeddedness in attempts to retain talented employees. Furthermore, the research results could contribute to the body of knowledge relating to the psychological factors that influence staff retention in the South African organisational context.

This is potentially ground-breaking research because, to date, there is no existing study on the relationship dynamics between the psychological career meta-competencies (psychological career resources, career adaptability, and hardiness) and retention-related dispositions (job embeddedness and organisational commitment), especially in a staff retention context. Studies on the relationship between these constructs are rare, especially in the South African context (Ferreira & Coetzee, 2010; Ferreira *et al.*, 2010).

1.5 THE RESEARCH MODEL

The research model of Mouton and Marais (1996) serves as a framework in this research. The model aims to incorporate the five dimensions of social science research, namely the sociological, ontological, teleological, epistemological and methodological dimensions, and to systemise them within the framework of the research process. The five dimensions are aspects of one and the same process, namely research.

The assumption of the research model is that it represents a social process. According to Mouton and Marais (1996), social science research is a collaborative human activity in which social reality is studied objectively in order to gain a valid understanding of it. The model is described as a systems theoretical model with three interrelated subsystems, which also interrelate with the research domain of a specific discipline – in this instance, industrial and organisational psychology. The subsystem represents the intellectual climate, the market of intellectual resources and the research process itself.

1.6 PARADIGM PERSPECTIVES OF THE RESEARCH

For the purpose of this research, the term "paradigm" is used in its meta-theoretical or philosophical sense to denote an implicit or explicit view of reality (Morgan, 1980). The paradigm perspective refers to the intellectual climate or variety of meta-theoretical values or beliefs and assumptions underlying the theories and models that form the definitive context of this research.

A paradigm in the social sciences includes the accepted theories, models, body of research and methodologies of a specific perspective (Mouton & Marias, 1996). Their origin is mainly

philosophical and is neither testable nor meant to be tested. The current study was conducted in the field of industrial and organisational psychology.

1.6.1 The intellectual climate

The literature review is presented from the perspective of the humanistic-existential and open-systems paradigm and the empirical study from the positivist research paradigm.

1.6.1.1 The literature review

The literature review is presented from the humanistic-existential and open-systems perspectives, as highlighted below.

(a) The humanistic paradigm

According to Meyer, Moore, and Viljoen (1995, p. 13), the basic assumptions of the humanistic paradigm are as follows:

- *The individual is an integrated whole*

The current study focuses on perspectives of individuals in an organisation as collective. It goes beyond exploring the views of individuals of that unit, taking into consideration the impact of the collective on the individual.

- *The individual is a dignified human being*

Human beings have qualities that distinguish them from other objects such as stones and trees. The current study is interested in the population sample's opinions and perceptions.

- *Human nature is positive*

People are basically good, and their destructive behaviour is caused by environmental influences such as unemployment, poverty, favouritism, discrimination and racism.

- *The individual has conscious processes*

Conscious processes dictate individuals' decisions. The focus of the study on organisational commitment is used to collect information on the way individuals perceive the organisation.

- *The individual is an active being*

Individuals are active participants in life, make choices and are responsible for the course their life takes.

Thematically, the humanistic paradigm relates to the constructs of psychological career resources, hardiness, job embeddedness and organisational commitment.

(b) Existential psychology

- In this existential view of psychology, finding meaning in life is seen as a primary goal (Orr & Westman, 1990). Individuals create meaning through the decisions they make in their daily lives. Existentialism sees people as "beings-in-the-world", who continuously and dynamically construct their personalities through their actions, instead of carrying around a set of static internal traits (Kobasa, 1982). Over time, as patterns accumulate, "more pervasive meaning systems and general directions emerge" (Maddi, 2002, p. 175). In other words, people develop mental models that systematically influence their decision patterns (Senge, 1990) and developmental trajectories.

- For each decision an individual faces (and the subsequent actions taken), he or she must choose a path – either "the future" with all its unknowns, or a continuation of a more familiar path from the past. These meaning systems create developmental trajectories or paths that allow for greater (or less) personal growth. Consistently choosing the future (the less familiar as opposed to a "tried-and-true" path from the past) leads to on-going personal development and is therefore deemed the most desirable pattern. However, future-oriented decisions also create uncertainty and arouse anxiety. For example, an individual deciding whether to pursue a job opportunity in a different industry or continue in a job that is adequate but routine, faces a choice between uncertainty about the potential for growth or continuing on a safer path that fulfils his or her needs but does not introduce any new challenges. Turning down the new job will probably result in some guilt because a significant developmental opportunity has been missed, but this may seem like less of a problem than the anxiety associated with facing an uncertain future. According to Maddi (2002), existential courage (willingness to confront the anxiety invariably created when an individual faces the unknown) provides the necessary incentive to regularly propel a person towards the less certain but more developmentally valuable "future-oriented" choices. Existential courage lies at the heart of authenticity.

- Authentic people are courageous and strenuously engage with life. They develop and maintain attitudes and goals that are aligned with a sense of personal responsibility, caring, involvement and constant striving. They seek out challenges (difficult but surmountable environmental demands) and see change as an incentive for growth (Kobasa, 1982; Orr & Westman, 1990). This authenticity gives hardy people the ability to remain engaged and maintain a sense of connection when confronted with life's hard facts. Authentic individuals also believe they can exert control over events (both external and internal), which enables them to interpret stressful events as challenges instead of as threats. The developmental histories of authentic or hardy people allow them to be more open to experience at a variety of levels. They are more confident in their sense of self and their place in the social world. This gives them the ability to avoid being threatened or psychologically disrupted by difficult or painful experiences and thus imbues them with greater resilience when under stress (Bartone, 2000).

Thematically, the existential paradigm relates to the constructs of psychological career resources, hardiness, job embeddedness and organisational commitment.

(c)   The open systems paradigm

The open systems paradigm studies an individual as part of an organisation who interacts with the external environment. Hodge, Anthony, and Gales (1996) identify the following assumptions of the open systems paradigm:

- The organisation as an open system interacts with the external environment.
- It is a set of interrelated and interdependent parts arranged in a manner that produces a unified whole.
- The open system model is characterised by inputs, throughputs or transformation processes and outputs.
- This open system moves towards growth and expansion.
- An open system engages in the process of production, maintenance and adaptation of its functioning.

Thematically, the empirical study deals with the variables, psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment.

1.6.1.2 The empirical research

The empirical research is presented from the positivist research paradigm. According to Morgan (1980) and Schrag (1992) , the main assumptions of the positivist paradigm are as follows:

- The positivist research perspective is primarily regulative and pragmatic in its basic orientation.
- It is concerned with understanding society in a way that generates useful empirical knowledge.
- Society has concrete real existence and a systematic character oriented to produce an ordered and regulated state of affairs.
- It encourages an approach to social theory that focuses on understanding the role of human beings in society.
- Behaviour is always seen as being contextually bound in a real world of concrete and tangible social relationships.

Positivism can be viewed as the existence of a straightforward relationship between the world (objects, events and phenomena) and our perception and understanding of it. The positivists maintain that it is probable to describe what is "out there" and to get it right. Such a position is also referred to as the "correspondence theory of truth" because it suggests that phenomena directly determine one's perception of them – hence the existence of a direct connection between things and their representation. Frederick (2009, p. 14) explain positivism by indicating that the outside world itself decides completely on what the one and only truthful view is that can be taken from the situation, independent of the development or conditions. A positivist epistemology implies that the aim of research is to generate objective knowledge – that is, understanding that is fair and unprejudiced, based on a view from the outside, without personal involvement or vested interests on the part of the researcher.

1.6.2 The market of intellectual resources

According to Mouton and Marais (1996), the market of intellectual resources refers to the collection of beliefs that have a direct bearing on the epistemic states of scientific statements (Mouton & Marais, 1996). For the purpose of this study, the theoretical models, meta-theoretical statements and conceptual descriptions relating to psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment, central hypotheses and theoretical and methodological assumptions are presented.

1.6.2.1 *Meta-theoretical statements*

The meta-theoretical statements represent a vital category of assumptions underlying the theories, model and paradigms of this research. In the disciplinary context, this study focuses on industrial and organisational psychology as a field of application (Mouton & Marais, 1996). Meta-theoretical statements are presented on the following:

(a) *Industrial and organisational psychology*

This study is conducted in the context of industrial and organisational psychology, which is conceptually described as the application of psychological principles, theories and research to the work setting. It includes a study of the factors that influence work behaviour such as sociocultural influences, employment-related legislation, personality, gender, race/ethnicity and life span development (Landy & Conte, 2004). The study examines the relationship between the individual's psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment. The industrial psychologist and human resource practitioner is a scientist who derives principles of individual, group and organisational behaviour through research; a consultant and staff psychologist who develops scientific knowledge and applies it to solve problems at work; and a teacher who trains in the research and application of industrial and organisational psychology and human resource management (Landy & Conte, 2004, pp. 6–7).

The relevant subfields of industrial and organisational psychology included in this research are career psychology, organisational psychology and psychometrics.

(b)   Career psychology

Career psychology is the study field of career development and career behaviour as an integral part of human development. According to Greenhaus, Callanan, and Godshalk (2010), career development refers to an on-going process whereby an individual progresses through a series of stages, each of which is characterised by a relatively unique set of issues, themes or tasks. This study has relevance in the field of career psychology because it supports the need for an overall conceptual framework of career development and career choices in the contemporary world of work. Thematically, the notions of psychological career resources, hardiness and career adaptability as a composite set of psychological career meta-competencies are of relevance to this research.

(c)   Organisational psychology

Organisational psychology deals with the organisational responsiveness to psychological, sociopolitical and economic forces which focus on individual, group and system level intervention (Coetzee & Schreuder, 2010; Watkins, 2001). Work in this area investigates factors such as role-related behaviour and personal feelings (or dispositions) of psychological attachment to an organisation. Organisational psychology is more concerned with social and group influences.   Thematically, the notions of job embeddedness and organisational commitment as a composite set of retention-related dispositions are of relevance to this research.

(d)   Psychometrics

This branch of psychology relates to the principles and practices of psychological measurement such as development and standardisation of psychological tests and related statistical procedures (Coetzee & Schreuder, 2010; Plug, Meyer, Louw, & Gouws, 1986). Psychometrics puts researchers in a position to measure behaviour in various forms, providing different explanations for inter- and intrapersonal functioning.

In this study, questionnaires were used to measure individuals' psychological career resources, hardiness, career adaptability, job embeddedness and organisational commitment.

1.6.2.2 Theoretical models

The theoretical beliefs that are described here are testable statements about the "what" (prescriptive) and "why" (interpretative) of human behaviour and social phenomena. These include all statements that form part of hypotheses, typologies, model, theories and conceptual descriptions (Mouton & Marais, 1996).

In this research, the theoretical models are based on the following:

The literature review focuses on the psychological career resources model (Coetzee, 2008), the career adaptability model (Savickas, 1997), the hardiness model (Kobassa,1985), the job embeddedness model (Mitchell *et al.*, 2001a) and the organisational commitment model (Meyer & Allen, 1991).

1.6.2.3 Conceptual descriptions

The following conceptual descriptions serve as points of departure for discussion in this research:

(a)   Psychological career resources

In the context of this study, the concept of psychological career resources is defined as the set of career-related preferences, values, attitudes and attributes that lead to self-empowering, proactive career behaviour that promotes general employability (Coetzee, 2008). Psychological career resources are also regarded as individuals' inherent resources or meta-competencies which enable them to adapt to changing or uncertain career circumstances and shape and select environments in order to attain success in a particular sociocultural context (Coetzee, 2008; Ebberwein, Krieskok, Ulven, & Prosser, 2004; 2001; Sternberg, 1997).

(b)   *Career adaptability*

Based on the various definitions of career adaptability as provided in the literature, for the purpose of this research, career adaptability is explained by Savickas (1997). Career adaptability is described as the willingness to manage predictable tasks of planning for and contributing to the work context and taking into consideration the random changes endorsed by transformation in work and working conditions (Savickas,1997, p. 254).

(c)   *Hardiness*

Based on the various definitions of hardiness as provided in the literature, for the purpose of this research, hardiness emerged as a set of attitudes or beliefs about oneself in interaction with the world around one that provides the courage and motivation to do the hard work of turning stressful changes from potential disasters into opportunities instead (Maddi, 1998, 2004; Maddi & Kobasa, 1984).

(d)   *Job embeddedness*

In the context of this research, job embeddedness can be defined as the broad set of influences on an employee's decision to remain with a specific organisation (Mitchell *et al.*, 2001b). These influences contain on-the-job factors such as connections with colleagues, the fit between an individual's skills and the demands of the job, and organisation-sponsored community service activities.

(e)   *Organisational commitment*

Based on various definitions of organisational commitment provided in the literature, for the purpose of this study, organisational commitment is defined as reflecting three aspects namely (1) affective commitment, (2) continuance commitment and (3) normative commitment. Organisational commitment therefore reflects an affective attitude towards the organisation, acknowledgement of the consequences of leaving the organisation, and an ethical responsibility to remain with the organisation (Meyer & Allen, 1991)).

Retention refers to an initiative taken by management to keep employees from leaving the organisation, by rewarding them for performing their jobs effectively, ensuring harmonious working relations between employees and managers and maintaining a safe, healthy work environment (Cascio, 2003).

A psychological career profile refers to a profile consisting of all cognitive, affective, conative and interpersonal attributes relating to an individual's psychological career meta-competencies (psychological career resources, career adaptability and hardiness) and his or her retention-related dispositions (job embeddedness and organisational commitment), which in turn may affect the retention of talented staff.

1.6.2.4 Central hypothesis

The central hypothesis of the research can be formulated as follows:

The overall relationship dynamics between an individual's psychological career meta-competencies (psychological career resources, career adaptability, and hardiness) and retention-related dispositions (job embeddedness and organisational commitment) constitutes a psychological career profile that informs organisational retention practices. This hypothesis further assumes that individuals with a particular psychological career meta-competencies profile (psychological career resources, career adaptability and hardiness) will be more embedded and committed towards an organisation, which in turn will influence the retention of talented staff. Furthermore, individuals from different age, gender, race, marital status and employment status groups will have different levels of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment.

1.6.2.5 Theoretical assumptions

Based on the literature review, the following theoretical assumptions are addressed in this research:

- There is a need for basic research that seeks to isolate the psychological career meta-competencies (psychological career resources, career adaptability and hardiness) relating to an individual's retention-related dispositions (job embeddedness and organisational commitment).
- Environmental, biographical and psychological factors such as sociocultural background, race/ethnicity, gender, life span development and people's range of psychological career resources, career adaptability and hardiness will influence their job embeddedness and organisational commitment.
- The five constructs of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment are multidimensional and can be moderated by external factors such as age, gender, race, marital status and employment status.
- Knowledge of an individual's psychological career resources, career adaptability and hardiness profile as well as levels of job embeddedness and organisational commitment will enhance the understanding of the factors that may potentially inform retention practice.

1.6.2.6 Methodological assumptions

Methodological assumptions are beliefs concerning the nature of social science and scientific research. Methodological beliefs are more than methodological preferences, assumptions and presuppositions about what ought to constitute proper research. There is a direct link between methodological beliefs and the epistemic status of research findings (Mouton & Marais, 1996). The following main epistemological assumptions are the methodological assumptions that affect the nature and structure of the research domain and these relate to methodological choices, assumptions and suppositions that make for sound research.

(a) Sociological dimension

The sociological dimension conforms to the requirements of the sociological research ethic that make use of the research community for its sources of theory development. Within the bounds of the sociological dimension, research is experimental, analytical and exact, since the issues that are studied are subject to quantitative research analysis of variables and concepts. This will be described in chapter 5 (the empirical research) and chapter 6 (the research results).

(b) Ontological dimension

The ontological dimension of research encompasses that which is investigated in reality. It relates to the study of human activities and institutions whose behaviour can be measured. This research measures properties of the constructs of psychological career resources, organisational commitment, hardiness and career adaptability.

(c) The teleological dimension

This dimension suggests that the research should be systematic and goal directed. It is therefore necessary to state the problem being investigated and relate it to the research goals. The research goals are explicit in this research, namely to measure the relationship between psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment. Furthermore, in practical terms, the teleological dimension looks to furthering the fields of industrial and organisational psychology and human resource management by providing them with knowledge that will enable an organisation to retain valuable employees.

(d) The epistemological dimension

According to Mouton and Marais (1996), this dimension relates to the quest for truth. A primary aim of research in the social sciences is to generate valid findings that approximate reality as closely as possible. This research attempts to achieve this truth through an effective research design and the generation of reliable and valid results.

(e)   The methodological dimension

Methodological assumptions are beliefs about the nature of social science and scientific research. Methodological beliefs are more than the methodological preferences, assumptions and presuppositions about what ought to constitute sound research (Mouton & Marais, 1996). An optimal research design incorporating relevant methods will be used to test the theoretical hypothesis. Research methodologies can be classified as qualitative or quantitative.

In this research, exploratory and descriptive research will be presented in the form of a literature review on psychological career resources, organisational commitment, hardiness and career adaptability. Quantitative (descriptive and explanatory) research will be presented in the empirical study.

1.7   RESEARCH DESIGN

According to Terre Blanche and Durrheim (2002), research design is a strategic framework which serves as the bridge between research questions and the execution of the research. The research design for this study is discussed with reference to the types of research conducted, followed by an explanation of validity and reliability.

1.7.1   Exploratory research

According to Mouton and Marais (1996), the aim of exploratory research is to gather information from a relatively unknown field. The main task is to gain new insights, establish central concepts and constructs and then establish priorities. This research is exploratory in that it compares various theoretical perspectives on career adaptability, psychological career resources, hardiness and organisational commitment.

1.7.2   Descriptive research

Descriptive research involves the in-depth description of the individual, situation, group, organisation, culture, subculture, interactions or social objects (Mouton & Marais. 1996). Its purpose is to systematically classify the relationships between variables in the research domain. The overriding aim is to describe issues as accurately as possible.

In the literature review, descriptive research is applicable with reference to the conceptualisation of the constructs of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment.

In the empirical study, descriptive research is applicable with reference to means, standard deviations and Cronbach alphas, in terms of the constructs of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment.

1.7.3 Explanatory research

Explanatory research goes further than merely indicating that there is a relationship between the variables (Mouton & Marias, 1996). It indicates the direction of the relationship in a causal relationship model. The researcher seeks to explain the direction of the relationship. In the current study, this form of research is applicable in the empirical study of the relationship between the career adaptability scores, psychological career resources scores, hardiness scores and organisational commitment scores of a group of subjects.

The end goal of the research is to draw conclusions about the relationship between the constructs of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment.

This research thus fulfils the requirements of the type of research as outlined above.

1.7.4 Validity

Research design is synonymous with rational decision making during the research process. Irrespective of how structured or unstructured a research project is likely to be, it is the researcher's duty to ascertain which factors may pose a threat to the validity of the findings. By looking at the nuisance variables in a critical and systematic manner, it is possible to ensure that the ultimate findings are likely to be more valid (Mouton & Marais, 1996).

Research needs to be both internally and externally valid. Proper research design will ensure this. According to Terre Blanche and Durrheim (2002), both internal and external validity are essential and desirable for a research design. For research to be internally valid, the constructs must be measured in a valid manner and the data that are measured must be

accurate and reliable. The analysis should be relevant to the type of data collected, and the final solutions must be adequately supported by the data. The researcher follows these principles. For the research to be externally valid, the findings must be applicable to all similar cases. The findings must be valid for similar studies other than the one under review (Mouton & Marais, 1994, p. 50). Validity is illustrated in table 1.1 below.

Table 1.1

Internal Validity (Mouton & Marais, 1994, p. 51)

Conceptualisation	Theoretical validity
Constructs	Construct validity
Operationalisation	Measurement validity
Data collection	Reliability
Analysis/interpretation	Inferential validity

1.7.4.1 Validity of the literature review

In this research, validity is ensured by making use of literature relating to the nature, problems and aims of the research. Some of the constructs, concepts and dimensions that form part of the concepts of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment in this research could be found in the relevant literature. Hence the choice of constructs, concepts and dimensions was not subjective. The researcher also ensured that the concepts and constructs were ordered in a logical and systematic manner. Every attempt was made to search for and consult the most recent literature sources, although a number of the classical and contemporary mainstream research streams were also referred to because of their relevance to the conceptualisation of the constructs relevant to this research.

1.7.4.2 Validity of the empirical research

In the empirical research, validity was ensured through the use of appropriate and standardised measuring instruments. The measuring instruments were critically examined for their criterion-related validity (to ensure accurate prediction of scores on the relevant criterion), content validity and construct validity (the extent to which the measuring instruments measure the theoretical constructs they purport to measure) (Coetzee & Schreuder, 2011).

1.7.5 Reliability

Reliability is the extent to which a test is repeatable and yields consistency of the results indicated by what is measurable. Reliability in the literature is addressed by using existing literature sources, theories and models that are available to researchers (Foxcroft & Roodt, 2005).

In the current study, reliability was ensured by structuring the research model in order to limit the nuisance variables. The research context was respected at all times. The reliability of a literature review is ensured when other interested academics have access to the literature sources and the theoretical views in the literature.

Reliability of the empirical research is ensured when a truly representative sample is used. In this research, confounding variables were minimised through the sampling procedure and by including instruments of which the reliability has been proven through previous research.

1.7.6 The unit of research

According to Mouton and Marais (1996), in the social sciences, the most common object of research is the individual human being. The unit of analysis distinguishes between the characteristics, conditions, orientations and actions of the individuals, groups, organisations and social artefacts (Mouton & Marias, 1996). This research focuses on the constructs psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment. At individual level, the individual scores on each of the measuring instruments were taken into consideration. At group level, the overall scores on all the measuring instruments were taken into consideration. At subgroup level, the age, gender, race, marital status and employment status scores were taken into consideration. The purpose was to determine whether there is a relationship between the psychological career meta-competencies constructs (psychological career resources, career adaptability, and hardiness) and the retention-related constructs (job embeddedness and organisational commitment) and develop a psychological career profile for the retention of talented staff.

1.7.7 The variables

The aim of this research is to measure the effects of three independent variables relating to the psychological career meta-competencies composite construct on two dependent variables relating to the retention-related dispositions composite construct. According to Kerlinger and Lee (1999), an independent variable is the presumed cause of the dependent variable – the presumed effect. In the current research, the criterion data of the job embeddedness and organisational commitment instruments are the two dependent variables (the criterion data), and the psychological career resources, career adaptability and hardiness measuring instruments are the predictor data or independent variables.

Figure 1.1 provides an overview of the relationship between the independent and dependent variables.
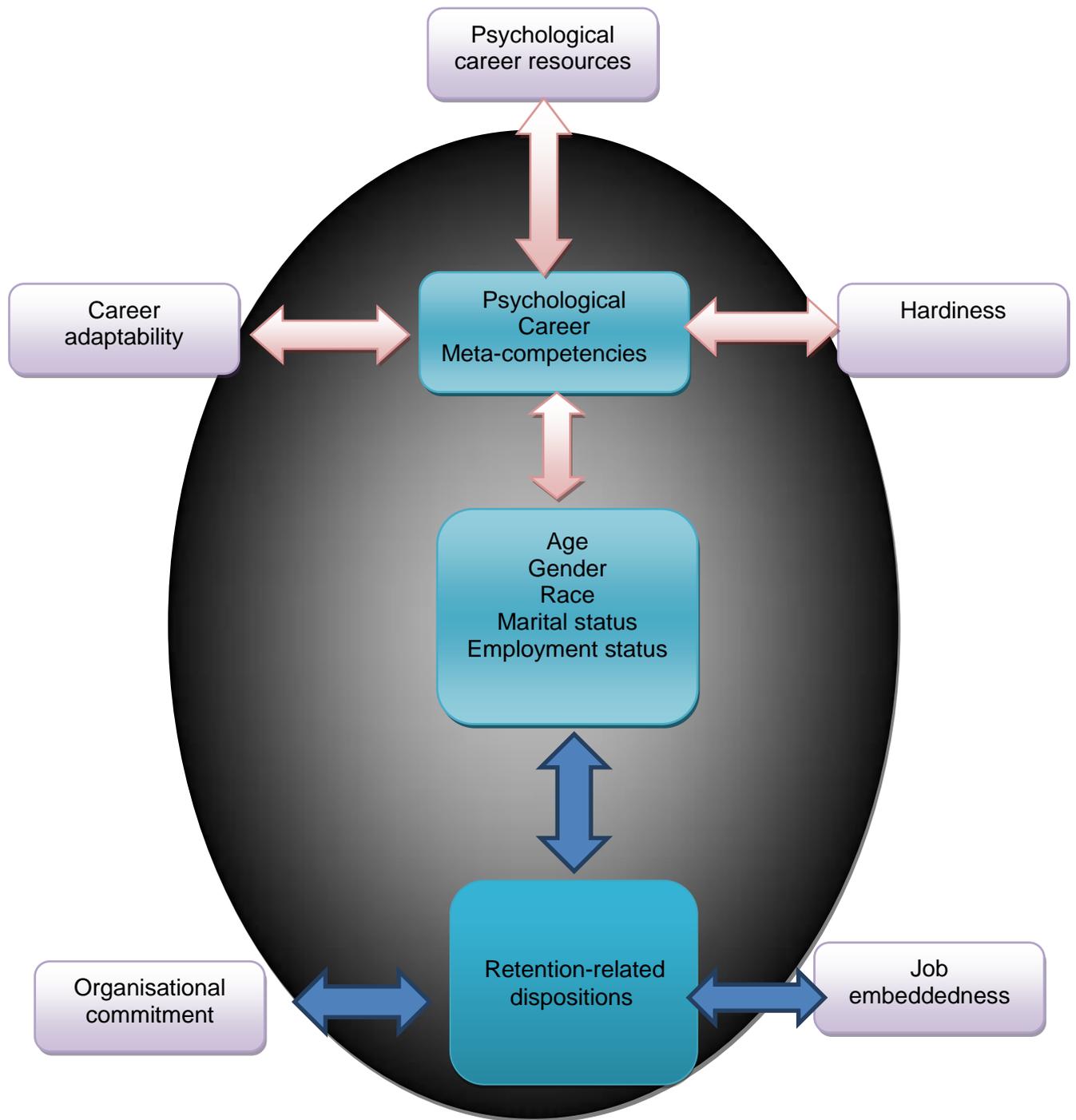
Figure 1.1. The focus of the research

1.7.8 Delimitations

The study is confined to research dealing with the relationship between four core variables, namely psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment. In an attempt to skew factors that could influence an

individual's levels of psychological career resource, career adaptability, hardiness, job embeddedness and organisational commitment, the variables used as control variables were limited to age, gender, race, marital status and employment status.

No attempt is made to manipulate of classify any of the information, results or data on the basis of family or spiritual background. Also not included in any classification process are the factors of disability or physical or psychological illness. The research is intended to be ground research that restricts its focus to the relationship between psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment. If the researcher can identify such a relationship, then the groundwork information could be useful to future researchers to address other issues relating to the five constructs. The selected research approach is not intended to establish the cause and effect of the relationship, but merely endeavour to investigate whether such relationships do in fact exist and whether the relationship between psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment is influenced by variables such as age, gender, race, marital status and employment status.

1.8 RESEARCH METHODOLOGY

The research is conducted in two phases, each with different steps, which will be discussed in the section below. Figure 1.2 provides an overview of the different phases.

PHASE 1: LITERATURE REVIEW
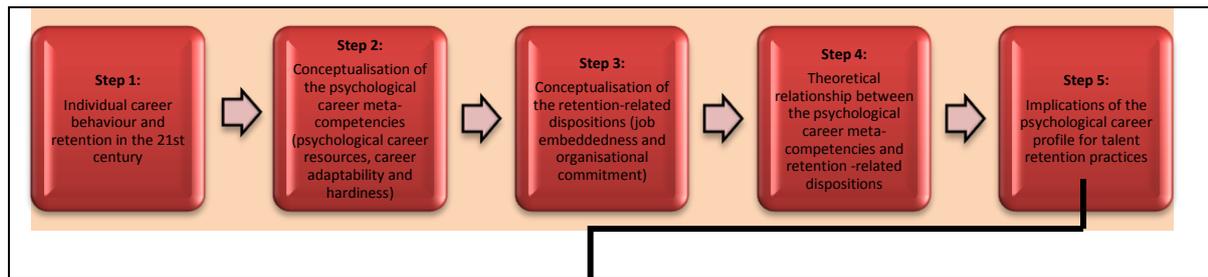
PHASE 2: THE EMPIRICAL STUDY
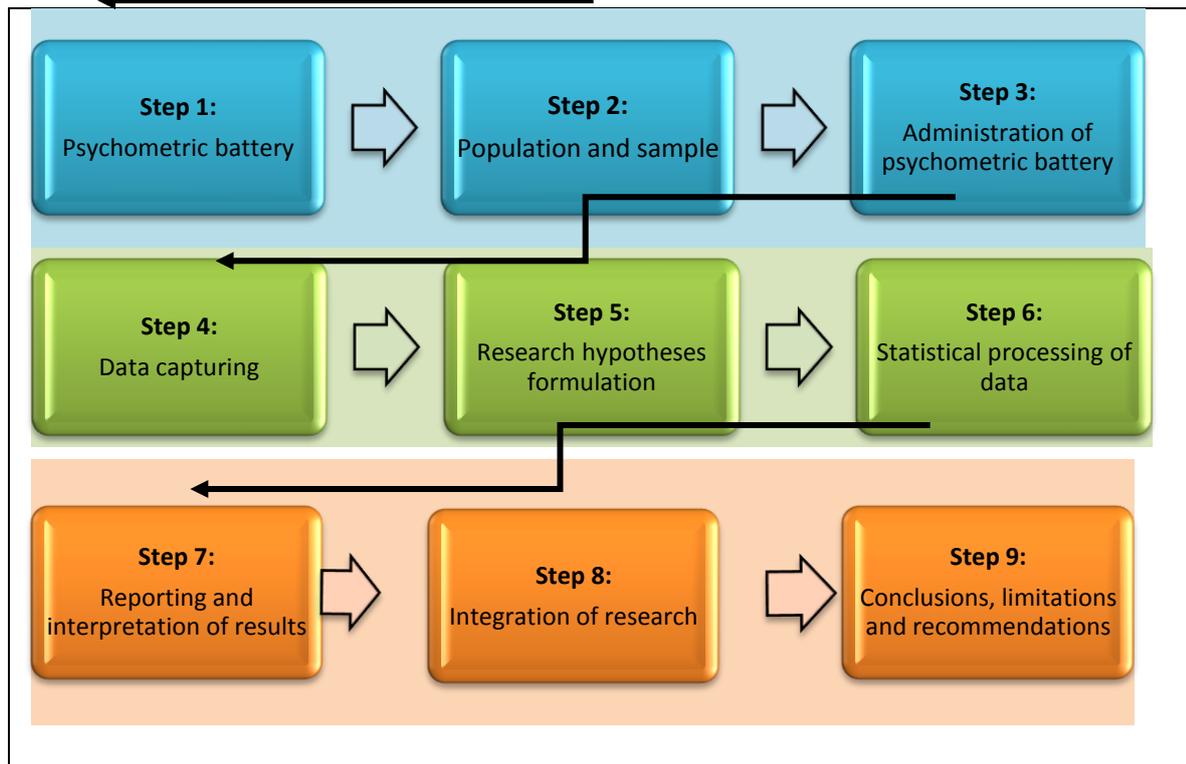
Figure 1.2. Overview of the research methodology

1.8.1   Phase 1: the literature review

The literature review consists of a review of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment.

Step 1: addresses research aim 1 of the literature review, namely to conceptualise individual career behaviour and retention in the 21st century.

Step 2: addresses research aim 2 of the literature review, namely to conceptualise the psychological career meta-competencies constructs of psychological career resources, career adaptability and hardiness and how individuals' biographical characteristics influence the development of these competencies.

Step 3: addresses research aim 3 of the literature review, namely to conceptualise the retention-related dispositions constructs of job embeddedness and organisational commitment and how individuals' biographical characteristics influence the development of these dispositions.

Step 4: addresses research aim 4, namely to conceptualise the overall theoretical relationship between the psychological career meta-competencies constructs (psychological career resources, career adaptability, and hardiness) and the retention-related disposition constructs (job embeddedness and organisational commitment). Step 4 also addresses research aim 5, namely to, based on the theoretical relationship between the psychological career meta-competencies and retention-related dispositions constructs, construct a theoretical integrated psychological career profile of the career agent that may be used to inform retention practices.

Step 5: addresses research aim 6, namely to outline the implications of the psychological career profile for talent retention practices.

Step 1: *Individual career behaviour and retention in the 21st century*

Research in the field of career psychology relating to the individuals' career behaviour is critically evaluated. Retention in the 21st century is further discussed and conceptualised. Finally, the implications for industrial and organisational psychology practices and human resource management practice pertaining to staff retention are discussed.

Step 2: *Conceptualisation of the psychological career meta-competencies (psychological career resources, career adaptability and hardiness)*

Research in the field of career psychology relating to the constructs of psychological career resources, career adaptability, hardiness and other related constructs are critically evaluated. Based on this conceptualisation of the construct of psychological career resources, a

conceptual model is designed to illustrate the principles and concepts discussed in the literature. Finally, the implications for industrial and organisational psychology practices and human resource management practice pertaining to staff retention are discussed.

Step 3: *Conceptualisation of the retention-related dispositions (job embeddedness and organizational commitment)*

Humanistic and organisational theories and research relating to the constructs of job embeddedness and organisational commitment are critically evaluated. Based on these conceptualisations of the construct of job embeddedness, a conceptual model is designed to illustrate the principles and concepts discussed in the literature. Finally, the implications for industrial and organisational psychology practices pertaining to staff retention are discussed.

Step 4: *The theoretical relationship between the psychological career meta-competencies (psychological career resources, career adaptability and hardiness) and the retention-related dispositions (job embeddedness and organisational commitment)*

This step relates to the theoretical integration of the theoretical relationship between the psychological career meta-competencies (psychological career resources, career adaptability and hardiness) and the retention-related dispositions (job embededdedness and organisational commitment).

Step 5: *Implications of the psychological career profile for talent retention practices*

This step related to the construction of the psychological career profile for talent retention practices and its implications for industrial and organisational psychology practices pertaining to staff retention.

1.8.2 Phase 2: the empirical study

An empirical study is conducted in the South African organisational context, and involves the following steps:

Step 1: *Choosing and justifying the psychometric battery*

The measuring instruments that measure the dependent variables (job embeddedness and organisational commitment) and the three independent variables (psychological career resources, career adaptability and hardiness) are discussed.

Step 2: *Determination and description of the sample*

The population is identified and the sample determined.

Step 3: *Administration of the psychometric battery*

This step involves a description of the data from the following samples in the following manner:

Step 4: *Capturing of criterion data*

The responses of subjects to each of the items of the five questionnaires are captured on an electronic database, which is then be converted to an SPSS data file.

Step 5: *Formulation of research hypotheses*

In order to operationalise the research, research hypotheses are formulated from the central hypothesis to be empirically tested.

Step 6: *Statistical processing of data*

The statistical procedure relevant to this research includes descriptive statistical analysis (internal consistency reliability, uni-dimensionality analysis, means, standard deviations, kurtosis and skewness and frequency data); correlational analysis (Pearson product-moment correlation coefficients); and inferential and multivariate statistics (canonical correlation analysis, standard multiple regression analysis, structural equation modelling, hierarchical moderated regression analysis and test for significant mean differences).

Step 7:   *Reporting and interpretation of the results*

The results are depicted in tables, diagrams and/or graphs and the discussion of the findings is presented in a systematic framework, ensuring that the interpretation of the findings is conveyed in a clear and articulate manner.

Step 8:   *Integration of the research findings*

The findings relating to the literature review are integrated with the findings of the empirical research as an integration of the overall findings of the research.

Step 9:   *Formulation of conclusions, limitations and recommendations*

The final step relates to conclusions based on the results and their integration with theory. The limitations of the research are discussed, and recommendations made in terms of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment as constructs used to inform effective retention practices.

1.9   CHAPTER LAYOUT

The chapter in the study are as follows:

Chapter 1: Scientific overview of the research

Chapter 2:   Meta-theoretical context of the study: Individual behaviour and retention in the 21st- century world of work

Chapter 3: Psychological career meta-competencies

Chapter 4: Retention-related dispositions

Integration of the literature review

Chapter 5: The empirical research

Chapter 6: Research results

Chapter 7: Conclusions, limitations and recommendations

1.10 CHAPTER SUMMARY

The background to and rationale for the research, the aim of the study, the research model, paradigm perspectives, the theoretical research and its design and methodology, the central hypothesis and the research method were all discussed in this chapter. The rationale for the study is the fact that no known research has been conducted on the relationship dynamics between the psychological career meta-competencies (psychological career resources, career adaptability, and hardiness) and retention-related dispositions (job embeddedness and organisational commitment) in the context of retention. The research endeavours to critically evaluate, and on the basis of sound research methodology, investigate the relationship between the sets of psychological career meta-competencies and retention-related dispositions constructs to be able to construct a psychological career profile to inform staff retention practices.

Chapter 2 addresses research aim 1 and discusses the world of work and careers in the 21st century from a meta-theoretical perspective.

CHAPTER 2: META-THEORETICAL CONTEXT OF THE STUDY: INDIVIDUAL CAREER BEHAVIOUR AND RETENTION IN THE 21st-CENTURY WORLD OF WORK

Keywords: knowledge economy, career, technology, globalisation, career agent, retention

The aim of this chapter is to put the present study in perspective by outlining the meta-theoretical context that forms the definitive borders of the research. Individuals who enter the world of work deal with a number of challenges such as the reduction of employment opportunities, the weakening of job security, fast-changing technology and increasing personal responsibility to keep up with the changes, to up-skill themselves, increase employability and engage in lifelong learning (Marock, 2008; Pool & Sewell, 2007). The new relationship between the employee and world of work creates the desire to develop career interventions that help individuals to reflect on their career meta-competencies as key resources in sustaining their employability (Coetzee, 2008; Savickas *et al.*, 2009). The above-mentioned trends require an understanding of the world of work in the 21st century in contrast to the traditional career, which in turn may potentially inform retention strategies.

2.1 WORK AND CAREERS IN THE 21st CENTURY

In this section, the focus will be on the evolution of the concepts of careers, changes in careers and the protean and boundaryless career.

2.1.1 Evolution of the concept of careers

The outlook of careers has evolved over the years. The conventional organisational career, once regarded as the norm, is now considered by many to have been more significant in the last century (Baruch, 2004a; Clarke, 2009; Inkson & Arthur, 2001; Kuijpers & Scheerens, 2006). Models such as the boudaryless career (Arthur & Rousseau, 1996a), the protean career (Hall, 1996b), the portfolio career (Handy, 1994), the postcorporate career (Peiperl & Baruch, 1997) and the intelligent career (DeFillippi & Arthur, 1994) have been offered as models for a prospect in which careers are more prone to be charaterised by flexible employment contracts, multiple employers, creative job moves and multiple career changes. The fundamental argument of these models is that an individual's job security will be increasingly anchored not in a particular but in his or her own portable skills and employability (Mallon, 1998). Individuals are therefore encouraged to embrace career self-management (Clarke, 2009; Clarke & Patrickson, 2008; Sturges, Conway, & Leifooghe, 2008) and to perceive events of career success in terms of psychological triumphs at an individual level

(which may include, individual achievement or feelings of satisfaction and success) instead of more objective measures such as development through the organisation ladder with its related rank markers (Arthur, Khapova & Wilderom, 2005; Hall, 1996a).

The word "career" is difficult to define. It is often used in the theory and in daily communication, as if its meaning is generally understood (Coupland, 2004). According to Young, Valach and Collin (1996), awareness around the constructed meaning of the concept "career" has increased. Career is a social creation and is continuously being reinvented – it may thus also change the relationship between individuals and organisations (Coupland, 2004).

The concept "career" originates from the Latin word, *carrera,* which means a carriage path or path. Even though it has moved towards the meaning of a person's path or development and growth through life, there seems to be an immeasurable and interesting vacuum between individuals' accounts of their calling and the "genuine" course they travel during their profession (Gunz & Heslin, 2005).

A more modern definition describes career as a developmental process of the employee along a range of experiences and jobs in one or more organisations (Baruch & Rosenstein, 1992; Baruch, 2004a, 2006). At the end of the previous century, individuals had to start taking care of their own careers again (Savicaks *et al.*, 2009), which means that nowadays individuals are expected to act as career agents.

2.1.2 Changes in careers

According to Baruch (2004b), change has always existed, but the speed with which it happens seems to be increasing. Business organisations (nonprofit, public and private organisations) are bombarded with rapid developments or changes in various areas such as the economy, technology and society in general. These developments or changes have wide implications for the management of individuals at work and specifically the planning and management of their careers. The current generation fails to see the boundaries in many facets of life, and this could have implications for their careers as such because careers are becoming multidirectional and boundaryless (Baruch, 2004a).

Several authors emphasise that changes have occurred in the world of work in the 21st century. Collin and Young (2000) found that the market and work expectations were the most prominent changes in the world of work. Hall (1996a) and Sennet (1998) recognised the decrease in stability and security in careers as the most important change in the 21st century

careers. Richardson (2000) explored the influence of globalisation on the 21st-century careers and found that globalisation presents both new opportunities and threats in the workplace. A threat typically includes the increasing competition at the hand of more efficient capital-rich economies and thereofore decreasing employment opportunities and job security.

Amundson (2006) also identified globalisation, the increasing use of new technology and communication techniques and the shift from industrial to information sciences as the key forces driving the changes in the 21st-century work context.   Blickle and Witzki (2008) confirmed the findings of Amundson (2006) and added mergers and acquisitions to the list of driving forces.   Burke and Ng (2006) added downsizing, business restructuring and subcontracting as factors that influenced the changes in the 21st century.   Table 2.1 summarises the key drivers for change in the 21st century.

Table 2.1
Key Drivers for Change in the 21st Century

Increased globalisation and national economies	Amundson (2006); Blickle & Witzki (2008); Burke & Ng (2006); Hall & Chandler (2005); Jones & DeFillippi (1996); Luthans, Luthans & Luthans (2004); Richardson (2000)
Emergence of new technology and communication technologies	Amundson (2006); Baruch (2006); Blickle & Witzki (2008); Hall & Chandler (2005); Landry, Mahesh, & Hartman (2006); Luthans *et al.* (2004); Sullivan (1999)
Development from industrial to information societies	Amundson (2006); Baruch (2006); Blickle & Witzki (2008)
The application of new managerial strategies (mergers, acquisitions, downsizing, business restructuring and subcontracting)	Baruch (2006); Blickle & Witzki (2008); Burke & Ng (2006); Clarke (2008); Cox & King (2006); Quigley & Tymon (2006); Schabracq & Cooper (2000); Sullivan (1999)

From the 1980s until the 21st century, the radical and unpredictable changes in the world of work caused people to move away from what had once been known as a stable career to a more dynamic approach of working (Baruch, 2006; Jones & DeFillipi, 1996; King, 2004; Landry *et al.*, 2006). Most people experienced career transitions and moved away from the traditional career into a new way of doing things, referred to as the boundaryless or protean

career.   Boundaryless careers are a variety of job opportunities that stretches beyond the boundaries of a single employment setting (Sullivan, 1999).

The changing organisational structures, rising career patterns, decreasing job security and the focus on transferable skills resulted in increased emphasis on employability (Clarke, 2008). According to Naute, Van Vianen, Van Der Heijden, Van Dam, and Willemsen (2009), employability is an essential ingredient for organisations wishing to compete in the competitive environment of the 21st century as well as individuals aiming for career success.   Baruch (2004a) also identified employability as a key ingredient for survival in the ever-changing world of work.   Clarke (2008) notes that the transferable skills (and behaviours) characterise employability and increase an organisations' competitive advantage.   An organisation with employable employees may have the advantage of its sustaining competitive edge in a world of megacompetition (Naute *et al.*, 2009).   Employability is the continuous fulfilment, acquisition and creation of work by the optimal use of a person's competencies (Van der Heijde & Van der Heijden, 2006).   Naute *et al.* (2009) consider employability to be the alternative to job security, and thus emphasise the importance of developing employability skills through lifelong learning and personal development.   Sullivan (1999) adds that individual characteristics such as a person's age, gender, race, maritial status and personality could have an influence on outcomes such as career success and career development, which in turn also influence an individual's employability.

As a result of the changes in the work world and focus on employability, individuals need to equip themselves with a wider variety of skills in order to be more flexible to meet the needs of organisations and customers.   The onus is therefore on the individual to continuously undergo training to up skill himself or herself.   This will ensure continued employment in the fast-changing world and the new challenges in 21st-century careers.   Fallows and Steven (2000) emphasise the fact that higher education plays a pivotal role in assisting graduates to gain the skills to become more employable, which can help them manage their careers successfully. Hence employability has become a concern for both the providers of educational services and those individuals wishing to enter the world of work (Cox & King, 2006).

The current literature on career-specific-related issues emphasises the dynamic nature of labour markets (Baruch, 2006).   The impression that comes across is that in the past organisations had a rigid hierarchical structure and operated in a stable environment. Careers were thus predictable, secure and linear (Baruch, 2006).   By contrast, the organisational system is now in a mode of change which is all dynamic and totally fluid, and careers are therefore unpredictable, vulnerable and multidirectional.   Representations of both past and

current careers represent extreme scenarios that do not reflect a true and fair representation of the real case at hand. On the one hand, although a shift from the traditional and conventional mode must have taken place, many organisations still perform in a relatively stable environment and apply well-established strategies for their management, keeping a significant share of the traditional system in tact. On the other hand, even in the traditional mode, the psychological contract and the actual practice were not fully rigid (Baruch, 2006). A more valid and reliable perspective will acknowledge that current organisations are less rigid, but not fully fluid; control may not be solely with the organisation, but the shift does not mean that the organisation has no say in career management. The shift implies that individuals have taken more control of their own career, but much remains for organisations to manage. Based on internal feelings, careers can be viewed as successful, but moving up the hierachical ladder, high earnings and gaining status and power are nevertheless the determining factors of success for individuals. For a long time, career theory argued that careers are structured (Super, 1957; Wilensky, 1961), that is, extremely traditional and organisationally focused, whereas scholars now suggest the opposite end of continuum – that is, extremely nontraditional, boundaryless or protean and individually focused (Baruch, 2006).

2.1.3 The boundaryless career

Over the last decade, two models have dominated thinking and research in the career literature, the protean career and boundaryless career (Baruch, 2004a; Briscoe, Hall, & Frautsch de Muth, 2006; Hall, 1996b; Mirvis & Hall, 1996). According to Clarke (2009), the idea of protean or boundaryless careers is attractive in terms of incorporating the career needs of individuals into the employees' needs for organisations. It is still uncertain to what degree individuals are adapting to comtemporary employment relationships or how they are managing their careers for potential employability (Clarke, 2009).

Modern-day careers have been defined as "boundaryless" in the sense that they are becoming increasingly entrenched in a further dynamic boundary-spanning knowlegde economy, frequently concerning "opportunities that go beyond any single employer" (DeFillippi & Arthur, 1994:116; Zikic, Bonache, & Cerdin, 2010).

Arthur and Rousseau (1996a) emphasise the significance of examining careers outside a single organisational situation. In an attempt to draw attention to the adaptability of the boundaryless career concept, Forret, Sullivan, and Maineiro (2010) recommend that potential research looks at differences in boundaryless careers portrayed by physical mobility (i.e. the real physical move across boundaries, such as movement between employers, industries and

jobs) and psychological mobility (i.e. an individual's perception of the ability to make transitions).

Even though the explanation of physical mobility is fairly straightforward, the definition of psychological mobility seems to be more complex (Forret *et al.*, 2010). Sullivan and Arthur (2006, p. 21) describe psychological mobility as an individual's or employee's ability to shift his or her mindset during certain situations or experiences in the workplace. According to Sullivan and Arthur (2006), individuals with high psychological mobility may haved high expectations of their own employability or may search for personal growth outside the workplace (e.g. pursue additional education or engage in vonluteer work) or may describe career success in a different way to their employers, coworkers, relatives or friends. Individuals may remove themselves from the fast track to acquire less demanding work schedules in order to engage in self-reflection and rejuvenation (Forret *et al.*, 2010). However, individuals may perhaps accept lower-paid jobs in order to create a better work/family balance.

Several authors focus on the change from a long-term-based career relationship to a transactional, shorter career relationship between employees and employers (Baruch, 2004a; Blickle & Witzki, 2008; Cox & King, 2006; De Vos & Soens, 2008; Hall, 2004). In the past, individuals were expected to work for one or two organisations during their whole life span and to serve these organisations with all they had. In recent years, the focus has shifted to employees expecting organisations to serve them and individuals moving to various organisations during their life span (Baruch, 2004b). Owing to changing loyalty and a shorter working relationship, the psychological contract as well as the employee's and employer's expectations have also changed. Under the old contract, employees were loyal workers and, in return, experienced a sense of job security. However, under the new contract, employees exchange performance for continuous learning and development (Baruch, 2006; Clarke, 2008; De Vos & Soens, 2008; Sullivan, 1999). Table 2.2 summarises the differences between traditional and boundaryless careers.

Table 2.2

Differences Between the Traditional and Boundaryless Career

	Traditional	**Boundaryless**
Employment relationship Baruch (2004a); Baruch (2006); Blickle & Witzki (2008); Sullivan (1999)	Job security for loyalty	Employability for performance and flexibility
Boundaries Baruch (2004a); Blickle & Witzki (2008); De Vos & Soens (2008); Schabracq & Cooper (2000); Sullivan (1999)	One or two firms	Multiple firms
Skills Cox & King (2006); Sullivan (1999)	Firm specific	Transferable
Success measured Baruch (2004a); Baruch (2006); De Vos & Soens (2008); Hall (2004); Sullivan (1999)	Pay, promotion and status	Psychologically meaningful work
Responsibility for career management Baruch (2004a); Blickle & Witzki (2008); Cox & King (2006); Hall (2004); Sullivan (1999)	Organisations	Individual
Training Baruch (2004a); Sullivan (1999)	Formal training programmes	On-the-job training
Milestones and career choices being made Amundson (2006); Baruch (2004a); Sullivan (1999)	Age-related ones, at the early career age	Learning related Repeated, at different age stages
Environment characteristic Baruch (2004a); Blickle & Witzki (2008); De Vos & Soens (2008)	Stability	Dynamism
Career horizon (time) Baruch (2004a); De Vos & Soens (2008); Schabracq & Cooper (2000)	Long	Short
Essence of career direction Allred, Snow, & Miles (1996); Baruch (2004b); Eby, Butts, & Lockwood (2003)	Linear	Multidirectional
Hierarchy level Baruch (2004b); Hall & Chandler (2005)	Steep ladder	Flat

Landry *et al.* (2006) and Schabracq and Cooper (2000) found that with the changes, the new careers either changed to make use of technological tools, or made way for individuals to be extremely creative in their work and therefore allowed for significant freedom.   With the

changes, people now require significantly more skills and vastly different abilities in order to succeed in their careers.

Large numbers of people have experienced career transitions, moving to what has been labelled the "boundaryless career" (DeFillippi & Arthur, 1994). This transition poses new challenges that emerge as the business environment becomes turbulent and less predictable (Ashkenas, Ulrich, & Jick, 1995). Both organisations and people change their expectations, thus generating new psychological contracts (Rousseau, 1995, 1996). Overcoming the stress associated with transitions such as these may be involved with a considerable emotional struggle and hence the inner feelings people experience (Baruch, 2006; Goleman, 1995). People have a variety of career options and paths and they navigate their careers instead of allowing the organisation to decide for them.

Contemporary work has placed the focus on the changing meaning of careers. Scholars point to a shift from the long-term-based career relationships, to transactional, short-term-based ones that evolve between individuals and their employing organisations (Adamson, Doherty & Viney, 1998; Baruch, 2003; Baruch, 2004a). In the past, people expected to serve their organisation for their entire working life. Even if this did not happen in practice, it was the desirable development. Now people expect the organisation to serve them, and the time span for the relationship to last could be easily reduced to few years (Baruch, 2004a).

The main shift is manifested in the change of psychological contracts. From the organisational perspective, it entails primarily moving from offering careers of secure employment for all, to opportunities for development (Herriot & Pemberton, 1995; Rousseau, 1995, 1996). From the individual's perspective, it is a farewell to traditional commitment to the organisation, moving to multiple commitment, which includes merely a conditional commitment to the organisation (Baruch, 2004b). Strong individualism is accompanied by social cognition and the prominence of the variety of life constituencies. This means that while individuals are less committed towards organisations (Baruch, 1998), they may develop several levels of meaning, which include identification, association and relationship. These relationships may also depend on the career stage in which the individual find himself or herself (Cohen, 1991).

Organisations are also grappling with changing workforce demographics, attitudes and values, incorporating and utilising the rapid advancements in technology and addressing globalisation-related challenges such as increased competitive pressures, outsourcing and offshoring and a global workforce that places a higer premium on cross-cultural sensitivities and skills (Burke & Ng, 2006). As new technology is invented, the way one does things changes, and these

changes in turn affect one personally and directly, such as where one lives and work. According to Burke and Ng (2006), technology has altered the way one traditionally communicates in organisations. Globalisation has also opened up new opportunities for workers and organisations alike. The result of all this globalisation is changing the work experience and evironment for individual workers, groups and organisations (Burke & Ng, 2006).

Conventional thinking suggests that organisations simply do not matter as much as they used to (Baruch, 2004a). The boundaryless organisation (Ashkenas *et al.*, 1995) resulted in the emergence of the boundaryless career (DeFillippi & Arthur, 1994). Careers have become transitional and flexible, and the dynamics of restructuring are blurring the tidy and firm former routes for success (requiring new perspectives on what success means). Linear career systems have become multidirectional (Baruch, 2006).

2.1.4   The protean career and career success

Employers can no longer provide secure jobs and have even stopped pretending that such a commitment is managable – instead they maintain that they can help employees to improve their competence and ability to acquire employment (Baruch, 2004a). In the contemporary career environment, different career concepts are valid. As mentioned previously, two of these are the intelligent career and the protean career (concepts that have become valid and applicable in a boundaryless career environment). The intelligent career (Arthur, Claman, & DeFillippi, 1995) emphasises the qualities required for successful management of individuals' own careers; they suggest the term "intelligent careers" to manifest the elements required for effective career management on the individual's part (Baruch, 2006).

Hall and Mervis (1995a) describe the protean career as a new type of career form in which the individual instead of the organisation assumes responsibility for his or her own career and for transforming his or her own career path. The concept of a protean career attitude offers a suitable approach to study contemporary careers (De Vos & Soens, 2008). A protean career attitude reflects the degree to which an individual manages his or her career in a proactive, self-directed way, driven by personal values and evaluating career success based on subjective succes criteria (Hall, 2002). One significant implication for the individual working in a constantly changing organisational environment is that he or she must have a clear sense of personal identity that functions as an internal guide for making career decisions (Hall, 2002). The protean person's own personal career choices and search for self-fulfilment are the unifying or integrative elements in his or her life (Hall, 1976, p. 201). The protean career is

one of the most innovative approaches to capturing the new notion of career systems (Hall, 1976, 1996, 2004).

In essence, the protean career is the individual's contract with himself or herself, instead of the employment contract between the individual and the organisation (Baruch, 2006). Career and life success are defined and formed by individuals. In contrast to the traditional career approach, relevant career success is more concerned with a person's inner feelings of self-actualisation, fulfilment and satisfaction derived from his or her own career. It should be noted, however, that protean career and the boundaryless career are distinct constructs. As Baruch (2006) sees it, the protean career will flourish in boundaryless career world, whereas it was suppressed (or at least not supported) in the traditional, rigid and stable career system. Prominent career scholars indicate that this is indeed the case (Sullivan & Arthur, 2006), although others see the two types of career as similar constructs (Baruch, 2006).

Career success can be explained as "the accomplishment of desirable work-related outcomes at any point in a person's work experiences over time" (Arthur *et al.*, 2005; De Vos & Soens, 2008, p. 450). In the context of boundaryless careers, with the growing importance of interfirm mobility and unpredictability, researchers speak increasingly of the personal meaning of career success as the primay focus in assessing careers (Hall, 2002). Subjective career success refers to feelings of satisfaction and accomplishment in an individual's career (Seibert, Crant, & Kraimer, 1999).

2.1.5 Career attitudes and behaviour towards the organisation

Individuals' career attitudes and experiences have changed dramatically compared with the situation in the previous two decades because of the changes in the economic, technological and business environments (Barnett & Bradley, 2007). In order to understand the career values, attitudes and experiences of individuals, it is necessary to comprehend the concept of career development and exactly what it entails.

The theories underlying the concepts of psychological career resources, career adaptability and hardiness (as a composite set of psychological career meta-competencies) should be understood. The psychological career resources model developed by Coetzee (2008), the career adaptability theory developed by Savickas (2009) and the hardiness theory developed by Maddi (1987) will be discussed in depth in chapter 3, because this research project is mainly based on these theories.

It is necessary to include Super's (1990) career stage model in the discussion in order to gain a better understanding of when in the individual's life span some of these psychological career resources, adaptability, hardiness, job embeddedness and organisational commitment variables develop.

A brief overview of Super's (1990a) career stage theory will promote an understanding of the different stages an individual undergoes throughout his or her lifespan. These stages enable an individual to make career-related choices, which in turn impact on his or her psychological career resources, as defined by Coetzee (2008), and his or her adaptability (Savickas, 2005). Super's (1990a) theory can also be extended to organisational choice in the sense that an individual's choice of an organisation may also be a means of promoting an individual's self-concept (Schreuder & Coetzee, 2011). The relationship between the individual's self-concept (perceptions of the self) and the organisational image (individual's perception of the organisation) can be a determinant of organisational choice. According to Schreuder and Coetzee (2011), an important career decision would then be to find a fit between the individual's self-concept and the image of the organisation. Super's (1990a) career stage theory adds to our understanding of how individuals go through different stages or experiences in their career development process and how each stage has certain elements that enable the individual to strive towards a successful career. These stages and elements are summarised in Table 2.3.

Table 2.3
Super's Life Stage Model (Coetzee & Roythorne-Jacobs, 2012, p.170-171

Life stages	Core life themes (preoccupations) (Savickas, 2005)	Characteristics	Self-related developmental tasks	Work-related career developmental tasks
Decline (old age from +65)	Losing one's job owing to poor health or physical limitations Slowing down work or part-time work Planning retirement	Decelerating, retirement, planning and retirement living	Finding new balance of involvement with society and with self. Reappraisal of self-concept	Decline in work activity - greater activity in roles involving family, volunteer work and leisure Community service
Maintenance (middle adulthood, age +46–65)	Dealing with new technological advancements – holding one's job and reputation	Holding, updating and innovating	Realistic self-assessment, opportunities to learn new skills, and the sharing of	Maintains levels of achievement despite challenges of competition,

			skills and expertise Setting new priorities	rapid changes in technology and family
	Improving performance			
Establishment (early adulthood, age + 25–45)	Advancing in one's work (promotion, increase in pay) Feeling sense of stability on the job Knowing basic requirements of the job Thinking about job on long-term basis Imagining onselfe as an effective, reliable worker	Stabilising, consolidating and advancing period of trial in the late twenties and a period of stabilisation in the thirties and early forties	Working to make one's place in chosen field of work Settling down in chosen/permanent position Learning to relate to others Developing a realistic self-concept	Pursues advancement (e.g. responsibility) Economic stability Succession of job changes before a final choice (trail) During stabilisation, security and advancement become priorities
Exploration (adolescence, age +14 – 25)	Exploring career possibilities First full-time job Type of encounters with supervisors, co-workers Job search Fitting in	Crystallising, specifying and implementing self-concept	Connecting self-concept to world of work (developing self-concept) Tentative career choices – learning more about opportunities Trial and error (exploration and experimentation with possible selves)	Identifies types of work through part-time jobs, and job shadowing Makes transition from school to work or further education
Growth (birth to age +12 – 14)	School system Families, friends Growth in relationships to issues that concern dealing with teachers, peers, parents and siblings	Curiosity, fantasy, interest and capacity	Formation of self-concept through interaction with adult figures	Orientation to work through chores and responsibilities at school and home. Developing interests

The changing nature of the psychological contract also influences the attitudes and behaviour of people in the organisation. Employees and their feelings towards the organisation are greatly influenced by the economic, technological and environmental changes in the

organisation. According to (Meyer & Herscovitch, 2001), the psychological contract is a significant determinant in employee commitment, and the employee's perception of the psychological contract and commitment towards the organisation are interrelated.

It is essential to understand the concept psychological contract because it has a influence on organisational commitment. This could form an important part of the results of this research study, because the study's focus is on the relationship between psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment.

According to Coetzee (2008), the employability, career and life satisfaction and common welfare and happiness of the worker have developed into a major focal point of managers and industrial psychologists. The employability of staff is seen as a significant condition for supporting a competitive lead at the business level and promoting experiences of objective and psyhological career accomplishment at the personal level (Van Dam, 2004; Van der Heijde & Van der Heijden, 2006).

The changing nature of careers and the new form of psychological contract are also influencing people's psychological attachment to and attitude towards the organisation. This study therefore also focuses on individuals' organisational commitment. Commitment has been studied extensively in the last 20 years. One of the reasons for the attractiveness of organisational commitment may be its vital location in human resource management policies. Commitment plays a key role in the employee-organisation relationship. The feeling of belonging helps to connect individuals to a specific organisation. Organisational commitment usually stimulates the aspiration to remain an employee of the organisation, the intention to reside, retention of membership, presence and possibly performance (Chow, 1994). Organisational commitment can be defined as a psychological condition that binds the employee to the organisation (Allen & Meyer, 1990).

Encouraging improvements in commitment levels may present outcomes in encouraging behavioural consequences as well as indirect outcomes for improved employee satisfaction levels (Bashir & Ramay, 2008). Feelings about job performance, which refer to commitment and satisfaction, as well as being in a profession and organisation that fit an individual's values and goals, influence an employee's intention to leave or remain with a particular organisation (Bashir & Ramay, 2008). Hence an individual's organisational commitment is influenced by his or her feelings, values and goals in the job he or she is currently doing.

An examination of the concept of organisational commitment in the previous decade seems to be extremely popular in the literature on industrial and organisational psychology and organisational behaviour (Mathieu & Zajac, 1990). According to Mathieu and Zajac (1990), employees, organisations and the world are influenced by the development of improved perceptions of the development associated with organisational commitment. The level of employees' organisational commitment will possibly ensure that they are better suited to receive both extrinsic (which includes remuneration and benefits) and psychological (which includes essential job satisfaction and associations with fellow employees) rewards. Organisations appreciate commitment on the part of their staff. Organisational commitment is generally assumed to reduce abandonment behaviours which include tardiness and turnover. In addition, employees who are committed to their organisations may possibly be more willing to participate in "extra-role" activities, such as being creative or innovative, which frequently guarantee an organisation's competitiveness in the market (Katz & Kahn, 1978).

An individual's commitment to an organisation may be an incentive for him or her to remain with the organisation for a longer period (Van Dam, 2008). Research has indicated that organisation commitment is constructively related to turnover objectives and behaviour (Griffeth, Hom, & Gaertner, 2000). In addition, Gellaty, Meyer, and Luchak (2006) established that organisational commitment can forecast an employee's aim to remain with a specific organisation for at least a year longer. This suggests that there could be variations in commitment among employees who seem to be focused on remaining with the organisation for some time and employees whose focus is on leaving on the short run (Van Dam, 2004). Others have indicated that organisational commitment relies to a certain extent on the specialised commitment that proceeds it. Employees who are further committed to both the occupational field and the employing institution may perform better than less committed individuals (Kidd, 2006; Lackman & Aranya, 1986).

In conclusion, changing circumstances have created the need for people to equip themselves with the necessary skills and competencies to make them employable or create their own employment opportunities. An up-skilled workforce will, in turn, provide the organisation with the qualified, committed and motivated workforce it requires to increase its competitive advantage (Richardson, 2000). Amundson (2006) and King (2004) both contend that challenges in the world of work also influence staff retention. A more dynamic approach needs to be followed during retention practices. The above authors note that the extent of the changes have compelled people entering the world of work to critically reflect upon the current assumptions which, in turn, will influence the way in which career counselling practices are developing. Emphasis is placed on the increased responsibility of individuals in career

development and the interpersonal skills that every individual entering the world of work needs. As a result of the on-going changes in the economy and social environment, it is becoming essential to focus on career decision making and career development as a lifetime practice (Amundson, 2006). This may in turn influence the commitment of individuals and their retention.

2.2   INDIVIDUALS AS CAREER AGENTS

As previously discussed, the boundaryless career reflects a new approach to careers, in which the psychological contract between employer and employee no longer automatically includes a promise of lifetime employment and stable career advancement (Arthur, 1994). The boundaryless career entails that employees have to engage in a range of career self-management activities to create options that allow them to realise their personal career goals and enhance their employability (De Vos & Soens, 2008). Organisations endeavour to change employees' attitudes towards their career development and own role in the workplace (Briscoe & Hall, 2006; De Vos & Soens, 2008). Inherent in the notion of protean careers is the fact that the individual employee is primarily responsible for managing his or her career and that a strong sense of identity and values are crucial for guiding career decisions (Briscoe & Hall, 1999, 2006; Hall, 2002). De Vos and Soens (2008) conclude in their study that individuals who adopt a protean career attitude report higher levels of career satisfaction and perceived employability and that this relationship is mediated by the development of career insight.

The responsibility for managing careers is increasingly changing from employers to adaptive and proactive employees (Raabe, Frese & Beerh, 2007). With the nature of jobs shifting and the concept of the protean career (Hall, 1996b; Hall, 2004), there has been a transfer of the responsibility for careers from employers to employees and a call for individuals to be more proactive about their careers (Seibert *et al.*, 1999), which require a high degree of personal initiative (Frese & Fray, 2001). It is necessary to consider the self-regulation theory in order to understand the nature of career agency.

By taking into consideration the self-regulation regulation theory, control means that individuals guide their own activities in association with one or more goals (Raabe *et al.*, 2007). The self-regulation theory suggests that individuals' dealings with the environment will allow them to guide their goal-directed activities over time and across changing situations (Vohs & Baumeister, 2004). Interventions pertaining to the self-regulation theory aspire to enhanced control and self-regulation, and have been successful for specific short-term employee behaviours such as job presence (Frayne & Latham, 1987; Latham & Frayne, 1989), a

decrease in challenging workplace behaviour (Godat & Brightman, 1999), and sales (Frayne & Geringer, 2000). Proof of interventions to attain more complex, longer-term goals such as career building is absent.

The self-regulation theory is based on the initiative that goals, plans and feedback are relevant factors for regulating an individual's actions (Raab *et al.*, 2007). The individual actions (Frese & Zapf, 1994) include the following steps: goals, information collection, planning, execution and feedback. Individuals observe their environments and gather information to help them plan a course of action. Goals and information ensure that individuals develop plans. Implementing the plan means actively manipulating the environment on an individual's behalf, and the consequences are feedback on the individual's actions. Personal initiative is characterised by individuals being self-starting, proactive and determined in facing obstructions (Frese, Kring, Soose & Zempel, 1996). Raabe *et al.'s* (2007) study, which was conducted at a global technology organisation in Germany, over a period of more than nine months, included different industries.

Raabe *et al.* (2007) developed two models that apply the action theory to career self-management. The models are based on the way in which a career-focused intervention supports an action regulation theory and increases career self-management through self-knowledge and goal commitment, which affect the plan quality (figure 2.1). The second model (figure 2.2) clarifies how the implementation of active career self-management behaviours may affect career satisfaction, directly through feedback variables from the organisational environment. The concept of feedback in the action theory refers to the motivation that the individual may interpret as information concerning the action. This includes either information on the process of action in the acting individual (proprioceptive feedback), given by other individuals (in the sense of receiving a smile when the individual has told a joke), by the objective environment (receiving a pay raise) or by a feedback intervention (when other individuals provide information on the acting indivual's actions in order for him or her to learn from it).
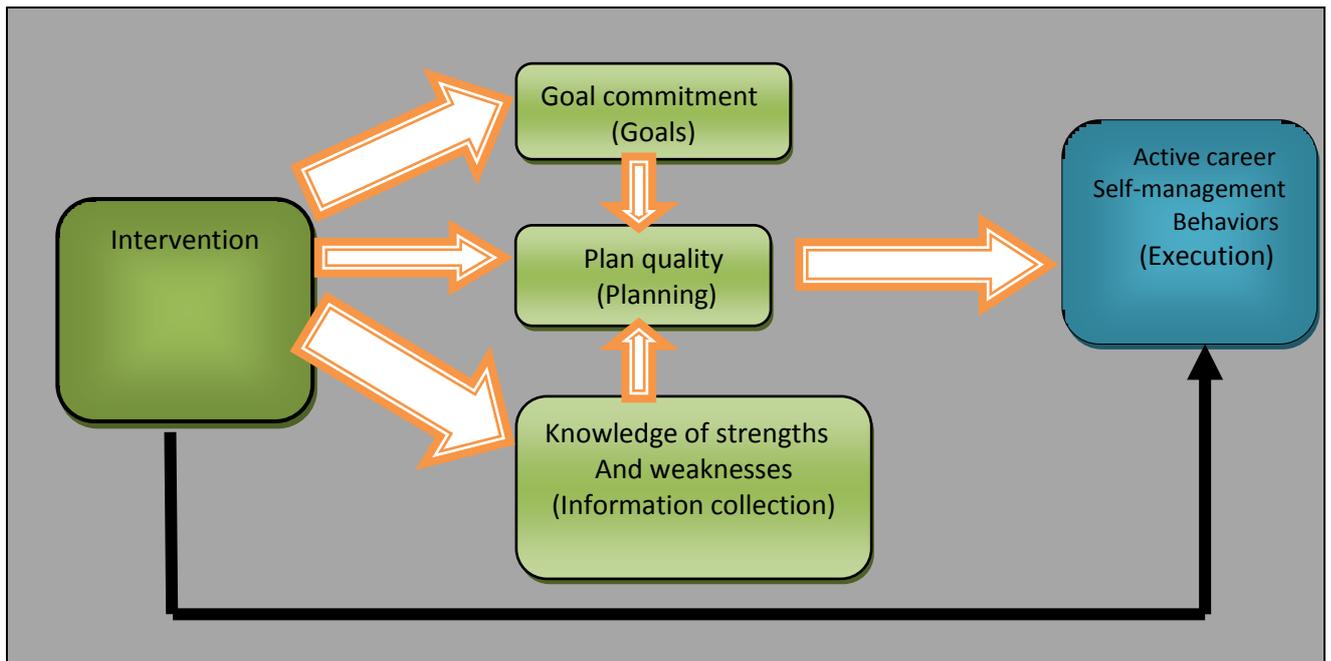
Figure 2.1. First career self-management model (Raabe *et al.*, 2007, p. 299)
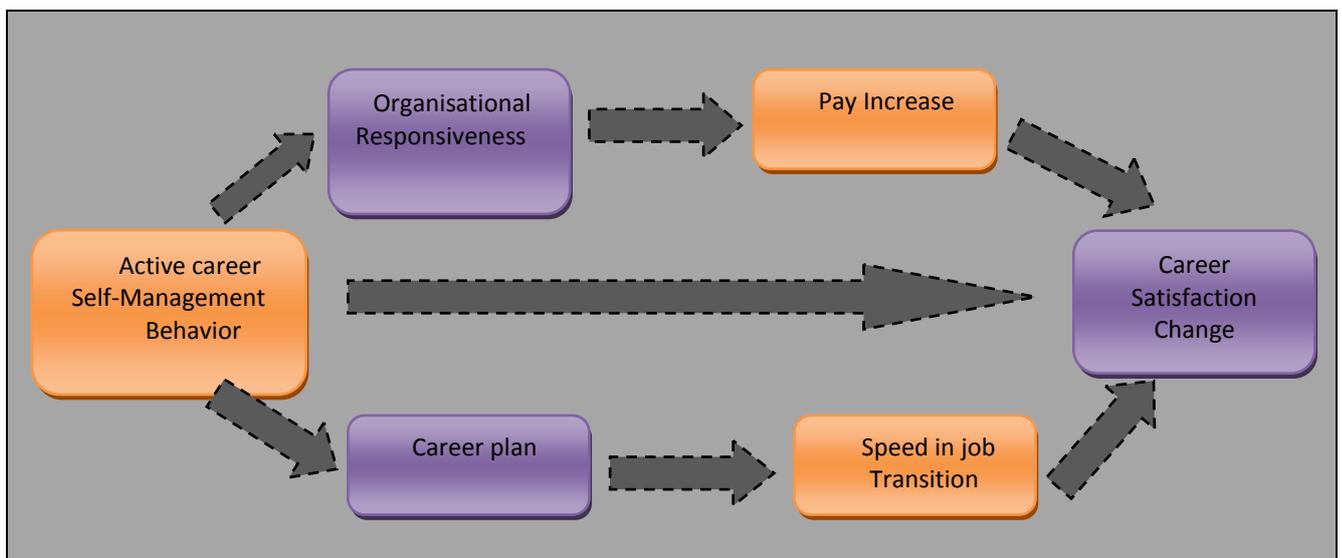
Figure 2.2. Second career self-management model (Raabe *et al.*, 2007, p. 299)

The three variables (goal commitment, self-knowledge and the quality of a self-management plan) suggested by the action theory (Frese & Zapf, 1994) should, in turn, increase career agency and career self-management behaviours (e.g. taking personal ownership of and engaging in actions to develop one's own career). The three variables thus moderate the effect of the intervention on career self-management behaviour.

Employees who know how to utilise their strengths and weaknesses in career management will develop more meaningful and specific plans. Action theory also suggests that the quality of the career plan (Frese & Zapf, 1994) is central. Although goal commitment is the starting point (Frese & Zapf, 1994), goals are only transformed into actions by a plan. Both goal

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commitment and self-knowledge should enhance the plan quality, the key variable leading to improved career self-management behaviour. The relationship between the intervention and plan quality is therefore mediated by self-knowledge and goal commitment (Raabe *et al.*, 2007).

According to the action theory, plans help transform general goals into specific implementation objectives, which then lead to goal-directed behaviour (Raabe *et al.*, 2007). Effective plans need to have certain qualities, including specific action steps and the timing of these steps, as well as alternative plans in case unexpected problems occur (Frese & Zapf, 1994).

When actions are successful so that goals are achieved and positive feedback is received, action theory predicts positive affect (e.g. career satisfaction) to increase (Raabe *et al.*, 2007). Employees engaging in more active career self-management behaviours have more control over their careers and should subsequently be more satisfied with their progress and careers. Generally, employees prefer control, participation and autonomy - hence the expectation that career self-management behaviour could affect career satisfaction directly, regardless of other payoffs involved.

Active career self-management behaviours can affect an individual's career success by influencing the objective organisational conditions. Career management behaviours that increase the visibility of employees which have been found to be related to informal organisational career management (Sturges, Guest & Mackenzie Davey, 2000) may include organisational advancement efforts such as providing mentoring, training opportunities or skills development and informal networking. Employees with active career self-management behaviour will make the organisation responsive and therefore experience the organisation as responsive. Employees with a high degree of active career self-management behaviours are more likely to be perceived as able and standing out (thereby increasing organisational responsiveness). In terms of action theory, only active behaviours lead to environmental changes conducive to the individual (Frese & Fray, 2001). Organisational responsiveness to career self-management should lead to visible positive outcomes, namely pay increases, which in turn relate to career satisfaction. Pay increases are something that the organisation can control, and something that should lead employees to be more satisfied with their careers, because it is unlikely that self-management without organisational responsiveness would result in pay increases (at least in a merit-based performance system) (Raabe *et al.*, 2007).

Career self-management behaviour can influence career success by how well a career plan is implemented. If employees manage their careers proactively as a result of the intervention,

they will probably alter their jobs more quickly. Some form of job change is thus likely to be a key result of enhanced career self-management (Raabe *et al.*, 2007). The faster employees change to new jobs or assume increased responsibilities, the more satisfied they should be with their progress towards skills development and advancement. Better jobs should increasingly make employees more satisfied with their career paths. It is therefore possible to induce individuals to engage in such self-regulatory behaviours by expanding self-management principles from more specific behaviours to self-control of more global, complex goal-directed actions needed in career building. Raabe *et al.* (2007) linked career self-management strongly to a subsequently measured, subjective indicator of successful careers, namely career satisfaction. In fact, self-management behaviours appeared to have the strongest effect on career satisfaction. There was both a direct path from career self-management to career satisfaction and a path mediated by organisational responsiveness and pay increases. However, the path from career self-management to career satisfaction via the mediators career plan implementation and speed in job transition was not confirmed.

The increasing emphasis on concepts such as career agency, career self-management, the protean career and psychological success in the literature on careers confirms current research on empowerment and intrinsic motivation (Quigley & Tymon, 2006; Schreuder & Coetzee, 2011). It is argued that intrinsic motivation is the essential motivational/psychological component of employee empowerment. According to Manz (1991), intrinsic motivation enables employees to become self-managing or self-leading. In Hall and Moss's (1998) notion of the protean career, development is undoubtedly self-directed. In addition, they argue that following the protean career involves a high level of self-knowledge, self-awareness and personal responsibility. Individuals need to be self-correcting in response to changing demands from the environment, without waiting for formal training and development from the organisation (Quigley & Tymon, 2006).

Skilled individuals become entrepreneurs of their own career, building a convenient repertiore of meta-competencies to uphold and enhance their market value (Hoekstra, 2011). Individuals choose careers fitting their personal goals as far as market conditions allow. Organisations use changeable strategies to commit those individuals that the organisation values the most in the labour market and offer temporary and noncommitting contracts to the easier replaceable majority (Hoekstra, 2011). Individuals are responsible for managing their own careers, and hence for negotating employment conditions and opportunities for further development (Sullivan, 1999). The career scenery has become more complex, dynamic and open, and the career theory demonstrates signs of moving in that direction (Hoekstra, 2010; Richardson, Constantine, & Washburn, 2005; Savickas, 2002). Schein's (1978,1990) work on career

anchors presumes that career motivation is determined by an individual's personal understanding of his or her own abilities, needs and values – and that making choices that are dependent on this understanding will help lead him or her to a more satisfying, personally fulfilling career.

In the traditional career context, the organisation assumed sole responsibility for taking charge of the individual's career. However, in the new world of work, the responsibility has shifted to the individual to market himself or herself and increase his or her employability skills (Hall, 2004). Most of the responsibility for managing careers is therefore shifting from the employers to employees (Raabe *et al.*, 2007). The new psychological contract which originated from the new world of work implies that the employer does not automatically promise the individual lifetime employment and steady career achievements (De Vos & Soens, 2008; Forrier & Sels, 2003). People determine their own destiny and thus manage their own careers (Baruch, 2006). Individuals need to think for themselves and think of themselves as self-employed rather than being employed (Clarke, 2008; London & Smither, 1999; Schein, 1996). Individuals should to be encouraged to embrace career development activities and self-management instead of relying on organisations and educational institutions to do it for them. Career self-management typically includes career guidance, career counselling and engaging in learning opportunities (Clarke, 2008). Individuals need to develop a self-awareness of their own strengths and weaknessess. Career development activities can help individuals to overcome the weaknessess and use their strengths in the opportunities provided by the new world of work (Ghulam & Bagley, 1999). When individuals engage in career self-management and career-development activities they will experience greater control over their careers and as a result increase their employability (Clarke, 2008). According to Harvey (2000), the challenge is not only how to accommodate and increase employability alone, but the emphasis is also on the shift from the responsibility of the educational provider to the individual to increase employability.

Career self-management thus involves those activities that allow individuals to make a realistic self-assessment of their own talents and capabilities in the light of organisational career opprtunities and the concrete actions undertaken to realise these ambitions (De Vos, Dewettinck, & Buyens, 2009). These action might include networking, self-nomination, the notion of life design (Savickas, 1997) and creating opportunities. Thematically, this research views individuals' psychological career resources, career adaptability and hardiness as vital psychological career meta-competencies that form an integral part of individuals' career self-management behaviour.

2.3   RETENTION CHALLENGES FOR ORGANISATIONS

Retention can be described as initiatives taken by management to prevent employees from leaving the organisation, such as rewarding them for performing their jobs effectively; ensuring harmonious woking relations between employees and managers; and maintaining a safe healthy work environment (Cascio, 2003).   Redman and Wilkonson (2009) indicate in their research that organisations need to take cognisance of the changing priorities of job candidates and what attracts them to jobs and organisations.

According to Kerr-Phillips and Thomas (2009), South Africa is experiencing a universal skills crisis, particularly pertaining to the retention of the country's top talented and knowledgeable employees.   This deficiency leads to the reduction in the number of or loss of intellectual and technical individuals, with a negative result that impacts on the country's economic and social growth (Du Preez, 2002).   While retaining talent in South Africa is a macro challenge, South African organisations are also facing the micro challenge of retaining top talent in their own organisations (Kerr-Phillips & Thomas, 2009).   It is these knowledgeable employees who, through their intellectual capital, control an organisation's competitive advantage (Birt, Wallis, & Winternitz, 2004).   According to Mitchell, Holtom and Lee (2001), managers are facing a constant challenge to grow and retain talent and reduce the impact of market-driven turnover on their talent group by dominating the fight for talent in local and global contexts.

There is likely to be a greater need for creativity and innovation on the part of employees in the new service and knowledge-based sectors that have grown dramatically in the past decade. Industries have become more knowledgeable, which has made it more imperative for employees to continuously learn and update their knowledge and skills (Burke & Ng, 2006). There is also a greater need for employees to work collaboratively with more emphasis on a variety of team-based structures.   Finally, organisations will need greater commitment and engagement of staff in order to remain competitive (Burke & Ng, 2006).

Lesabe and Nkosi (2007) identify the following six critical factors that need to be considered in the retention of highly skilled professional and managerial employees in the South African context: (1) compensation (base salary), (2) job characteristics (skill variety and job autonomy), (3) training and development opportunities, (4) supervisor support, (5) career opportunities, and (6) work/life policies.

Money still seems to be the main incentive used to attract professionals.   According to Higginbotham (1997), high salaries are not vital, but "good" and "fair" salaries demonstrate a

strong association with the intention to stay, signifying that as long as the compensation is competitive, financial rewards are not the main factor in retention. Kochanski and Ledford (2001) support this statement, namely that the actual level of pay is less important than feelings about pay raises and the process used to administer them. Employees want to understand how the pay system works and how they can receive pay increases. Once the pay level has been reached, the intangables such as career, supervisor support, work and family balance become essential (Döckel, Basson & Coetzee, 2006; Tomlinson, 2002).

Repetitive, narrow work experience with little individual judgement ward off high technology employees (Kochanski & Ledford, 2001). Research has indicated that the design of high technology professionals' work content influences the stability of the technical workforce (Amabile, Conti, Coon, Lazenby & Herron, 1996; Döckel *et al.*, 2006). Job characteristics, that include variety and autonomy are well-established predictors of organisational commitment (Pretorius & Roodt, 2004). According to Döckel *et al.* (2006) and Dubie (2000), faithful employees take pleasure in the autonomy they obtain in their existing jobs. The higher the individual's level of autonomy, the more negatively it is associated with turnover (March & Mannari, 1977).

Training is crucial for the survival of any professional employee and is the only way he or she can remain employable over the span of his or her career. According to Tomlinson (2002), it is vital for organisations to retain the leading edge by having their employees well trained in the latest technologies and trends. Employees remain at organisations that encourage career opportunities through learning and the ability to apply their newly learnt skills (Döckel *et al.*, 2006). The main mechanism forpredicting training is to enhance organisational commitmentthrough enhanced self-worth and significance.

Supervisor support includes the supervisory behaviours that uphold and encourage the employee's innovation. These behaviours include reward and recognition. Providing adequate performance feedback to employees helps strengthen positive attitudes towards the organisation and helps avoid early intentions to leave the organisation (Döckel *et al.*, 2006).

Labour market trends in the IT field have continued to present amplified career opportunities for high technology employees and hiring and retention challenges for the organisations appointing these employees (Döckel *et al.*, 2006). Kochanski and Ledford's (2001) survey demonstrates that career opportunities give way to more significant predictors of retention than any other type of reward, and second to this, are training opportunities and an employee's relationship with his or her supervisor.

Work/life policies include flexible work scheduling (e.g. part-time work, job-sharing, variable starting and quitting times), family leave policies allowing periods away from work for employees to see to family matters and childcare assistance (Burke & Cooper, 2002).

Individuals' job satisfaction, organisational commitment, job embeddedness and work engagement (as key psychological retention-related dispositions influencing their decisions to stay or leave) may be increased by using strategies that focus on assessing and evaluating employees, designing and changing workplaces and jobs, leadership and training and career management (Schreuder & Coetzee, 2010). According to these authors, an individual's embeddedness in his or her job and career will determine the loyalty he or she feels towards the organisation. Hence job embeddedness may lead to higher levels of commitment towards an organisation, which in turn may have a positive effect on employee retention. These strategies can be viewed as retention challenges that organisations face in the current changing world of work.

Table 2.4 provides an overview of the many challenges identified by the literature with regard to the retention of employees, while Table 2.5 provides an overview of the key challenges in retention in South Africa.

Table 2.4
Summary of Key Retention Challenges Globally

Retention challenge	Literature source
Individual charateristics, workplace structures and environmental conditions	(Kim, Price, Mueller, & Watson, 1996)
Stress, job satisfaction and organisational commitment	(Griffeth *et al.*, 2000; Mallol, Holtom, & Lee, 2007; Mueller, Boyer, Price, & Iverson, 1994)
Job satisfaction and organisational commitment	(Lum, Kervin, Clark, Reid, & Sirola, 1998)
Job satisfaction and organisational commitment	(Lum *et al.*, 1998)
Remuneration and career opportunities	(Iverson & Roy, 1994)
Conflict with colleagues and supervisors	(Schaufeli & Enzmann, 1998)
Unmet career expectations	(Houkes, Janssen, De Jonge, & Bakker, 2003)
Job enrichment and employee commitment	(Luna-Arocas & Camps, 2008)
Casual events such as job satisfaction, work commitment	(Elangovan, 2001)
Specialised skills	(Glen, 2006)

Table 2.5

Summary of Key Retention Challenges in South Africa

Retention challenge	Literature source
Organisational culture and business dynamics	(Luthans, Van Wyk, & Walumbwa, 2004)
Broad range of diversity and the new demographic employee pool	(Thomas & Jain, 2004)
Ethnicity, language, education and opportunities	(Roodt, 1997)
Multicultural workforce, competitiveness and ethnicity	(Prime, 1999)
Personal characteristics which include individualism, self-centredness, competitiveness and exclusiveness	(Finestone & Snyman, 2005)

The identified retention challenges may serve as a means to reveal the organisation's support of their commitment to its employees and in turn promote a mutual attachment by employees. Employees' organisational commitment is associated with their belief that the identified retention factors are motivated by the aspiration to retain good employees and be fair in their treatment (Döckel *et al.*, 2006).
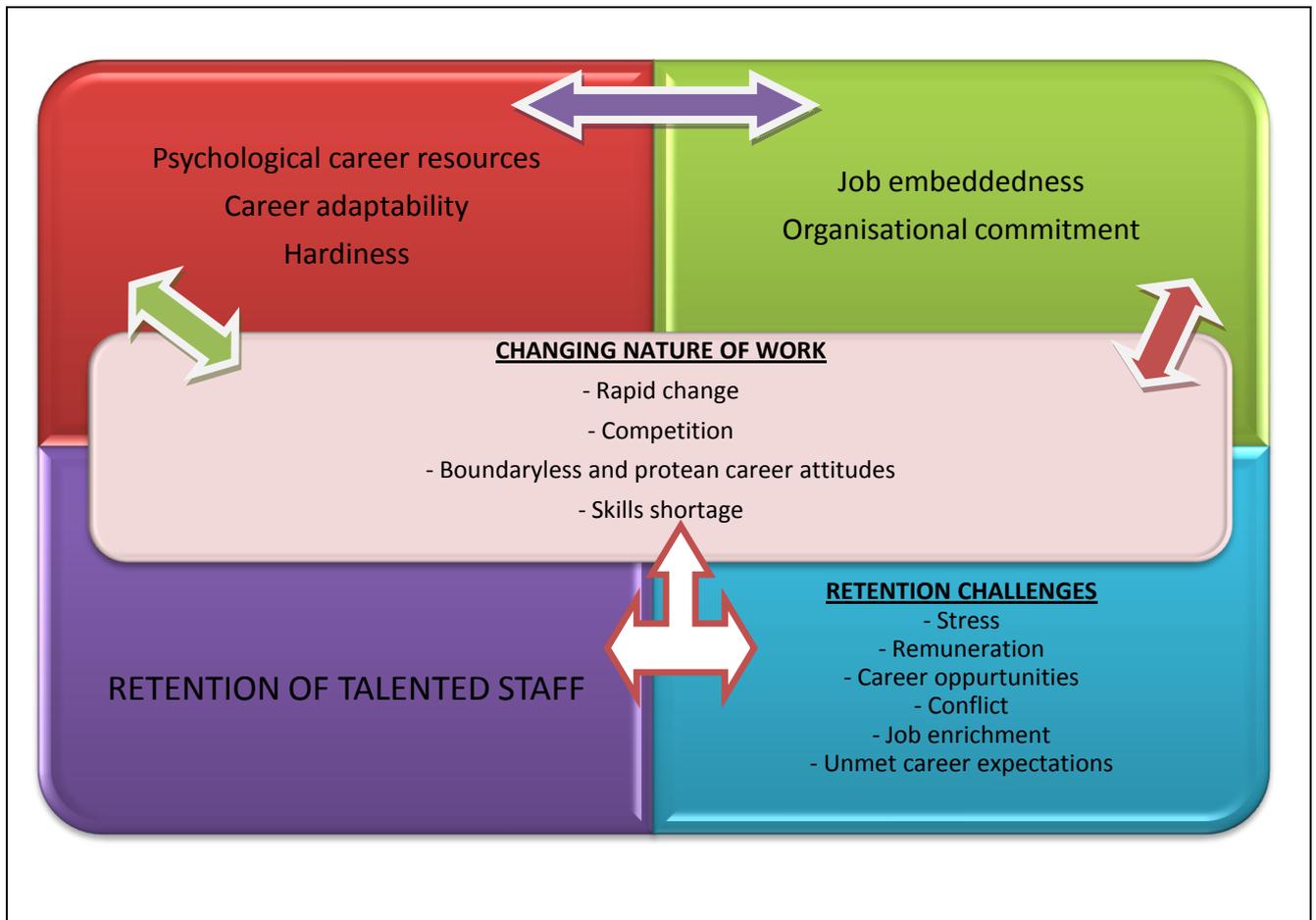
Figure 2.3.   *Hypothesised link between individual psychological behaviour and retention in the contemporary career context*

2.4   CHAPTER SUMMARY

It is clear from the literature that the work context has changed dramatically during the 21st century. As a result of these changes, careers have also changed and moved away from what was known as the traditional career to the boundaryless career. The developments in the career context have influenced the skills and competencies of individuals wishing to enter the world of work. Higher qualifications or technical skills are no longer enough to secure a job. The present study will focus on psychological career resources, career adaptability and hardiness as psychological career meta-competencies and job embeddedness and organisational commitment as retention-related dispositions influencing the retention of valuable employees in an organisation.

If individuals are to acquire the necessary psychological attributes, they need to take responsibility for up skilling themselves and managing their careers as effectively as possible.

Individuals can engage in career counselling and career development activities to identify their strengths and weaknesses and develop these psychological attributes as a tool for enhancing their skills. A psychological profile for staff retention would therefore be a powerful tool for industrial psychologists, human resource practitioners, managers, career counsellors, individuals as career agents and all those involved in career counselling. This tool could be used to deepen the understanding of how career agents' psychological career profiles influence their psychological attachment to the organisation. This knowledge could be useful in the design of retention practices for talented staff.

Herewith research aim 1 (to conceptualise individual career behaviour and retention in the 21st century) has been achieved.

Chapter 3 discusses the questions pertaining to the conceptualisation of the first three variables of concern to this research, namely psychological career resources, career adaptability and hardiness as a composite set of psychological career meta-competencies.

CHAPTER 3: PSYCHOLOGICAL CAREER META-COMPETENCIES

Keywords: career development; career drivers; career harmonisers; career preference; happiness; job/career satisfaction; life satisfaction; social contract; employability; psychological career resources; career adaptability; hardiness

Chapter 3 addresses the second literature research aim pertaining to the conceptualisation of the psychological career meta-competencies constructs of psychological career resources, career adaptability and hardiness, and how individuals' biographical characteristics influence the development of these competencies. In this chapter, the constructs of psychological career resources, career adaptability and hardiness and the related theoretical models will be explored. The variables influencing the development of psychological career resources, career adaptability and hardiness and the implications for retention will also be discussed. The chapter concludes with an evaluation of the theoretical foundations of the constructs of psychological career resources, career adaptability and hardiness, highlighting the contributions and limitations of relevance to this research.

3.1 PSYCHOLOGICAL CAREER RESOURCES

The concept of psychological careers will be discussed in the subsections below. Firstly, the concept of psychological career resources will be conceptualised, and this will be followed by a discussion of the theoretical models and the variables influencing psychological career resources.

3.1.1 Conceptualisation of psychological career resources

Resources are defined as those psychological entities that are either centrally appreciated in their own right (e.g. self-esteem, close attachments, wellbeing and internal tranquility) or operate as a means to gain centrally appreciated ends (Hobfoll, 2002; Ferreira *et al.*, 2010; Ferreira & Coetzee, 2010). This broad definition forms a part of a number of major theoretical perspectives that focus on psychological resources (Hobfoll, 1998; Holahan, Moos, Holahan & Cronkite, 1999). In the careers context, the concept of career meta-competencies is used to refer to individuals' psychological resources.

Career meta-competencies consist of an assortment of psychological career resources, which include attributes and abilities such as behavioural flexibility, self-knowledge, career orientation

consciousness, sense of reason, self-esteem and affective literacy, which enable individuals to be independent learners and hands-on agents in the administration of their own careers (Coetzee, 2008; Hall & Chandler, 2005; Ferreira *et al.*, 2010; Ferreira & Coetzee, 2010). According to Coetzee (2008), more researchers in the field of career development indicate that a superior understanding of individuals' career meta-competencies (as described by an individual's set of psychological career resources) with regard to their common employability is essential.

An individual's career awareness refers to his or her psychological career profile (Coetzee, 2008, p. 10). This is based on Adler's (1956) explanation of the idea of consciousness. Coetzee (2008, p. 10) describes career consciousness as individuals' awareness and career-related cognitions, which include perceptions, attentiveness and self-evaluations of their career preferences, attitudes, ideals, skills and behaviours that are understood and identified by individuals as a vital factor in actualising their objectives and experiencing job satisfaction.

3.1.2 Theoretical model

Coetzee (2008) offers a valuable theoretical framework to help individuals recognise the significance of developing their inner career resources and drawing on these psychological resources to improve their individual employability characteristics and abilities. Figure 3.1 illustrates how the different psychological career resources interact.
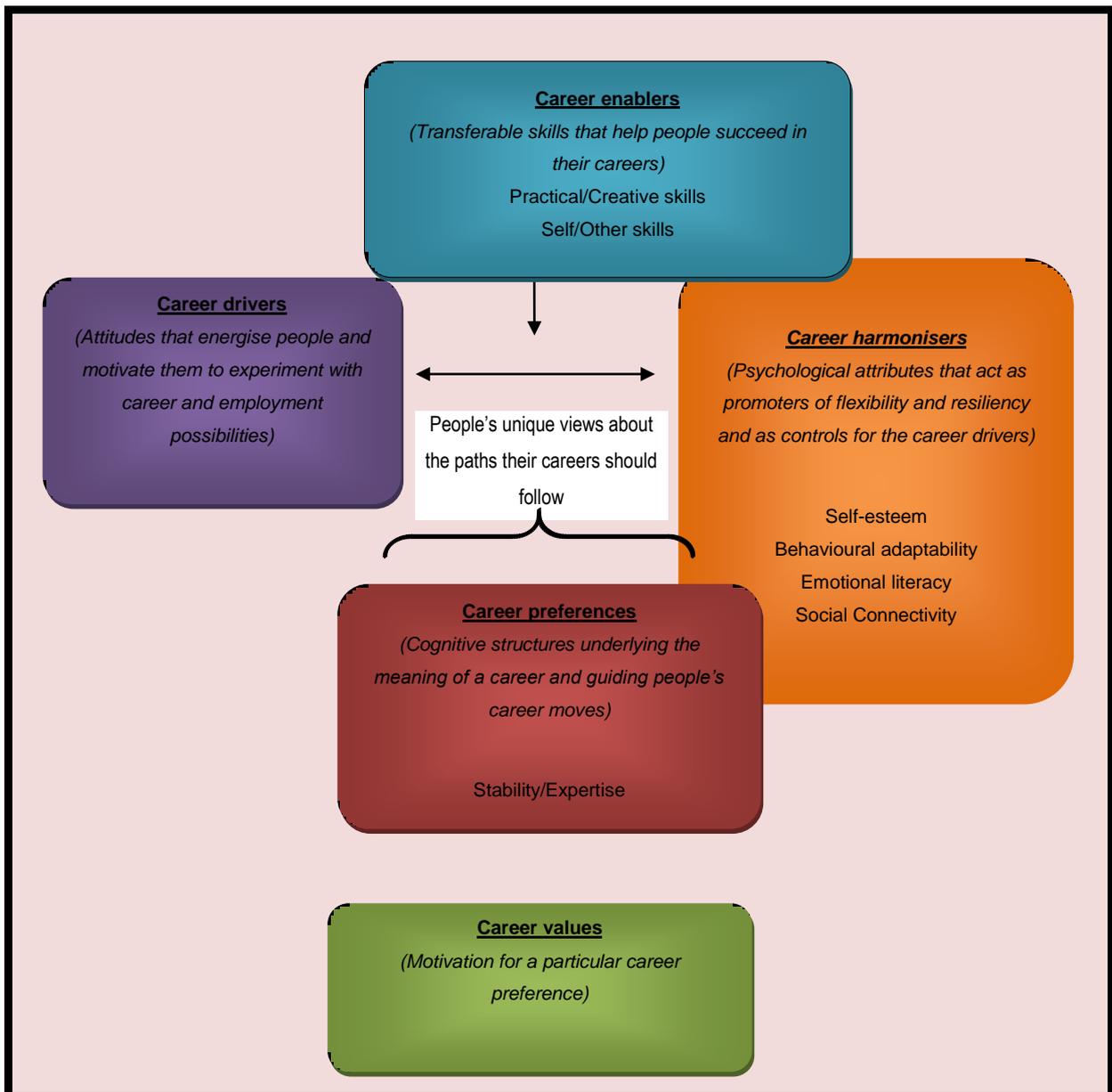
Figure 3.1. A theoretical framework of the construct of psychological career resources
Source: (Ferreira *et al.,* 2010, p. 2)

3.1.2.1   Career preferences and career values

Individual's career preferences and career values refer to their exceptional mental picture of the path their career should take that guides their career options (Ferreira *et al.*, 2010; Ferreira & Coetzee, 2010).   Individuals' career preferences and career values are furthermore considered to be the on-going cognitive or theoretical structures forming the foundation of their opinions about their career that indicate the importance of a career to them   (Coetzee & Schreuder, 2009).   Coetzee (2008) identifies four career preferences based on the career orientation models of Driver and Brousseau (1988) and Derr (1986), in terms of the

psychological career resources construct. These include stability/expertise (preference for a stable career), managerial (preference for a career as a manager), creativity/variety (preference of a creative career with plenty of variety) and autonomy/independence (preference of a career where the individual can function independently). Individuals' career preferences steer their moves, values or ideals on the basis of their enthusiasm for a particular career preference (Brousseau, 1990). An individual can set long-term goals or targets for his or her career, based on his or her career preferences and career values. Career values include the growth/development in the individual's career and having authority and influence in his or her job (Coetzee, 2008). This means that, in the long run, a person's career goals may be affected or influenced by the way he or she prefers and values his or her career.

Values incorporate ideas on numerous facets in life, including the self, family, other people, religion and work (Bergh & Theron, 2004). In evaluation practices, the concern of values and attitudes often involves incorporated notions; even interests in occupation and existence are frequently incorporated into values and attitudes (Bergh & Theron, 2004).

As summarised in Table 3.1, the notion of values in the careers context is acknowledged by Super (1970) who identified a range of work values.

Table 3.1

Overview of Super's Work Values (Ferreira, 2009)

Value	**Explanation**
Altruism	The ability and willingness to help others in the workplace
Aesthetics	To have visual ability in order to be able to identify beauty
Creativity	The willingness to try out new and fresh ideas and suggestions
Intellectual stimulation	The ability to solve new and fresh problems which may arise in the workplace
Achievement	The driving force to be able to produce effective and productive Work
Independence	The ability to enjoy the freedom inside one's area of activity
Prestige	The ability to increase stature and mastery in one's field of Interest
Management	The ability and willingness to enjoy authority over others
Economic return	The ability to recognise that money is vital
Security	The driving force to strive towards permanent status in the work
Surroundings	The ability to experience the physical work environment as

	pleasant
Relationships	Fair interactions with colleagues and supervisors
Associates	The ability and willingness to be a part of the work team
Way of life	The ability to be one's own person and lead a quality life
Variety	The driving force to desire and welcome change in the individual's current job and activities

According to Sager (1999), values imitate an individual's assessment of the significance of actions and job characteristics. Rokeach (1973) defines values as lasting cognitive demonstrations and conversations of desire. According to this view, values are less complicated than interests, and interests materialise from values.

Values are ideas, opinions or philosophies that individuals deem to be important. Values outline the basis of individuals' interests (Hendrix, 1990). The most generally acknowledged definition of values can be found in the prominent works of Rokeach (1973), who defines values as principles against which individuals evaluate their own behaviours and those of others (Brown, 2007). Super (1990), Stebalus and Brown (2001) and Leong (1991), recognise values as significant determinants of an assortment of aspects of occupational growth, career selection and career fulfilment and propositions that have received wide support (Brown, 2007).

According to Smith and Campbell (2008), values also efficiently differentiate professional environments in that expected variation in value patterns is evident when individuals are grouped according to profession. This means that individuals who practise the same profession probably have more or less the same set of values, which will direct their career decision-making process.

An individual's preference can be influenced by his or her values and what he or she regards as important. It is therefore necessary to understand the concept of value in order to better understand the concept of preference.

3.1.2.2   Career drivers

Career drivers (people's sense of career purpose, career directedness and career-venturing attitude) are the attitudes that energise people and motivate them to experiment with career and employment possibilities on the basis of their viewpoints of the possible selves they could

become or the possible working roles they could experience (Coetzee, 2008). In terms of career drivers, the concept of career purpose can be clarified as an individual's sense of being enthusiastic about his or her career (Coetzee, 2008; Ferreira *et al.*, 2010; Ferreira, 2009; Ferreira & Coetzee, 2010). A sense of purpose is based on individuals' self-confidence and personal belief, which they are able to fulfil through their career goals.

The concept of career directedness is defined as a person's sense of clarity on future career guidelines and targets as well as the precision in terms of where and how support will be found for achieving his or her career targets or finding fresh career opportunities (Coetzee, 2008). In essence, this means that individuals show career directedness once clear goals or targets have been set, and the individual striving to achieve these goals or reach these targets by using his or her strengths and abilities.

The idea of career venturing can be seen as an individual's eagerness to take risks by investigating innovative and new career opportunities (Ferreira *et al.*, 2010). When an individual identifies career objectives and strives to achieve them, this usually leads to career satisfaction.

According to Heslin (2003), career satisfaction measures the individual's capacity to believe that his or her personal career advancement is in line with his or her personal goals, values and preferences. Crant (2000) maintains that a person's character or personality can manipulate the degree to which he or she takes the initiative to engage in career management behaviours and accomplish career or job satisfaction.

According to Smith and Campbell (2008), an aspect of satisfaction is understood when the employee and employer are mutually pleased with the employee's performance. Satisfaction is thus the degree to which an individual's desires are met through his or her occupation and the fact that the employer assesses the individual's performance as satisfying the organisation's desires.

When individuals seem to be fulfilled in their career, they need assistance in maintaining their feelings of fulfilment. This can be done by developing new skills to help them to do the job to the best of their ability (Ferreira *et al.*, 2010).

3.1.2.3   Career enablers

Coetzee (2008) acknowledges two constructs associated with the notion of career enablers, which include practical/creative and self/other skills that assist individuals to be more successful in their jobs (Ferreira & Coetzee, 2010). The career enablers incorporate skills such as applying theoretical constructs in a realistic and creative manner in order to focus attention on innovative ways of doing things. Career enablers are regarded as individuals' convenience skills, such as their practical or inventive skills and self-management and association/relationship skills – in other words, those capabilities that may help individuals to enjoy a successful career path (Coetzee, 2008). Once individuals have developed the skills and knowledge to maintain the feeling of satisfaction as well as the need to develop emotional intelligence, a feeling of harmony is arises in their career (Ferreira *et al.*, 2010).

3.1.2.4   Career harmonisers

Career harmonisers are the psychological characteristics that operate not only as promoters of flexibility and hardiness but also as controls (because they ensure that the career drivers are in balance so that individuals do not burn themselves out in the process of following and reinventing their careers) (Ferreira & Coetzee, 2010). Coetzee (2008) labels career harmoniser attributes as self-esteem, behavioural adaptability, emotional literacy and social connectivity (the capability to connect with others and create and uphold equally satisfying and encouraging relationships). Self-esteem, behavioural adaptability, emotional literacy and social connectivity have also been related to experiences of subjective career success and happiness (Sinclair, 2009). An individual who has a well-developed psychological career resources profile will be able to engage proactively in career self-management activities that advance his or her job performance and experiences of personal career success in a particular sociocultural environment (Coetzee, 2008; Ebberwein *et al.*, 2004; Ferreira & Coetzee, 2010; Van der Heijde & Van der Heijden, 2006).

Career harmonisers are entrenched in individuals' emotional intelligence and social connectivity (Coetzee, 2008). According to Emmerling and Cherniss (2003), individuals who are emotionally intelligent are most likely, in a healthier situation, to make use of the motivational charateristics of their emotions. They may be able to focus on exact emotions throughout the development of decisions about their occupation. This will have a motivational consequence on adaptive behaviour by encouraging individuals to think about various affective components when making occupational choices (Ferreira *et al.*, 2010).

Social connectivity, however, can be explained as an individual's ability to relate to others and create and maintain satisfying and sustaining relationships (Coetzee, 2008). The feelings experienced throughout the career decision-making process and in social relationships in the job are most likely to influence the consciousness of the risks associated with precise career choices, the magnitude and type of self-exploration individuals engage in and how they process information relating to career selection (Emmerling & Cherniss, 2003). Behavioural adaptability can be regarded as an individual's ability to recognise those trails that are necessary for possible performance and to make the necessary changes to meet their career-related desires (Coetzee, 2008).

Coetzee (2008) suggests that the different characteristics of a person's psychological profile have to be in a state of equilibrium to allow optimal development of the individual's psychological career resources. If any one of the components is out of balance, none of the other components can be fully functional and thereby help to self-empower career behaviour (Ferreira *et al.*, 2010). Reasonable and the best possible functioning of the psychological resources is a sign of self-directed career behaviour that is guided within and determined by the person's career preferences, career values, sense of purpose, career directedness and self-awareness.

This section dealt with the psychological career resources model developed by Coetzee (2008), which will form part of the theoretical framework for this research study. A number of relevant theories will be discussed in the next section.

3.1.3 Other theoretical models

3.1.3.1 Schein's concept of career orientations

Schein's (1978; 1990) career anchors model is a much respected and significant theory of value. Career anchors are an individual's occupational self-image, created by his or her awareness of individuality, values, interest, thoughts, capabilities, competencies and occupational knowledge during a secure phase in his or her employment (Bergh & Theron, 2004). Individuals may have one (or more) career anchors they regard as critical, which could influence their career options and results, as well as their functioning in a work situation and their growth in their prospective career (Bergh & Theron, 2004).

Career anchors may influence certain kinds of career facets such as rewards, promotions and acknowledgements, and change as an individual's career develops throughout his or her life span (Schein, 1993). Schein (1990; 1996) distinguishes between the following career anchors: technical and functional competence, general managerial competence, autonomy, security and stability, entrepreneurial creativity, challenge and lifestyle. Coetzee and Schreuder (2009) conducted a study based on the relationship between psychological career resources and working adults' career anchors. The results of their study indicated that psychological career resources act as a predictor for working adults' career anchors.

3.1.3.2 Fugate, Kinicki and Ashforth's model of employability

People are currently experiencing generally large self-managed and boundaryless occupations, which include planning with numerous organisations or even industries (Fugate *et al.*, 2004). The result of the increased rate of change, the borders between professions, the borders between organisations and boundaries between life responsibilities are becoming distorted, and individuals are compelled to assume different roles in the organisation (Ashforth, 2001).

Survival in the changing world of work requires employees to constantly handle change - that is, change in themselves and in their career context (Fugate *et al.*, 2004). An individual's capability and enthusiasm to adjust is critical to career success (Hall, 2002).

The shift towards employability was discussed in chapter 2. According to Fugate *et al.* (2004), people's employability comprises dispositional or psychosocial attributes that interact to help them adjust to become accustomed to the numerous occupational-related changes in the current world economy.

Employability is regarded as psychosocial construct representing individual features that encourage adaptive cognition, behaviour and concern and improve the individual-job boundary (Fugate *et al.*, 2004). The responsibility is on the employee to ensure he or she acquires the understanding, skills and abilities required and appreciated by existing and future employers (Fugate *et al.*, 2004). This tie in with the psychological career resources model of Coetzee (2008) because of the fact that individuals need to develop and gain new skills to ensure career success.

Employability is described as a structure of work-detailed, dynamic adaptability that allows employees to recognise and understand their career prospects (Fugate *et al.*, 2004).

Employability makes the movement between jobs and organisations (within and between) possible. Even though employability does not guarantee definite employment, Fugate *et al.* (2004) argue that it does improve a person's probability of being employed. According to Chan (2000), a person will be regarded as employable to the degree he or she can confer features successfully to negotiate demands. The main focal point is on individual-concentrated factors, which include career identity, personal adaptability and social and human capital, the reason being that individuals have almost no say in employers' employment measures, such as job-specific skills or the relevant years or experience required (Fugate *et al.*, 2004).

According to Fugate *et al.* (2004) and McArdle *et al.* (2007), employability includes the following three separate, but interrelated psychosocial attributes:

(a) Adaptability

The motivation and flexibility to adjust behaviours, reactions and opinions in response to environmental difficulties can be defined as adaptability (Fugate *et al.*, 2004). According to Hall (2004), the key to success in today's uncertain and changing world of work is adaptability. Savickas (1997) indicates that plan-fullness, a willingness to survive and the motivation to investigate oneself and one's situation can be associated with adaptability. Individuals who manifest adaptability tend to be less insecure and uncertain and are at ease in fresh circumstances and across organisational limitations (McArdle *et al.*, 2007). Included in the element of adaptability is the construct of realistic behaviour. According to Siebert *et al.* (1999) and Bateman and Crant (1993), realistic individuals are capable of influencing environmental transformation, remaining moderately without hindrance by situational limitations. Recognising and acting on changes, an outlook of power, determination, self-efficacy, self-direction, managing and information seeking can be associated with realistic personality qualities (Bateman & Crant, 1993).

(b) Career identity

Career identity signifies the manner in which individuals describe themselves in the occupational framework, and can be regarded as a "cognitive compass" which is used to navigate the way through career prospects (Fugate *et al.*, 2004). Career identity imitates the "knowing why" competencies recognised by Defillippi and Arthur (1994). "Knowing-why" competencies include features such as career drive, own meaning and individual values

(McArdle *et al.*, 2007). According to McGreevy (2003), the purpose of an "internal career compass" has turned out to be significantly essential in providing direction, particularly when the person discovers himself or herself outside of the limitations of an organisation employing individuals. Hall, Briscoe, and Kram (1997) recommend that in the career environment which is in turmoil, the individual's needs should be associated with an occupation or institute, but as an alternative representing an individual's delicate values, inspirations and broader career happiness.

(c)   Human and social capital

The final aspect of the employability model includes human and social capital. Individual variables (schooling, work understanding, guidance, ability and familiarity) may affect an individual's career progress, which in turn refers to human capital (McArdle *et al.*, 2007). Human capital includes the "knowing-how" competencies sketched by Defillippi and Arthur (1994). "Knowing how" competencies include a career-related understanding and abilities constructed by means of work-related knowledge and specialised growth behaviour (McArdle *et al.*, 2007). By exploring continuous learning, individuals are able to build up their human capital, which means enhancing their employability.

Defillippi and Arthur (1994) suggest that the "knowing whom" competencies relating to recognised and informal career-related associations, refer to the social capital which is regarded as the interpersonal feature of employability. Some pragmatic work has confirmed that in order to determine an individual's self-perception it is necessary to consult his or her interpersonal links (Eby *et al.*, 2003) and provide access to career-related information and resources (Siebert, Kraimer & Linden, 2001). Social systems can furthermore be a foundation for social support, serving to improve the negative consequences of demanding situations, such as being without a job (McKee-Rayn, Song, Wanberg & Kinicki, 2005).

These three dimensions of employability can be related to the psychological career resource model (Coetzee, 2008). The adaptability dimension seems to underscore the career preference variable where an individual establishes feelings of stability and independence by adapting to the organisational environment in which he or she finds himself or herself.

The career identity dimension seems to be associated with the variable career drivers of the psychological career resources model (Coetzee, 2008) because the individual establishes a sense of career purpose, career directedness and happiness.

The human and social capital dimensions seem to be associated with the construct of career enablers, because the individual endeavours to acquire practical/creative skills as well as self/other skills by interacting with other colleagues and resources to gain this knowledge. The skills and knowledge acquired by individuals will enable them to go forward in their career and in turn foster feelings of career purpose in the indivdual.

3.1.3.3 Hammer's coping resources model

In the context of this study, the construct "coping resources" is presented as derived from the theoretical framework developed by Hammer (1988). It is necessary to include coping resources, because coping mechanisms can help individuals to manage and improve unpleasant experiences, as well as reduce the effects of stressful feelings caused by unpleasant experiences (Coetzee & Schreuder, 2011). Hammer (1988) describes coping resources as those psychological capacities inherent in individuals that enable them to handle stressors (such as those experienced during unemployment and career transitions) more effectively, to experience fewer or less intense symptoms on exposure to a stressor or to recover more quickly from exposure (Coetzee & Esterhuizen, 2010).

The resource domains outlined in Hammer's (1988) theoretical framework of coping resources were established on the basis of an extensive literature review, including his experience in conducting stress programmes and in working with individual client. The construct of coping resources refers to a range of psychological coping capacities as outlined in Table 3.2.

Table 3.2

Range of Psychological Coping Capabilities (Hammer,1988)

Cognitive Resources	These have to do with the extent to which individuals maintain a positive sense of self-worth, a positive outlook towards others and optimism about life in general.
Social Resources	These involve the degree to which individuals are imbedded in social networks that are able to provide support in times of stress.
Emotional Resources	These concern the degree to which individuals can accept and express a range of affect, based on the premises that a range of emotional responses helps to ameliorate long-term negative consequences of stress.

Spritual/philosophical Resources	These involve the degree to which an individual's actions are guided by stable and consistent values derived from his or her religious, familial or cultural traditions, or from personal philosophy. These values may actually define the meaning of potentially stressful events and prescribe the strategies that enable the individual to respond effectively.
Physical Resources	These have to do with the degree to which individuals enact the health-promoting behaviours believed to contribute to increased physical wellbeing. Physical wellbeing is thought to decrease the level of negative response to stress and to enable individuals to recover faster.

In the context of unemployment and general career transition experiences, the notion of coping resources is regarded as being closely related to adaptive career behaviour. According to Savickas (2005), adaptive career behaviours are characterised by a curiosity to explore possible selves and future scenarios, a positive self-evaluation of one's ability to pursue one's aspirations, a general agency in planning and directing one's future (Coetzee & Esterhuizen, 2010). Career agency is characterised by taking control of one's career with a sense of self-efficacy, including proactively seeking and exploring new information about a career that will enhance the fit between self and the environment.

The presence of coping resources provides both deterring and coping functions (Coetzee & Esterhuizen, 2010). Psychological adaptive capacities allow the individual to uphold and maintain self-identity in times of unemployment and when experiencing career transitions (Herr *et al.*, 2004; McArdle *et al.*, 2007). The presence of coping resources reduces distress and preserve people's psychological and social equilibrium. In this regard, psychological coping resources are regarded as valuable assets or protective factors that enable an individual to deal with problematic encounters and experiences, as and when such encounters and experiences occur (Coetzee & Esterhuizen, 2010). In other words, when people are confronted with stressful conditions and situations such as those caused by unemployment, they can draw on their psychological coping resources to cope with stimuli which, if not dealt with, may potentially challenge or threaten the person's survival or wellbeing (Ensel & Lin, 1991).

It is necessary to understand and consider the theories, as discussed in the above section, to be able to draw conclusions about the development of certain psychological career resources.

3.1.4 Variables influencing the development of psychological career resources

In the next section, the variables that can influence the development of psychological career resources will be discussed. These variables include gender, age, race and marital status.

3.1.4.1 Gender

Research by Ferreira and Coetzee (2010) indicated that females have a significantly stronger need than their male counterparts to venture out and experiment with new career opportunities. Females tend to have significantly higher levels of self-esteem, emotional literacy and social connectivity (suggesting their confidence in their ability to form meaningful social connections) which could offer an explanation for their apparent confidence in considering venturing out in search of new career opportunities (Ferreira & Coetzee, 2010). Contrary to these findings, Kniveton (2004) and Coetzee and Schreuder (2009), found that women placed a higher value on steady and stable work opportunities. High levels of emotional literacy were found by Brown, George-Curran, and Smith (2003) to be significantly related to people's confidence in their ability to successfully complete career-related tasks. The findings are also in agreement with other studies that report women to be more emotionally self-aware than men (Brown *et al.*, 2003) and to have a greater tendency to seek advice and social support (Chan & Hui, 1995). The results of Ferreira and Coetzee's (2010) study indicate that males have significantly higher levels of self-esteem than their female counterparts.

3.1.4.2 Age

Coetzee and Schreuder's (2008) findings indicate that the life/career stage of an individual can be characterised by a need for further growth and learning opportunities. Participants in the 25 and younger age group seem to have greater confidence in their ability to achieve their career goals and form meaningful social connections than individuals in the 56 and older age group (late life stage) (Ferreira & Coetzee, 2010). According to Feldman (2002), young adults in the early phase of their career development have a strong need to establish both their career identity and socially supportive networks. Individuals in the establishment phase of their careers (26–40 age groups) seem to have a significantly stronger preference for jobs that expose them to a variety of opportunities for expressing their talents and abilities creatively (Ferreira & Coetzee, 2010). Similar to findings reported by Coetzee (2008), individuals in the

late life or retirement stage (56 and older) of their careers seem to have a significantly higher need to venture out in search of new career opportunities (Ferreira & Coetzee, 2010).

3.1.4.3 Ethnicity/race

Research by Coetzee (2008) and Ferreira and Coetzee (2010) suggests that African individuals seem to have a significantly stronger need for a managerial position that exposes them to a variety of growth and development opportunities and jobs in which they can express their talents and abilities creatively. According to Coetzee and Bergh (2009), African individuals show a higher need to venture out in search of new career opportunities. This implies that the African individuals are more likely to move on to greener pastures if a new career opportunity should present itself. This may be the result of their significantly higher level of confidence in their ability to achieve their career goals. These findings appear to corroborate those of a previous study by Coetzee (2008), which reported whites to have significantly lower levels of self-esteem than their African counterparts (Ferreira & Coetzee, 2010). The findings of Ferreira and Coetzee (2010) are also in line with the conclusions drawn by Motileng, Wagner, and Cassimjee (2006), namely that employment equity and affirmative action strategies appear to have enhanced the self-esteem of black or African individuals. This is because the employment equity policies have afforded them the opportunity to articulate their competencies, potential and abilities.

3.1.4.4 Marital status

Separated/divorced individuals appear to have a significantly greater need for managerial-type jobs in which they can exercise control and authority over others (Ferreira & Coetzee, 2010). These findings correspond to the findings of Eddleston, Baldridge, and Veiga (2004) and Whitehead and Kotze (2003). The findings of Ferreira and Coetzee (2010) suggest that women managers are less likely to be married or to have children owing to the role overload often caused by the need to balance multiple life roles.

3.2 CAREER ADAPTABILITY

The concept of career adaptability will be discussed in the following sections. The concept will be conceptualised and the theoretical models explained. The variables influencing development career adaptability and the impact on retention will also be discussed.

3.2.1 Conceptualisation of career adaptability

Savickas (2005) conceptualises adaptive individuals as those who become concerned about their future as employees and then take action to increase their personal control over their vocational future. Adaptive individuals are proactive by displaying curiosity and exploring possible selves and future scenarios. They also seek to strengthen their confidence to pursue their aspirations (Savickas, 2005).

There are many different explanations or definitions of the concept of adaptability. This concept was initially explained by Super and Knasel (1981) as a vital construct in an individual's career development process and has since been recommended as a key competency in career success (O'Connel, McNeely & Hall, 2008; Savickas, 1994). Introduced by Savickas (1997) as a substitute for Super's (1955) idea of career maturity, adaptability signifies a significant skill in an individual's ability to steer the career decision-making process and the working world (Duffy, 2010; Savickas, 1997). Adaptability can be regarded as an individual's broad ability to adjust to changes or barriers in his or her career (Rottinghaus, Day & Borgen, 2005; Savickas, 1997). Rottinghaus *et al.* (2005) explain the concept of career adaptability as a trend affecting the way an individual sees his or her ability to plan and adjust to change, especially in the unpredictable situations. Both of the definitions of Savickas (1997) and Rottinghaus *et al.* (2005) refer to self-regulatory processes, stress the significance of the interaction between the individual and their environment and highlight managing life situations, non-maturational problems that face the individual (Creed *et al.*, 2009). Herr (1992) summarises career adaptability to include the following: plan-fullness, exploration, information decision making and reality orientation. For the purpose of this study, the definition of Savickas (1997) will be adopted.

Career adaptability can assist the individual to adjust and fit into a new career-related situation (Koen, Klehe, Van Vianen, Zikic & Nauta, 2001). Career adaptability incorporates factors such as, plan-fullness, exploration, decision making, information and realism (Super, 1974), career planning and career exploration (Zikic & Klehe, 2006), a boundaryless mind-set (McArdle *et al.*, 2007) of career planning, career decidedness and career confidence (Skorikov, 2007).Career adaptability may be particularly useful in understanding the job search process because this conceptualisation signifies the willingness and diverse adaptive resources that may assist individuals to prepare for and manage career transitions such as a move from unemployment to re-employment (Koen *et al.*, 2010). According to Savickas (1997, 2002, 2005), career adaptability involves looking forward to one's future career (planning), knowing what career to follow (decision making), looking around at different career options (exploration)

and having a feeling of self-efficiency to effectively perform the activities needed to accomplish one's career objectives (confidence).

In the continually changing society, employees require the psychological resources and self-determining capabilities to manage new career-related situations, which may include job loss and finding re-employment (Savickas, 1997, 2002, 2005; Super & Knasel, 1981). Career adaptability includes an individual's capability to face, track or acknowledge changing career roles and to effectively handle career shifts (Savickas, 1997, 2002, 2005), such as finishing a state of joblessness by searching for a job. Career adaptability can furthermore be used in terms of finding appropriate re-employment. It can be argued that the four dimensions of career adaptability (career planning, decision making, exploration and confidence) refer to an individual's preparation and psychological willingness to use diverse job search strategies, which in turn can influence the individual's re-employment results (Koen *et al.*, 2010). Understanding an individual's career adaptability profile may influence staff retention in an organisation. Career adaptability improves employability both inside and outside an organisation (Arthur, 1994; Ellig, 1998; Hall, 1996a; Ito & Brotheridge, 2005; London, 1983, 1993; Waterman *et al.*, 1994). Being career adaptable means, being able to deal with the unexpected and manage change. It involves the on-going learning of new skills and procedures, transferring skills from one context to another, dealing appropriately with ambiguity, treating new situations as opportunities instead of barriers, being self-aware and reflecting on one's own actions (Creed, Macpherson & Hood, 2010). Career adaptability is central to achieving career effectiveness in a changing climate and important in enabling individuals to manage and cope with shifting environmental demands (Hall, 2004; Pulakos, Arad, Donovan & Plamondon, 2000). Career adaptability is also reflected in the changing demands of employers who are increasingly seeking an adaptable workforce (Pulakos *et al.*, 2000).

The concept of career adaptability was conceptualised in this section. A number of theoretical models and theories will now be discussed.

3.2.2 Theoretical models

The following theory will be discussed in this section: Savickas's career construction theory

3.2.2.1 *Savickas's career construction theory*

Savickas's (2005) conceptualisation of career adaptability is of relevance to this research. The construct of career adaptability forms an integral part of Savickas's (2005) theory of career construction.

The need for further research on the construct of career adaptability is clear from the literature. According to Dix and Savickas (1995), a rarely studied dimension of adaptability is the coping responses of behaviours necessary for an individual to handle the career change tasks he or she may be faced with. They further recommend that future research should focus more on these behaviours. Phillips (1997) emphasises the need to listen carefully to the individual engaged in adaptive decision making as a means of understanding the process more comprehensively. One of Super's (1990) criticisms of his own theory is that his many constructs have not been well integrated into a comprehensive theory (Herr, 1997). Savickas (1997) suggests that the concept of adaptability could serve to integrate the segments of the theory and calls for a greater understanding of the "processes of adaptability" and it "practical usefulness".

The career construction theory of Savickas (1997) provides a way of thinking about how individuals choose and use work. The theory presents a model for comprehending vocational behaviour across the life cycle as well as methods and materials that career counsellors use to help clients make vocational choices and maintain successful and satisfying work lives. The model seeks to be comprehensive in its purview by adopting three perspectives on vocational behaviour: (1) the differential, (2) the developmental, and (3) the dynamic. From the perspective of individual differences psychology, it examines the content of vocational personality types and what different people prefer to do (Savickas, 2005). From the perspective of developmental psychology, it examines the process of psychosocial adaptation and how individuals cope with vocational developmental tasks, occupational transitions and work traumas. From the perspective of narrative psychology, it examines the dynamics whereby life themes impose meaning on vocational behaviour and why individuals fit work into their lives in distinct ways. In coordination, the three perspectives enable counsellors and researchers to investigate how individuals make use of career theories by using life themes to

integrate the self-organisation of personality and the self-extension of career adaptability into a self-defining whole that animates work, directs occupational choice and shapes vocational adjustments (Savickas, 2005).

According to Savickas (2005), career construction theory responds to the needs of today's mobile employees who may feel fragmented and confused as they encounter a restructuring of occupations, transformation of the labour force and multicultural imperatives. This fundamental reshaping of the work world is making it increasingly difficult to comprehend careers with only person-environment and vocational development models that emphasise commitment and stability as opposed to flexibility and mobility. The new job market in the unsettled economy calls for viewing career not as a lifetime commitment to one employer but as selling services and skills to a series of employers who need projects completed (Savickas, 2005).

Creed *et al.* (2010) proposed a model of career adaptability which is illustrated in figure 3.
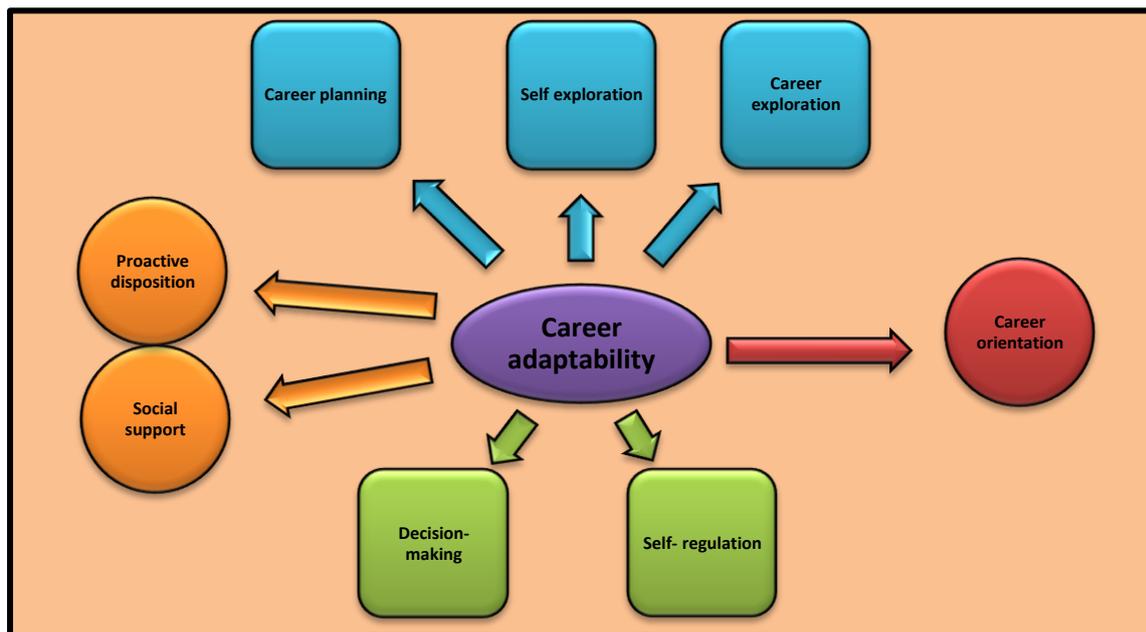
Figure 3.2. Model of career adaptability (career planning, self-exploration, career exploration, decision making and self-regulation) mediating relationships between proactive disposition, social support and new economy career orientation (Creed *et al.*, 2010)

The theory of career construction explains the interpretive and interpersonal processes through which individuals impose meaning and direction on their occupational behaviour (Savickas, 2005). Grounded in epistemological constructivism, the theory contends that vocational behaviour materialises as an individual actively engages in extracting meaning from

his or her experiences, as opposed to discovering pre-existing facts (Usinger & Smith, 2010). In contrast to stages of development, three components are associated with career construction theory, namely life themes, vocational personality and career adaptability.

(a)   Life themes

The life theme components of career construction theory emerged from Super's (as cited in Savickas, 2005) postulate that, in expressing vocational preferences, individuals put into occupational terminology their ideas of the kinds of people they are and want to be (Usinger & Smith, 2010).

(b)   Vocational personality

Vocational personality consists of an individual's career-related abilities, needs, values and interests (Usinger & Smith, 2010). It is the "what" of career construction. The focus of vocational personality is on the implementation of vocational self-concepts, providing a subjective, private and ideographic perspective on understanding careers (Savickas, 2005). Individuals form personalities in their families of origin and develop these personalities in the neighbourhood and school as they prepare to eventually enter the world of work. According to Savickas (2005), the career construction theory prefers to view interests and other career-related "traits" as strategies for adapting rather than as realist categories. Concepts such as interests should not be reified as factors or traits. They do not reside in an individual and cannot be excavated from within by interest inventories.

From this perspective, individuals can adopt or discard selected strategies as situations call for them. Long-term practised strategies do coalesce into a tested style. This style can be compared to that of other people to form types or groups, but these socially constructed categories should not be privileged as anything more than similarities (Savickas, 2005). The career construction theory asserts that vocational personality types and occupational interests are simply resemblances to socially constructed clusters of attitudes and skills. They have no reality or truth outside themselves because they depend on the social constructions of time, place and culture which support the career (Savickas, 2005).

Career adaptability includes the attitudes, competencies and behaviours that individuals use to fit themselves into careers that suit them. It is the "how" of career construction. Adaptability involves a series of attempts to implement a self-concept through a sequence of matching decisions (Usinger & Smith, 2010). The overriding goal is to create a situation in which the occupational role substantiates and validates the individual's self-concept. As such, for the career construction theory, occupational choice is the implementation of the self-concept, work is a manifestation of selfhood and vocational development is a continuing process of improving the match between self and the situation (Savickas, 2005).

According to Savickas (2005), the career construction theory views adaptation as transitions fostered by the following five principal types of behaviour: (1) orientation; (2) exploration; (3) establishment; (4) management; and (5) disengagement. These constructive activities form a cycle of adaptation that is periodically repeated as new transitions appear on the horizon. As each transition approaches, individuals can adapt more effectively if they meet the change with growing awareness, information seeking followed by informed decision making, trail behaviours leading to a stable commitment projected forward for a certain time period, active role management, and ultimately, forward-looking deceleration and disengagement. For example, an employee begins a new job with a period of growth in the new role, including exploration of the requirements, routines and rewards of that role. Then he or she becomes established in the role, manages it for a certain time period and eventually disengages from it either voluntarily when further growth readies him or her to change jobs or involuntarily when organisational changes make their position redundant.

Career adaptability includes an individual's capability to face, track or acknowledge changing career roles and to effectively handle career shifts (Savickas, 1997, 2002, 2005), such as concluding a condition of joblessness by searching for a job. Career adaptability should furthermore be significant for finding appropriate re-employment. It can be argued that the four dimensions of career adaptability (career planning, decision making, exploration and confidence) refer to an individual's preparation and psychological willingness to use diverse job search strategies, which in turn may influence his or her re-employment results (Koen *et al.*, 2010). These four dimensions are illustrated in figure 3.3.
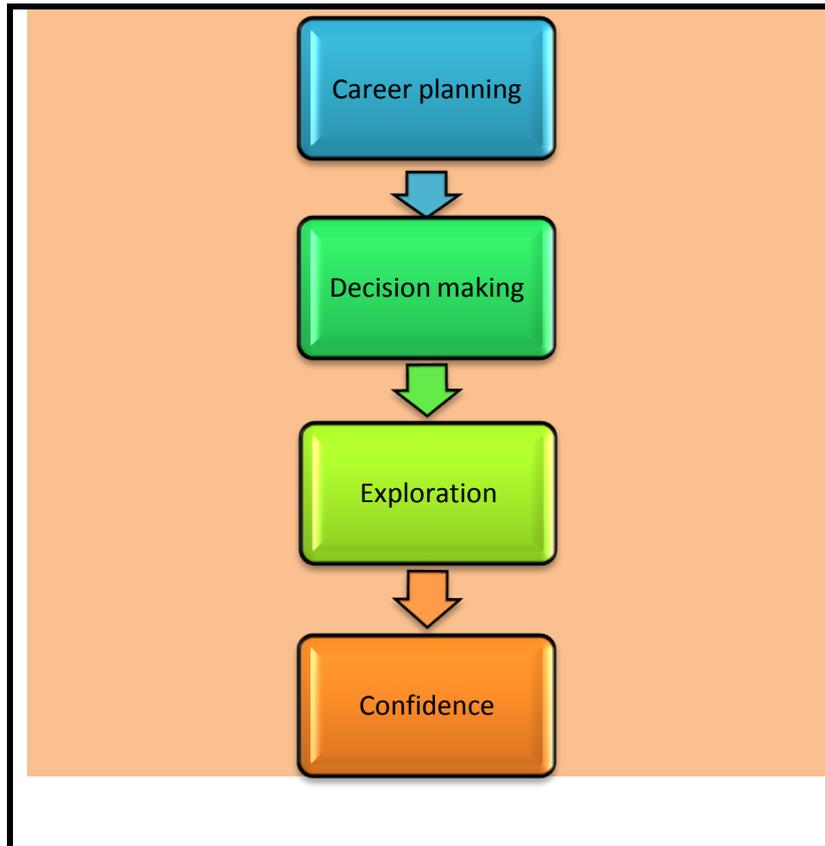
Figure 3.3. Savickas's career adaptability model (Savickas, 1997)

(i) *Career planning*

Career planning can refer to a future career orientation and plan fullness. Planning persuades individuals to summarise their prospect developments and to participate in planning activities, such as identifying and following career objectives (Koen *et al.*, 2010). Precedent studies found that career planning can promote more successful and rewarding careers (Morrison & Hall, 2002; Super & Hall, 1978). According to Koen *et al.* (2010), planning is a continuous activity and not an once-in-a-lifetime occurrence that will possibly be particularly applicable during the process of career transition following job loss.

(ii) *Decision making*

Decision making in a career reflects the confidence with which an individual knows what career he or she would like to pursue (Creed *et al.*, 2009; Savickas, 2005; Skorikov, 2007). Being decisive in a career can help individuals to participate in job-search activities instead of postponing and avoiding such activities (Savickas, 2005). Even when confronted with a restricted number of career choices, a feeling of decidedness can make these options individually significant (Koen *et al.*, 2010). Decision making may increase if an individual has

satisfactory information about potential career alternatives and is able to plan the achievable outcomes of different career choices (Pitz & Harren, 1980). Hence individuals who are looking for a job and show a high level of career decision making probably know exactly what they want in their future career (Koen *et al.*, 2010).

(iii) Career exploration

Career exploration refers to an individual who investigates his or her career options in order to learn about the nature of work he or she would want to do (Flum & Blustein, 2000; Savickas, 2005). The importance of the concept of exploration in career adaptability is reflected by the key place it holds in previous research (Blustein, 1988, 1992, 1997; Stumpf, Colarelli & Hartman, 1983; Zikic & Hall, 2009). Since career exploration entails openness towards gathering information in a broad and explorative manner, it shares main features with an exploratory job search strategy (Koen *et al.*, 2010). In comparison, exploration is more reflective in focus and more preparatory in nature, whereas an exploratory job search strategy represents actual job search activities. The use of an exploratory job search strategy seems the logical consequence of someone's readiness to broadly explore possible careers. At the same time, high career exploration will probably counteract the use of a focused job search, given that a focused job search relies on a narrow rather than a broad focus (Koen *et al.*, 2010).

(iv) Career confidence

Career confidence indicates an individual's feelings of self-efficacy or the apparent capability to successfully perform the activities necessary to accomplish the career goals as set out by the individual (Hirschi, 2009; Savickas, 2005). Several studies indicate that self-efficacy is essential in the job search process, increasing individuals' job search intensity and in turn the odds of their finding re-employment (Kanfer, Wanberg & Kantrowitz, 2001; Wanberg, Hough & Song, 2002).

Because it is lifelong, holistic, contextual and preventive, the life design framework by Savickas *et al.* (2009) for counselling interventions aims to increase clients' adaptability, narratability and activity. Adaptability addresses change while narratability addresses continuity. Together adaptability and narratability provide individuals with the flexibility and fidelity of selves that enable them to engage in meaningful activities and flourish in knowledge societies (Savicaks *et al.*, 2009).

In considering adaptability, the career construction theory (Savickas, 2005) highlights a set of specific attitudes, beliefs and competencies, which shape the actual problem-solving strategies and coping behaviour that individuals use to synthesise their vocational self-concepts with work roles.   Accordingly, life design intervention aims to increase career adaptability. For example, it seeks to increase the five "Cs" of career adaptability theory, which includes concern, control, curiosity, confidence and commitment.

- *Concern* involves a tendency to consider life within a time perspective anchored in hope and optimism (becoming concerned about the vocational future).
- *Control* rests on the conviction that it is an advantage for people to be able not only to use self-regulation strategies to adjust to the needs of the different settings, but also to exert some sort of influence and control over the context (increasing personal control over one's vocational future).
- *Curiosity* about possible selves and social opportunities increases people's active exploration behaviours (they display curiosity by exploring possible selves and future scenarios).
- *Confidence* includes the capacity to stand by one's own aspirations and objectives, even in the face of obstacles and barriers (strengthening the confidence to pursue one's aspirations).
- *Commitment* to one's life projects rather than one's particular job means that career indecision should not necessarily be removed because it actually generates new possibilities and experimentations that allow individuals to be active, even in uncertain situations. These elements are illustrated in figure 3.4

Figure 3.4. The five Cs of career adaptability theory (Savickas *et al.*, 2009)

Careers that were once thought to be secure, including those in the professional, technical and managerial classification, are at risk (Ito & Brotheridge, 2005; Sullivan, 1999). To control this risk, employees are being encouraged to enhance their career adaptability through a combination of career hardiness (London, 1983, 1993), growth activities and networking. Career adaptability improves employability inside and outside an organisation (Arthur, 1994; Ellig, 1998; Hall, 1996; Ito & Brotheridge, 2005; London, 1983, 1993; Waterman *et al.*, 1994).

It is necessary to identify the variables influencing the development of career adaptability, which will be discussed in the following section.

3.2.3   Variables influencing the development of career adaptability

The two variables that can influence the development of career adaptability are age and self-efficacy.

3.2.3.1 Age

Organisations expect employees to adapt quickly without setbacks caused by changes in their workplaces (Ilgen & Pulakos, 1999; LePine, Colquitt, & Erez, 2000; Niessen, Swarowsky, & Liez, 2010). They are considered adaptive when they perform well during change (Niessen, Swarowsky, & Liez, 2010).

While research has demonstrated that age alone accounts for little variance in work performance in relatively stable work contexts (Ng & Feldman, 2008; Sturman, 2003; Waldman & Avolio, 1986), it is plausible that adaptation to change in work settings may become more difficult with age (Peeters & Emmerick, 2008). For example, there is evidence to suggest that age is negatively related to the ability and willingness to learn (Colquitt, LePine, & Noe, 2000; Kanfer & Ackerman, 2004; Kubeck, Delp, Haslett, & McDaniel, 1996; Warr, 2001; Warr & Birdi, 1998; Yeatts, Folts, & Knapp, 2000).

The rationale behind the assumption of a negative age-performance relationship was that with increased age, cognitive abilities such as speed of information processing and working capacity decline (Niessen *et al.*, 2010; Verhaeghen & Salthouse, 1997). When people become aware of a decline in their cognitive abilities, work motivation may decrease (Kanfer & Ackerman, 2004) and they may experience a misfit between demands and their knowledge, skills and abilities. Career maturity refers both to an individual's development in an anticipated developmental phase and his or her coping skills compared with the coping skills of others in the same stage. Career maturity entails the steady development of attitudes, competencies and knowledge applicable to career decision making that corresponds to an individual's age. This concept contributed significantly to the field of career development because it led to the identification of the different types of information and behaviours that permit individuals to successfully progress through particular stages of career development.

3.2.3.2 Self-efficacy

Self-efficacy, which is a person's belief that he or she can master new task demands, is an important determinant of adaptability (Bandura, 1997; Fay & Frese, 2001; Gist & Mitchell, 1992; Kozlowski, Gully, Brown, Salas, & Nason, 2001; Maurer, 2001). Griffin and Hesketh (2003) found evidence that adaptive self-efficacy is positively related to adaptive performance. Herold, Fedor, and Caldwell (2007) demonstrated that change-related efficacy is positively associated with change commitment.

More specifically, Niessen *et al.* (2010) examined a person's beliefs associated with one's ability to learn and adapt in a high-tech organisational environment (Griffin & Hesketh, 2003). Niessen *et al.* (2010) expect employees who do not believe that they can manage new task demands, to possibly assess their knowledge, skills and abilitied as deficient. Consequently, they will perceive a poor fit between their knowlegde, skills and abilities and the new task demands.

Kanfer and Ackerman (2004) suggest that with increasing age, employees' self-efficacy for dealing with tasks that do not depend strongly on prior knowledge may decrease. They argue that most individuals recognise that cognitive abilities decrease with increasing age. This may have a negative impact on employees' self-efficacy for coping effectively with new task demands (Niessen *et al.*, 2010; Ryan & See, 1993).

Betz and Klein (1996) found self-esteem to correlate with both domain-specific and generalised self-efficacy, a critical component of adaptability for college students. The relationship between self-esteem and outcome variables such as academic achievement, psychological distress and depression has also been found to be mediated by an individual's sense of personal control (Duffy, 2010; Lu & Wu, 1998; Ormel & Schaufeli, 1991; Stupnisky, Renaud, Perry, Rithig, Haynes, & Clifton, 2007).

The following section will focus on the construct of hardiness in order further clarify the second research question.

3.3 HARDINESS

The concept "hardiness" will be discussed in the sections below. The concept will be conceptualised and the theoretical models then explained. The variables influencing the development of hardiness will also be discussed.

3.3.1 Conceptualisation of hardiness

Hardiness explains a generalised style of functioning, characterised by a strong sense of commitment, control and challenge that serves to alleviate the negative effects of stress (Azeem, 2010; Delahaij *et al.*, 2010; Hystad *et al.*, 2010; Zhang, 2010).

In their original work, Kobasa (1979), Kobasa *et al.* (1982) and Kobasa *et al.* (1983) defined hardiness as a collection of personality characteristics that function as a flexible resource during the encounter with demanding life events. Over the years, research has established and extended the original hardiness research across a number of groups, including army and police officers, nurses, teachers, emergency personnel and professional athletes, and consistently found that hardiness moderates the stress-health relationship (Barton *et al.*, 2004; Bartone, Ursano, Wright, & Ingraham, 1989; Bohle, 1997; Chan, 2003; Golby & Sheard, 2004; Hystad *et al.*, 2010; Zach *et al.*, 2007). Several studies headed by Kobasa found a comparable protecting effect of hardiness, as well as a moderating effect on stress (Kobasa *et al.*, 1982; Kobasa & Pucceti, 1983). Analysis of these investigations led Kobasa to propose that hardy individuals have a clear sense of direction, a dynamic approach in demanding situations and a sense of self-belief and control that moderates the intensity of possible threats and dangers (Zakin *et al.*, 2003).

Over the last 25 years, hardiness has emerged in psychology as a pattern of attitudes that facilitate turning stressful circumstances from potential disasters into growth opportunities (Gerhardt, Van der Doef, & Paul, 2001; Maddi, 1994, 1998, 2002, 2007; Maddi, Harvey, Khoshaba, Persico, & Brow, 2006; Maddi, Khoshaba, Harvey, Fazel, & Resurreccion, 2010). These attitudes of hardiness constitute the courage and motivation to face and transform stressors, instead of denying or catastrophising, and to avoid or strike out against them, and are especially essential in our changing tubulent times (Maddi, 1998, 2002; Maddi, Harvey, Khoshaba, Fazel, & Resurreccion, 2009). According to Maddi and Khoshaba (2001), hardy individuals construct meaning in their lives by recognising that (1) everything they do contitutes a decision, (2) decisions invariably involve pushing towards the future or shrinking into the past, and (3) choosing the future explands meaning, whereas choosing the past contracts it (Sheard, 2009).

Highly fussy individuals are described as being intellectually inquisitive and maybe more success oriented, hardworking and persistent (Komarraju & Karau, 2005). Such a description of an individual fits well with the"hardy personality" (Kobasa, 1979b). Hystad *et al.* (2010),

Maddi *et al.* (2002), Ramanaiah and Sharpe (1999) and Sheard and Golby (2007) have identified a positive correlation between hardiness and meticulousness.

The behavioural expressions of the three hardiness approaches (control, commitment and challenge) can be extended to the higher education environment. According to Sheard and Golby (2007), the moderating effect of commitment on academic performance can be demonstrated by individuals becoming deeply involved in their lives, seeing this as the best way to turn whatever they are experiencing into something that seems interesting, worthwhile and important. Such an attitude is likely to facilitate hard work and a willingness to expend extra time and effort to meet goals. Individuals high in control ought to be able to manage their lives or careers – for example, demonstrating satisfactory time management, prioritising those activities deemed most contributory to achieving success and taking responsibility for their own learning and development. Attitudes reflecting challenges should moderate performance by affording individuals the opportunity to consider potentially stressful situations as stimulating and inspiring instead of intimidating (Sheard & Golby, 2007). This should enhance the possibility of individuals accepting the complications in fulfilling certain requirements and engaging in the process of working towards an objective, thus facilitating the positive process of development through learning (Maddi, 2006).

Previous research by Maddi (1994, 2006), Maddi *et al.* (2009), Maddi, Harvey, Resurreccion, Giatras, and Raganold (2007), Maddi *et al.* (2010) indicated that hardiness is linked to enhanced performance and mental health, despite the pressures. Theoretically, hardiness should lead to obvious recognition of stresses, but guard against experiencing negative emotions and extreme arousal conditions that could result from this, instead involving participation in coping effectively with the stresses, and a resultant sense of accomplishment, significance and self-esteem. Additional studies have indicated that hardiness is positively related to problem-solving coping, socially supportive interactions and beneficial and self-care efforts (Maddi, 1994, 2002; Maddi, Wadhwa, & Haier, 1996; Weibe & McCullum, 1986). Consistent with these findings are others showing that hardiness is associated with viewing stressful circumstances as more tolerable (Ghorbani, Watson, & Morris, 2000; Rhodewalt & Zone, 1989) and avoiding excessive physiological strain (Alfred & Smith, 1989; Contrada, 1989; Harvey, 2005) and negative emotions (Maddi, 2002; Maddi *et al.,* 2009).

Although hardiness is regarded as a ubiquitous, an essential feature of effective performance, conduct and health under stress, it is not synonymous with other features that facilitate this fullness of life (Hersen & Thomas, 2006). Indeed, hardiness is conceptualised as a

personality disposition, with the emphasis on individual differences as they affect performance, conduct and health.

3.3.2   Theoretical models

Hardiness is a multifaceted construct that was proposed by Kobasa (1979) and conceptualised from the results of her study on middle management married Caucasian men who remained in spite of having to work in stressful situations (Sussman, 2002; Lambert & Lambert, 1999). Existentialism is the basis of hardiness, and hardiness is a combination of action, cognition and emotion targeted at the enrichment of life through development and survival (Kobasa *et al.*, 1981; Lambert & Lambert, 1999; Nunley, 2002; Sussman, 2002). The hardy personality is defined by Kobasa (1979) as one that incorporates the components of commitment, control and challengem which help a person manage stressful life events (Klag & Bradley, 2004; Lambert & Lambert, 1999; Maddi & Khoshaba, 1994; Pengilly & Dowd, 2000). A person may be strong or weak in one or more components.

3.3.2.1   *The three Cs of hardiness*

The hardiness trait is described as a constellation of three attitudes: commitment, control and challenge (Kobasa, 1979a, 1979b). These attitudes reflect deeply held beliefs that influence the way people interpret stressful events.   A hardy individual views potentially stressful situations as meaningful and interesting (commitment), sees stressors as changeable (control) and regards change as a normal aspect of life rather than a threat and as an opportunity for growth (challenge) (Funk, 1992). High levels of commitment enable individuals to believe in the truth, importance and interest value of who they are and what they are doing, and therefore the tendency to involve themselves fully in the many situations of life, including work, family, interpersonal relationships and social institutions (Kobasa, 1987, p. 6). Commitment engenders feelings of excitement along with a strong sense of community and motivation to remain engaged during difficult times (Kobasa,1982, 1985). These hardiness attitudes or behaviours are illustrated in figure 3.5 (Sheard & Golby, 2007).
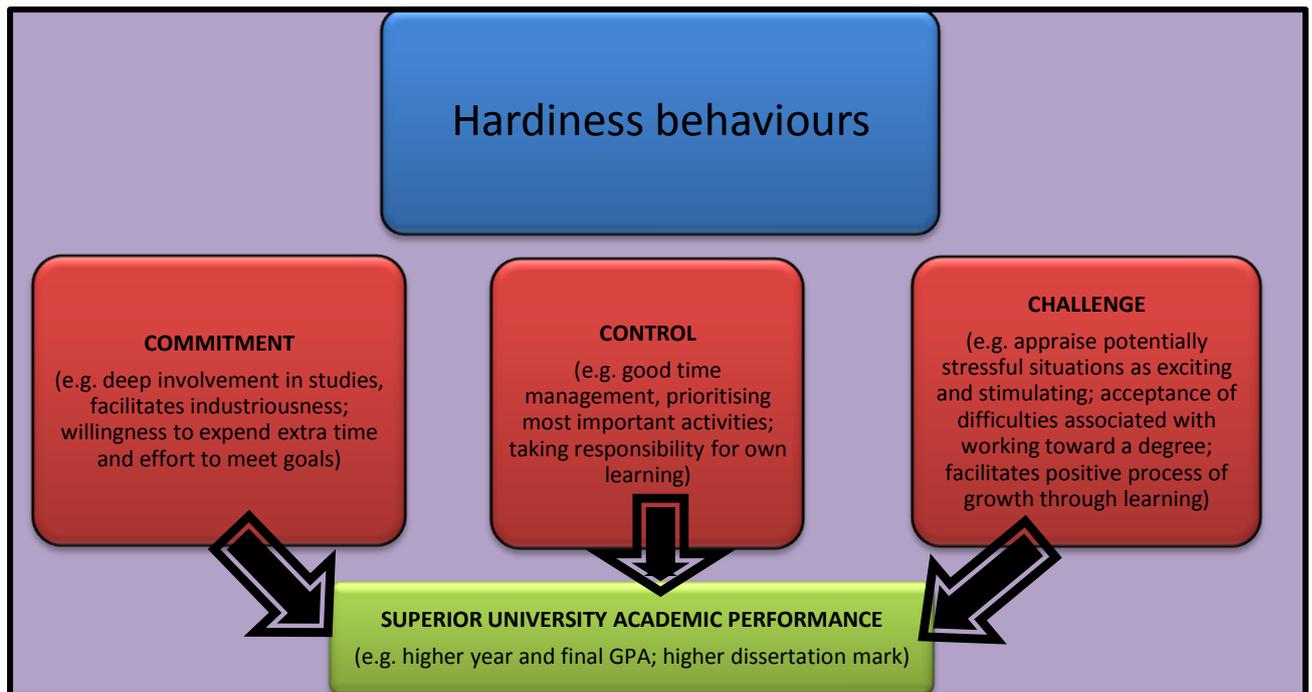
Figure 3.5.   The hypothesised moderating role of hardiness behaviours on university academic performance (Sheard & Golby, 2007)

(a)   Control

Control enhances motivation to engage in effortful coping because it predisposes the individual to view stressors as changeable (Kobasa, 1982; Maddi, 2002; Maddi & Kobasa, 1984). Hardy individuals feel that attempting to control or change a demanding or undesirable situation (instead of fatalistically accepting the outcome) falls within their scope of personal responsibility. Individuals demonstrating control, perceive many stressful life events as predictable consequences of their own activities, which are subject to their direction and manipulation (Kobasa, 1982, p. 7). When faced with difficulties, high control individuals are more likely to feel capable of acting effectively on their own. They reflect on how to turn a situation to their advantage instead of taking things at face value (Maddi & Kobasa, 1984).

(b)   Challenge

Challenge generates a zest for facing up to (or even seeking out) difficult experiences because they are viewed as opportunities for personal growth rather than as potential threats to security (Maddi *et al.*, 2002). Hence individuals who expect to thrive must learn to embrace the strenuousness of "authentic living", drawing strength from difficulties previously faced and successfully overcome as opposed to looking for ways to avoid stressful events.

Individuals high in challenge are motivated to become catalysts in their environments and to practise responding to the unexpected. They are apt to more thoroughly explore their surroundings in an on-going search for new and interesting experiences. As a result, they know where to turn for resources to help them cope with stress. High challenge individuals are characterised by cognitive flexibility and tolerance for ambiguity. This allows them to more easily integrate unexpected or otherwise stressful events (Kobasa,1982; Maddi, 1999).

(c) Hardiness and coping

Although the relationship between hardiness and coping is not examined in this study, a brief explanation is necessary to clarify how hardiness can influence health and well-being. Hardiness theorists propose that hardiness influences the relationship between stressors and strain primarily through its effect on appraisal and coping process. In the hardiness literature, coping and appraisal processes are subsumed under the rubric of coping strategies (Maddi & Kobasa, 1984). Coping strategies include primary appraisals (challenge or threat appraisals), secondary appraisals (assessments of the adequacy of available resources for dealing with environmental demands) and the actions taken in response to those stressors (Lazarus & Folkman, 1984). Hardiness allows the individual to appraise stressors in a way that minimises the level of threat perceived and limits the amount of negative arousal experienced (Kobasa, 1982). Hardy individuals are thus expected to interpret stressful events as being less threatening and more controllable (Kobasa, 1979b, 1982; Maddi, 1987; Maddi & Kobasa, 1984). Furthermore, hardy individuals are more likely to choose adaptive (or transformational) coping strategies over avoidant (or regressive) methods (Genry & Kobasa, 1984; Kobasa,1979a, 1979b, 1982,1985; Kobasa & Puccetti, 1983; Maddi,1987, 2002; Maddi, Kahn, & Maddi, 1998; Maddi & Kobasa, 1984).

Although the empirical evidence is somewhat inconsistent in examining specific coping strategies (Maddi & Hightower, 1999), several studies suggest that in general, hardy people appraise stressful events differently and gravitate towards more active coping strategies. Hardy individuals report experiencing events as less threatening and feel more optimistic about theit ability to cope (Florian, Mikulincer, & Taubman, 1995; Rhodewalt & Zone, 1989). They also rely more on adaptive (transformational) coping strategies such as problem-focused coping and support seeking and are less likely to use passive (regressive) coping strategies such as emotion-focused coping and distancing (Mills, 2000; Westman, 1990; Wiebe, 1991).

It is the combination of commitment, control and challenge that constitutes existential courage and motivation. To tolerate and resolve stressful circumstances, one must see them as (1) natural developmental pressures instead of catastrophic setbacks (challenge helps here), (2) resolvable as opposed to unmanageable (control helps here), and (3) worth investing in rather than avoiding (commitment helps here). Together, the 3 Cs of hardiness are close to what existential thinkers, such as Tillich (1952), meant by the "courage" to be.
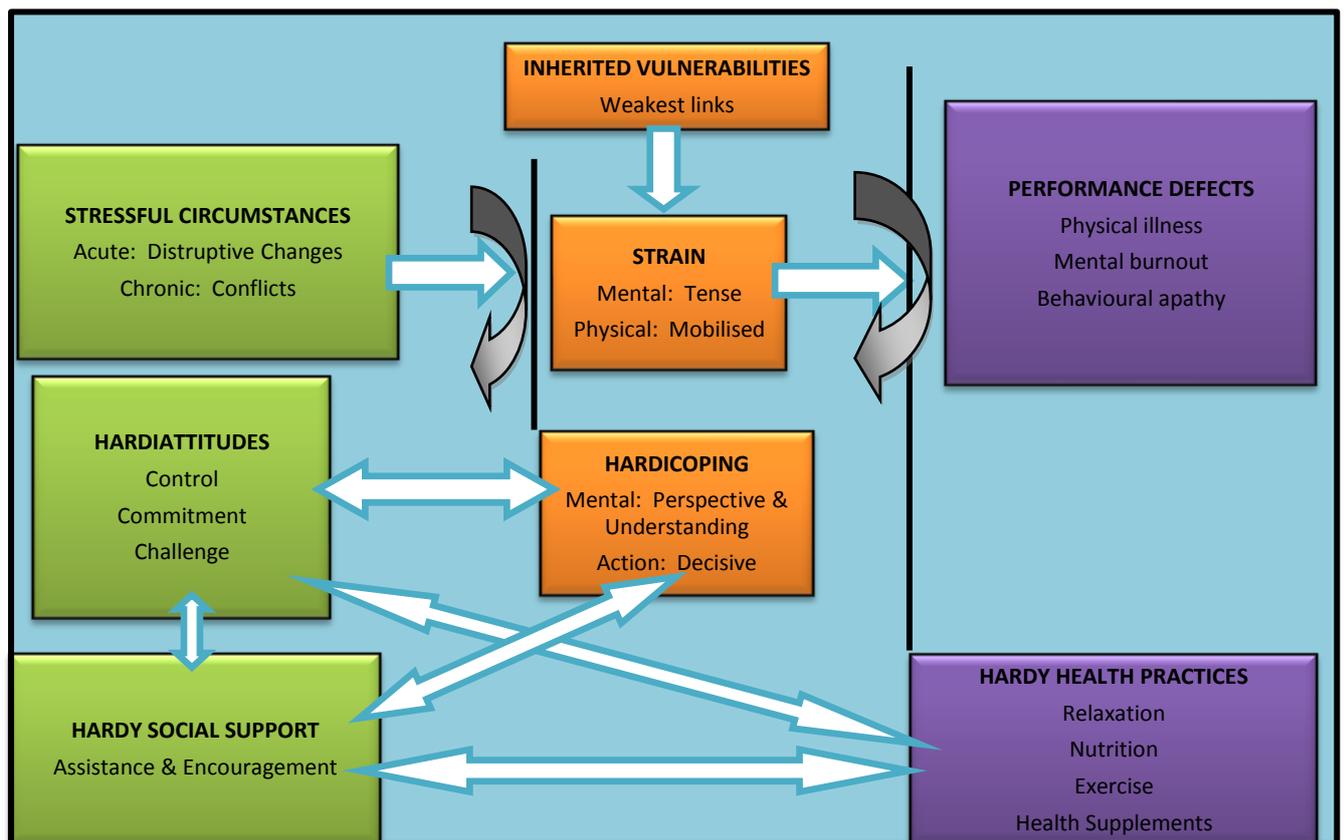
Figure 3.6. The hardiness model (Maddi, 2004)

The overall results of Maddi's (2004) 12-year longtitudinal study are summarised in figure 3.6. The bad news is the sinister line showing that, as stressful circumstances mount, this increases the likelihood of strain reactions as the organism responds with the "fight or flight" reaction (Selye, 1976). When the accumulated stressful circumstances continue unabated, the organismic arousal reaction may become too prolonged and intense, which increases the likelihood of breakdown in behaviour and health. Also, such a breakdown may be accelerated by and directionally reflect inherited vulnerabilities.

Hardiness has emerged as a significant stress resilience construct that has attracted a high level of sustained research attention. Over the years, A rich and complex body of literature has evolved, but it's very richness sometimes makes it difficult for researchers to identify clear patterns in the data. Several authors (Klag & Bradley, 2004; Lambert & Lambert, 1999; Maddi & Khoshaba, 1994; Pengilly & Dowd, 2000) have provided excellent qualitative reviews of the hardiness literature, discussing patterns, problems and issues requiring more investigation. The focus of the current study is to build upon those qualitative reviews and empirically examine the relationship between psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment and develop a psychological profile for employee retention based on the outcomes of this relationship.

The three Cs of hardiness are a cognitive/emotional combination constituting a learned, growth-oriented, personality style (Sheard & Golby, 2007). The strong hardy attitudes in individuals are sought after, which allows individuals to turn stressful situations into positive circumstances, grow in performance criteria by being creative and fulfil, maintain or enhance physical and mental health (Maddi, 2006). If an individual's hardy attitudes are strong, he or she will show an action pattern of coping with stressful circumstances (e.g. meeting deadlines and completing important projects), and striving to turn stressful situations from potential disasters into opportunities for himself or herself (Khoshaba & Maddi, 1999). The encouraging influence of hardiness on performance has been reported in assorted samples such as athletes (Golby & Sheard, 2004; Golby, Sheard, & Lavallee, 2003; Sheard & Golby, 2006), human resource consultants (Maddi *et al.*, 2006) and military personnel (Bartone & Snook, 1999).

Conceptually, not one of the three Cs per se is enough to provide the necessary courage and motivation to turn stress into an advantage. What is needed is all three of the Cs operating together (Maddi, 2002). American psychology is currently proccupied with the importance of the control attitude, and some feel that it is this attitude that fully defines hardiness. Imagine people high in control but simultaneously low in commitment and challenge. They would want to determine outcomes, but not waste time and effort learning from experience or feeling involved with people, things and events (Maddi, 2004). They would be egotistical and vulnerable to seeing themselves as better than others and as having nothing more to learn. They would be riddled with impatience, irritability, isolation and bitter suffering whenever control efforts fails. This is not hardiness so much as the Type A behaviour pattern with all its physical, mental and social vulnerabilities (Maddi, 2002, 2004).

3.3.3 Variables influencing the development of hardiness

The variables that may influence the development of hardiness will now be discussed.

3.3.3.1 *The organization*

According to Maddi, Khoshaba, and Pammenter (1999), organisations with hardy characteristics are referred to as HardiOrganisations.

HardiOrganisations have a characteristic culture, climate, structure and workforce. The culture of an organisation is formed on the basis of its values. The values of a HardiOrganisation are isomorphic with the attitudes of dispositional hardiness (Maddi *et al.*, 1999). The attitudes of commitment, control and challenge framing individual hardiness correspond to the hardy values of cooperation, credibility and creativity at organisational level. When individuals with a strong sense of commitment interact, that effort goes in the direction of valuing cooperation as something that expresses their group involvement. If the individuals are also control oriented, as a group, they value being credible because this signifies taking responsibility for their actions (Maddi *et al.*, 1999). Also, if the individuals are also challenge oriented, as a group they value creativity, as an expression of the search for innovative problem solutions learnt from past experiences.

Together, these three Cs (control, commitment and challenge), which form the values of a HardiOrganisation, extend to its target environment, mission statement and workforce. Regarding the target environment, HardiOrganisations assume that it is the nature of physical and social conditions to change continuously and that this change represents worthwhile evoluntionary progress (Maddi *et al.*, 1999). As far as the mission statement is concerned, HardiOrganisations see their way of excelling as being based on anticipating the direction of relevant environmental and social change and turning that change into an advantage by helping to effect it, and improving life in the process. HardiOrganisations recognise the workforce as the major asset in achieving the change-oriented mission and believe in both facilitating and rewarding employees for their mission-fulfilling behaviours (Maddi *et al.*, 1999).

Consistent with the values of the HardiOrganisation, its climate will form a healthy learning environment in which people work together for the common good. Characteristics will be employees who are energetically committing to work activities (instead of distancing themselves from such activities), struggling for control over events (as opposed to sinking into

powerlessness) and regarding their ensuing experiences as a developmental challenge (instead of a threat to stability). The emphasis of organisation members will be on working together in solving problems through a coping process that involves searching for perspectives and understanding and using what is learnt to take decisive actions (as opposed to denying, catastrophisising and avoiding problems). In interacting with one another, HardyOrganisation members will both want for themselves and extend to others assistance and encouragement (instead of overprotection or competition), thereby functioning as a team instead of merely as self-interested individuals (Maddi *et al.*, 1999).

As far as personnel make-up is concerned, the HardiOrganisation will be composed of an increasingly high proportion of HardiIndividuals. This is ensured because the usual functions or promotions, hiring and firing, gain sharing, member benefits and job training will reflect the on-going culture, climate and structure of the HardiOrganisation. Despite the continually changing work environment, HardiIndividuals will not wish to leave employment at HardiOrganisations that understand and value them (Maddi *et al.*, 1999). However, if they are compelled to leave as a result of company reorganisation, these HardiIndividuals will not leave feeling angry, and will continue their proactive, innovative ways in other jobs. Indeed, they will be regarded as a valuable commodity by other HardiOrganisations (Maddi *et al.*, 1999).

3.3.3.2   *Family life*

A predominant thing about families is that their members are tied to one another in a more permanent fashion than is true in other relationships. In one's family of origin, the tie is not only social but also genetic (Hersen & Thomas, 2006). One's family or reference begins with a marriage contract and continues to solidify through the genetic ties involving whose who are conveived and born. However, the closeness and importance of family ties and the difficulty breaking them, does not mean that the on-going interactions of family members will always be harmonious. Indeed, there are many relational pressures that can easily arouse stress. Parents worry about whether their children will grow up weak, and struggle to steer them in the right directions. Children fear that they will be stifled or embarassed by their parents and may keep their secrets to themselves. Children also wonder whether they or their siblings will be the favourites or the most successful and can easily fall into invidious competition (Hersen & Thomas, 2006).

It is easy for family members to fall into conflictful relationships that fester and worsen instead of improving. Unless one is careful and dedicated, this sinister process can lead to denial and

avoidance or even catastrophising and striking out. It takes a special, concerted, continuing effort to improve the relationship by resolving the conflict and replacing it with a pattern of giving and receiving assistance and encouragement (Hersen & Thomas, 2006). This demands the kind of social interaction and coping skills practised in the hardiness training programme. However, this hard work will not be done consistently unless there is the courage provided by the hardy attitudes. This is especially true because the family member who initiates conflict resolution must unilaterally start the process by giving assistance and encouragement, regardless of accumulation and apprehension (Hersen & Thomas, 2006).

The person strong in the courage of hardiness will try hard to empathise with and appreciate family members, even if they do not start out reciprocating. Furthermore, the hardy family member will try to find ways to help the others achieve their goals and fulfil their responsibilities in certain ways, such as being a sounding board, taking up the slack and giving space as needed. Once that facilitative pattern continues, it becomes more difficult for the other family members not to feel grateful and reciprocate. Soon conflict will have been resolved and replaced with a matual pattern of assistance and encouragement. The bond between these family members will continue to deepen as they help each other to develop and achieve their goals. Hardy people can certainly influence the goals and directions of their family member in a process based on mutual appreciation and respect instead of an overly narrow sense of what is worthwhile in others (Hersen & Thomas, 2006).

3.3.3.3 Work and school

The main thing about work and school functioning is performing activities in order to realise goals that are both of social and personal significance. The process involves encountering circumstances that can be stressful insofar as they are not entirely predictable and require one to stretch beyond one's habits and conveniences (Hersen & Thomas, 2006). Most people spend the largest proportion of their waking time at school or work.

Work and school functioning involves not only personal development and goal attainment but also interaction with others in this process. These are often significant others in the sense that at work, they are team members, supervisors or subordinates, and at school, they are classmates, teachers or club members. Although not as primary and unchangeable as those with family members, these relationships with others at work or school are still vital in one's development, goal attainment and sense of intimacy (Hersen & Thomas, 2006). Moreover, social norms for behavioural appropriateness operate, if anything, even more strongly in work and school relationships than they do among family members.

Nonetheless, people low in hardiness often fall into disregard and competition with others at work or school. This disregard and competition are frequently subtle so as not to appear socially imappropriate, but sometimes they are even open (Hersen & Thomas, 2006). Also, others who appear to be progressing well can arouse self-rejection in those around them who are low in hardiness. In general, those low in hardiness also will appear less directed, being unable to tackle difficult problems and learn in the process.

Those high in the courage of hardiness will show a noticeably different pattern at work or school. They are likely to show directionality and progress in their own activities, turning stressful circumstances from potential disasters into opportunities for growth, development and success (Hersen & Thomas, 2006). They will be well able to shoulder the danger involved in taking unavoidable risks on the path to realising their goals. In this process, they will work well with others around them, helping them and accepting assistance from them so that everyone wins. If someone else is promoted or obtains the highest grade, the people high in hardiness will not feel defeated, but will appreciate the other's accomplishment and continue their own efforts to learn and achieve (Hersen & Thomas, 2006).

3.3.3.4 Retirement

It is characteristic of those low in hardiness to look forward to retirement because for them, work is typically fraught with undermining stresses and uncertainties that seem to be imposed on them by others. Because of this, they may feel some initial relief when retirement occurs (Hersen & Thomas, 2006). However, as time passes, they will tend to feel a growing absence of meaning because they cannot come up with what would be worth doing, and things go from bad to worse. The nightmare of retirement may lead them towards various destructive attempts to deny and avoid, such as alcoholism or gambling.

In contrast, those high in hardiness will be sufficiently involved with their work and will not wish for retirement unless they become ill in some way. After all, their hardiness will have led them over the years to find work that is challenging enough and growth inducing (Hersen & Thomas, 2006). If their health is good, they will seek ways to continue working instead of retiring.

However, recognising that ceasing to work is inevitably, those high in the courage of hardiness will have begun making plans for their retirement years before it actually takes place. Once retirement occurs, these plans may lead them to take up activities that had

always seemed interesting but had never been attempted. Perhaps they will try artwork, writing or travelling, certain sports activities, political involvement or altruistic efforts – whatever seems interesting, provocative and a learning experience (Hersen & Thomas, 2006). Nor will they sink into social isolation, instead making sure that they service their existing relationships and build new ones as a function of their new activities.

3.3.3.5 Recreation

Recreation is the alternative to developing goal-directed activities at work or school. People low or high in hardiness are both likely to engage in recreational activities (Hersen & Thomas, 2006). However, those low in hardiness (i.e. without courage) may spend less or more time in recreational activities than is common for those high in this chatacteristic. For those low in hardiness, work or school may seem so overwhelmingly stressful that they will deny and avoid it, leading them to engage in more enjoyable activities. Many of them will seek out recreational activities with which they are familiar and that seem easy and unthreatening. Others will seek out such risky situations that there is nothing they can do to influence the outcome, except to hope that they will be lucky. However, among people low in hardiness, some will be so preoccupied with failing and being rejected owing to the massive stressfulness of work or school requirements that they may not be able to imagine engaging in recreational activities at all (Hersen & Thomas, 2006). For them, doing something recreational is tantamount to ensuring failure in the work or school tasks that already seem too formidable (Hersen & Thomas, 2006).

By contrast, people high in the courage of hardiness will be able to take a break from the developmental process of engaging fully in work and school tasks. After all, although these tasks are formidable, they will not seem overwhelming to them, and these individuals will view recreation as a way of rebuilding their personal resources for successful task performance at work or school. Since they are not overwhelmed by work or school, they can formulate a balanced life which, overall, is the most satisfying. When they take a break, the recreational activities they are likely to find most satisfying are those that are complicated and unusual enough to provoke them to learn, even though there is much less at stake in work or school activities – hence their desire for recreational activities that are not merely repetitive and that require mastery and provoke development (Hersen & Thomas, 2006). Although this may involve a certain degree of risk taking, this will be restricted to a moderate level in which mastery can be achieved readily through concentrated effort. This will not include games of chance where there is little or no way of influencing the outcome (Hersen & Thomas, 2006).

3.4 IMPLICATIONS FOR TALENT RETENTION

Many organisations and managers are seriously concerned about retaining their top talent. Workforce trends point to an future scarcity of extremely skilled employees who have the essential knowledge and capability to perform at high levels (Hausknecht, Rodda, & Howard, 2009). Organisations that do not manage to retain high performers will be left with an understaffed and less qualified workforce that will ultimately hold back their capability to continue being competitive (Rappaport, Bancroft, & Okum, 2003).

Today's business environment has become extremely competitive, thus resulting in skilled employees being characterised as the principal differentiating factor for most organisations (Samuel & Chipunza, 2009). Recent studies, according to Samuel and Chipunza (2009), revealed that retention of highly skilled employees has developed into a difficult assignment for managers because more than one organisation at a time endeavours by means of an assortment of inducements, to attract this group of employees.. In addition, skilled employees in South Africa are emigrating on a daily basis in search for improved employment conditions (Samuel & Chipunza, 2009).

Retention is a deliberate action by an organisation to produce a setting that engages employees for the long term (Samuel & Chipunza, 2009; Chiboiwa, Samuel & Chipunza, 2010). According to Samuel and Chipunza (2009), the primary purpose of retention is to prevent capable employees from leaving the organisation because this mayd have a negative effect on productivity and profitability. Yet, retention practices have become an intimidating and highly challenging task for managers and human resource (HR) practitioners in a aggressive economic environment (Chiboiwa *et al.*, 2010). One of the conventional ways of managing employee retention and turnover is through organisational reward systems. William and Werther (1996) explain the concept of reward as what employees receive in exchange for their contibutions to the organisation.

A number of factors have been expressed in order to explain why employees leave one organisation for another, or in some cases, leave the country (Chiboiwa *et al.*, 2010). Some of these reasons are   hiring practices, management styles, lack of recognition, lack of competitive compensation systems and toxic workplace environments (Abassi & Hollman, 2000; Sherman, Alper, & Wolfson, 2006). Others include lack of interesting work, job security and promotion and inadequate training and development opportunities (Chiboiwa *et al.*, 2010). These variables can be generally classified into intrinsic and extrinsic motivational factors.

Herzberg's two-factor theory argues that employees are motivated by internal values instead of values that are external to the work (Bassett-Jones & Lloyd, 2005). These intrinsic variables include achievement, recognition, the work itself, responsibility, advancement and growth (Chiboiwa *et al.*, 2010). Empirical studies, however, have indicated that extrinsic factors such as competitive salary, satisfactory interpersonal relationships, a friendly working environment and job security were mentioned by employees as the key motivational factors that influence their retention in the organisation (Kinnear & Sutherland, 2001; Maertz & Griffeth, 2004; Meudel & Rodham, 1998). The implication here is that management should not rely only on intrinsic variables to influence employee retention; instead, a combination of both instrinsic and extrinsic varibales should be considered as a valuable retention strategy (Chiboiwa *et al.*, 2010).

Gunz and Gunz (2007) established the encouraging influence of work experience and tenure.. Furthermore, Birt *et al.* (2004) found that employees' perception and understanding of these factors have a huge influence on employee retention. Regardless of the fact that an organisation may attempt to take all these factors into consideration when trying to enhance employee retention, it is still the employee's choice to leave the organisation on account of, say, poor management (Kaliprasad, 2006).

The relationship between different personal or biographical variables, including age, gender, number of children and level of education, ando employee retention, has yet to be fully investigated (Kyndt, Docky, Michielsen, & Moeyaert, 2009). A positive learning and working environment contributes positively to employee retention since it allows individuals to feel recognised for their strengths and creates possibilities for individuals to develop their qualities and skills (Cooperrider, Whitney, & Stavros, 2007; Kyndt *et al.*, 2009). This approach is consistent with what Dewey (1916) proposed about the importance of having a personal path as part of the notion of a career.

One needs to realise, in particular, that the manner in which employees recognise and understand the working and learning environment may impact on the retention of the employees of that specific organisation (Birt *et al.*, 2004). This finding justifies the need to look at both personal and organisational factors in considering proposals to enhance the retention of skilled employees (Kyndt *et al.*, 2009).

The study by Kyndt *et al.* (2009) also confirms that the perception of the significance of learning to employees and the quality of work environment is a strong predictor of an employee's intentions to remain with his or her current employer. The finding that approval

and encouragement have a strong positive influence on employee retention in itself is not surprising (Kyndt *et al.*, 2009). This finding is in line with previous research on employee retention (Cotton & Tuttle, 1986; Muchinsky & Morrow, 1980; Tett & Meyer, 1993; Trevor, 2001; Walker, 2001).

In particular, the importance of personal development to employees is contributing further to the understanding about employee retention and also creates new possibilities in attempts to enhance employee retention (Kyndt *et al.*, 2009). Another aspect of the learning and working climate that has been measured is pressure of work, which has been shown to have a significant negative relationship with employee retention (Kyndt *et al.*, 2009).

Besides organisational factors, personal factors can also play a role in employee retention. According to the findings of Kyndt *et al.*'s (2009) study, individual differences can enhance or reduce employee retention. Self-perceived leadership skills and seniority are positively related to employee retention (Kyndt *et al.*, 2009). They also indicated that it would seem that respondents with a longer career in a particular company feel more strongly connected to it and tend not to leave (Kyndt *et al.*, 2009).

Herewith the second literature research aim, namely to conceptualise the psychological career meta-competencies constructs of psychological career resources, career adaptability and hardiness and how individuals' biographical characteristics influence the development of these competencies have now been achieved.

3.5 THEORETICAL INTEGRATION

Chapters 2 and 3 provided a comprehensive literature review of the three independent variables (the psychological career meta-competencies) that are of relevance to this research study in an attempt to answer the first and second research questions – that is, how the literature conceptualises individual career behaviour and retention in the 21st century and how the three constructs (psychological career resources, career adaptability and hardiness) are conceptualised and explained by means of theoretical models in the literature.

The theoretical integration (addressed in chapter 4) aims to answer research aim 4, namely to conceptualise the theoretical relationship between the psychological career meta-competencies constructs (psychological career resources, career adaptability, and hardiness) and the retention-related disposition constructs (job embeddedness and organisational commitment). In addition, based on the theoretical relationship between the psychological

career meta-competencies and retention-related dispositions constructs, the theoretical integration aims to address research aims 5 and 6, namely to construct a theoretical integrated psychological career profile of the career agent that may be used to inform retention practices and to outline the implications of the psychological career profile for talent retention practices.

3.6 CHAPTER SUMMARY

The aim of chapter 3 was to conceptualise the constructs of psychological career resources, career adaptability and hardiness by means of a comparative examination of the basic literature and research on these constructs. The variables influencing the development of psychological career resources, career adaptability and hardiness were explained in detail. The chapter concluded with a discussion of the implications of psychological career resources, career adaptability and hardiness for retention.

Herewith research aim 2 has been achieved, namely to conceptualise the psychological career meta-competencies constructs of psychological career resources, career adaptability and hardiness and how individuals' biographical characteristics influence the development of these competencies.

Chapter 4 deals with the retention-related dispositions constructs of job embeddedness and organisational commitment in order to address the third literature research question relating to conceptualising the retention-related dispositions constructs of job embeddedness and organisational commitment and establishing how individuals' biographical characteristics influence the development of these dispositions.

Chapter 4 will also address research aims 4, 5 and 6 to conclude the literature review aims.

CHAPTER 4: RETENTION-RELATED DISPOSITIONS

Keywords: psychological career profile, job embeddedness; fit; links; sacrifice; organisational commitment; affective commitment; normative commitment; continuance commitment

In this chapter the retention-related dispositions constructs job embeddeddness and organisational commitment and the related theoretical models will be explored. The variables influencing the development of job embeddedness and organisational commitment and the implications for retention will also be discussed. The chapter will conclude with an evaluation of the theoretical foundations of the constructs job embeddedness and organisational commitment, highlighting the contributions and limitations as relevant to this research. This chapter also concludes with a theoretical integration of the four variables by means of discussing an integrated theoretical model that constitutes the psychological career profile that will be empirically tested.

4.1   JOB EMBEDDEDNESS

The concept of job embeddedness will be discussed in the subsections to follow. The concept job embeddedness will be conceptualised, and the focus will then turn to the theoretical models. The variables influencing the development of job embeddedness and the impact on retention will also be addressed.

4.1.1   Conceptualisation of job embeddedness

According to Mitchell *et al.,* (2001(a), p.1104), job embeddedness proposes that there are several strands that unite an employee and his or her family in a social, psychological, and financial network that contains work and non-work friends, groups, the community, and the physical environment in which he or she lives. Job embeddedness represents a broad set of influences on an employee's decision to stay on the job. These influences include on-the-job factors such as bonds with co-workers, the fit between one's skills and the demands of the jobs, and organisation-sponsored community-service activities (Crossley, Bennett, Jex, & Burnfield, 2007; Holtom, Mitchell & Lee, 2006). Job embeddedness also includes of-the-job factors such as personal, family and community commitments. The value of the construct job embeddedness was also demonstrated by Holtom *et al* (2006). Job embeddedness is a

stronger predictor of significant organisational outcomes such as employee attendance, retention and performance that the best-known and accepted psychological explanations (e.g., job satisfaction and organisational commitment) (Holtom *et al*, 2006).

Mitchell, Holtom, Lee, Sablynski and Erez (2001) developed the organisational embeddedness concept as a construct that merges the retention research focused on job satisfaction, job involvement, and organisational commitment with turnover models on structural economic and external reasons for leaving an organisation. The concept of being embedded in a job involves a wide array of options that influence employee retention. Building on the turnover models of Steers and Mowday (1981), Mitchell and Lee (2001) advanced their model by adding a new dimension to the understanding of turnover; -a counter-intuitive notion that individuals may leave an organisation for reasons other than job dissatisfaction. Job embeddedness is a multi-dimensional construct that focuses on the factors that make an individual more likely to remain in the job, namely the work and social, non-work attachements that are developed over a period of time. Job embeddedness includes multiple factors: such as work or organisational options like choosing one's own clients, empowerment, or mentoring activities, or non-work or social embeddedness (Van Emmerik & Sanders, 2004) which may include links to family, non-work and off-the-job interests, and job and organisational embeddedness (Mitchell *et al.*, 2001).

Job embeddedness is a relatively new construct developed to indicate a more comprehensive view of the employee-employer relationship than is typically reflected by attitudinal measures such as satisfaction or commitment (Mitchell *et al.,* 2001). Job embeddedness also differs from the traditional model of turnover in that it focuses on at employee retention, instead of employee turnover (Holtom & O'Neill, 2004). Thus, the central focus is how to keep people in an organisation, as opposed how to keep them from moving to a different organisation.

According to Feldman and Ng (2007), researchers have only recently begun to pay more attention to questions about why people stay in their jobs, organisations, and occupations even when other (and better) opportunities are available elsewhere. Starting primarily with the work of Mitchell *et al.* (2001), there is now increased interest in the constructs of embeddedness, namely, the totality of forces that keep people in their current employment situations.

4.1.2   Theoretical models of job embeddedness

Job embeddedness assesses a broad set of influences on employee retention. The critical aspects of job embeddedness include the following: (1) the extent to which an employee's job and community fit with the other aspects of his or her life space; (2) the extent to which employees have links to other people or activities; and (3) the ease with which links can be broken – what employees would give up if they were to leave, expecially if they were to physically move to another home or city (Holtom & O'Neill, 2004).

In the job embeddedness model (Figure 4.1) both the relationship of the individual to his or her work (the organisation) and the relationship between the individual and his or her non-work, social environment (the community) are significant predictors of turnover. In the work, and the community environments, an individual can have three kinds of attachments: links, fit and sacrifice. Thus, with the two factors (work and community) and the three kinds of attachments (links, fit and sacrifice), the job embeddedness model has six dimensions: work links, work fit, work sacrifice (organisational embeddedness) and community links, community fit and community sacrifice (community enbeddedness).   An individual is embedded when he or she has multiple links to the people in the employing organisation and non-work community, when the workplace and the community environment are a good fit for the individual and when the individual feels he or she has to sacrifice too much to leave the organisation and community (Mitchell *et al.,* 2001).
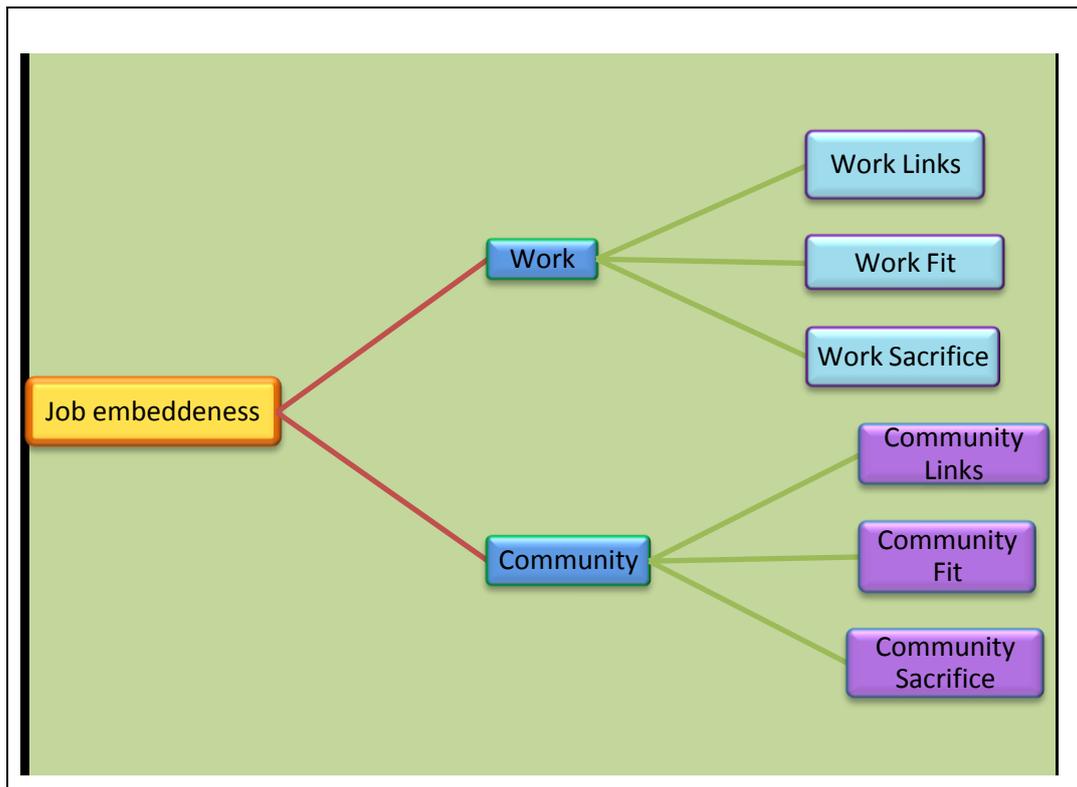
Figure 4.1. Dimensions of job embeddedness (Mitchell & Lee, 2001)

4.1.2.1   Work and community links

Links are defined as connections (formal or informal) between an individual and an institution or other people in the community (Mitchell *et al*, 2001, p.8). These links are not necessarily in the workplace and may involve not only an employee but also family members. There is a difference between the links tying the employee to the organisation (e.g., "How many years have you worked for this organisation?") and links to the community (e.g., "My lifestyle fits in well in my community"). These two dimensions (work and community) describe the extent to which an individual is linked to other people and activities in the workplace and community environment. Links include both formal and informal ties that an individual has with other people. One example of a work link is a strong connection with one's supervisor or co-workers. An example of a community link is a strong connection to a group of friends who spend every weekend together, or having relatives who live in the same area (Mallol *et al.*, 2007). According to Mitchell *et al* (2001), the higher the number of links between the individual and the work, the more he or she is bound to the job and the organisation. Similarly, the higher the number of links between the individidual and the community evironment, the more he or she is bound to the organisation.

To sum up, people have many links between the various aspects of their lives. Leaving their job and possibly their home may demand the re-arrangement of some of these links. Those with more links are likely to incur greater costs – whether financial, emotional or psychological – in leaving their current situation or job.

4.1.2.2   Work and community fit

Fit is defined by Mitchell *et al* (2001, p.8) as how comfortable the employee feels within the organisation and his or her environment. Two types of fit are considered: fit with an individual's organisation (e.g. "My values are compatible with the organisation's values") and fit within the community (e.g. "I really love the place where I live"). These two dimensions (work and community) describe the extent to which the work and community environments are pereived to be a good fit with the individual's interests, both inside and outside the organisation. Put differently, fit includes the individual's compatibility with his or her work and community settings. An example of high work fit would be the individual valuing being environmentally friendly and working for an organisation that supports recycling, or if the individual were to feel that he or she is a good fit with his or her job. An example of a high community fit would be enjoying music and living in an area that offers many opportunities to watch live bands in concert or being able to join an adult, recreational league in the area in order to play a favourite sport. The better the fit, the more an employee will feel professionally and personally tied to the organisation in which he or she works. According to Mitchell *et al* (2001), the better the fit between the employee's personal values (e.g. career goals and plans for the future) and the workplace, the less likely the employee is to leave. In a similar vein, the better the fit with the community environment, the less likely the employee would be to leave his or her organisation (Holtom & O'Neill, 2004).

4.1.2.3   Work and community sacrifice

Sacrifice represents what the employee would have to give up when leaving the organisation and includes not only material benefits but also psychological benefits (Mitchell *et al*, 2001, p. 9). The final work and community dimensions of job embeddedness include all the benefits that an individual would have to give up if he or she were to leave the job. In simple terms, it is the perceived loss of material or psychological benefits that are currently available or will be available in the future. An example of work sacrifice is the lost opportunity for promotion if the individual is up for a promotional review soon, or the loss of childcare if that is one of the benefits provided by the employer. An example of community

sacrifice is leaving a neighborhood in which all the neighbours help one another or leaving a highly regarded neighborhood school (Holtom & O'Neil, 2004). According to Mitchell *et al* (2001), the more an employee would have to give up when leaving, the more difficult it would be for him or her to leave the organisation and surrounding community.

The concept of embeddedness goes well beyond the organisation. It extends to the employee's family members fitting into an organisation and a community. Links, fit and sacrifice are considered at two different levels: (1) on the job and (2) off the job, generatting the six dimensions as discussed in the subsections above (Mitchell *et al*, 2001).

Although off-the-job embeddedness may be more crucial when relocation is involved, it may still apply in situations requiring only a change in jobs. In addition, if people are embedded they may remove job alternatives that require relocation from the set of job options they consider (Mitchell *et al*, 2001).

Job embeddedness implies that the evaluation of social relationships influences the decision-making process leading to turnover. The theory proposes that people who consider themselves embedded (as measured by questions relating to their working environment and community experience) are less likely to indicate their intention to leave (Mitchell *et al*, 2001).

It is easy to associate embeddedness with tenure, since time allows for the development of links. In support of the embeddedness concept, Griffeth *et al.,* (2000) meta-analysis shows the two best demographic predictors of turnover as tenure and children in the household.

Mitchell *et al* (2001) in a study of two organisations, reported correlations of -.41 and -.47 (p<.01) between job embeddedness and intentions to leave the organisation. In addition, the study demonstrates that job embeddedness significantly imporved the prediction of turnover beyond that accounted for by job satisfaction and organisational commitment.

Job embeddedness reflects those on-and off-the-job factors that keep people in their current positions. Table 4.1 provides examples of how employees can help embed employees in jobs using the various dimensions to guide their specific efforts.

Table 4.1

Job Embeddedness Suggestions by Dimensions

Dimension	Organisation	Community
Links	• Provide mentors	• Provide organisational support for community-based service
	• Recognise team accomplishments, reinforce tem identities	• Sponsor employee sports teams in local leagues
Fit	• Hire based on fit with the job	• Recruit most intensively in local markets (minimise relocation)
	• Hire based on fit with the organisational culture and values	• Promote work-life balance programmes (e.g. flexitime and job sharing)
Sacrifice	• Provide financial incentives	• Promote without requiring transfer
	• Provide non-financial incentives (e.g., sabbaticals or unique perks)	• Provide home-buying assistance

4.1.3 Variables influencing the development of Job embeddedness

This section deals with the variables that might influence the development of job embeddedness.

Many factors operating at organisational level infuence employee's mobility or embeddedness (Malos & Campion, 2000). These are identified and summarised in Table 4.2.

Table 4.2

Factors Influencing Employee Mobility or Embeddedness at Organisational Level

Factors identified	Brief explanation	Reference
Organisational staffing and compensation policies	• Policies detemine the internal mobility options for employees	• Sonnefeld & Peiperl (1988)
Structure of pension and insurance benefits	• May influence individual's job mobility or embeddedness, particularly in the late career stage	• Kim & Feldman (1998; 2000)
Intro-organisational networks	• Social networks of individuals affect their work attitudes and behaviours • Individuals oftent network with colleagues	• Davern & Hachne (2006) • Ayree, Wyatt, & Stone (1996) • Jorisaari & Nurmi (2006)
Organisational socialisation practices	• The socialisation process individuals' undergo affecs their embeddedness • This is the process where newcomers become familiar with the values, abilities and behaviours that are essential for effective job performance	• Allen (2006) • Bauer, Morrison, & Callister (1998)
Social capital	• The diversity and uniqueness of ties to individuals significantly enhance	• Burt (1992) • Granovetter (1985) • Lin (2001) • Nahapiet & Ghosal

	an individual's access to valuable information • Social ties at work directly strengthen individuals' links with others in the organisation and thereby enhance embeddedness	(1998) • Mitchell *et al* (a) (2001)
Social support and group cohesiveness	• Relationships that involve deep affection and positive emotions influence an individual's embeddedness	• Ng & Sorensen (2008) • Viswesvaran, Sanchez, & Fisher (1999)
Relational demography (race differences)	• Demographically different individuals are more likely to leave their organisations • Such individuals are less likely to identify with their work groups' values • They tend to have weak emotional attachments to coworkers	• Tsui, Egan, & O'Reilly (1992) • Jackson, Brett, Sessa, Cooper, Julin, & Peyronnin (1991)
Amount and predictability of time demands	• The time demands of personal life actvities may affect embeddedness • If these time demands cannot be managed,	• Fernet, Guay, & Senecal (2004) • O'Driscoll, Ilgen, & Hildreth (1992)

	such individuals tend to leave the organisation • Such individuals seek more flexibility, heavier workload and more predictable work hours	
Support in resolving work-life conflict	• Individuals with a high degree of work-life conflict typically experience a poor quality of life	• Ng, Sorensen & Ebby (2006)
Family and friendship networks	• Because an individual's decisions affect close family and friends, an employee is likely to take then into consideration	• Dette & Dalbert (2005) • Feldman (a) (2002) • Maertz & Griffeth (2004)

(Adapted from Feldman & Ng, 2007, p.356)

The strongest influences on job embeddedness as identified by Feldman and Ng (2007), will be discussed below.

4.1.3.1 Aggregate amount of mobility

In general, the structural factors (such as macro economic conditions) appear to have their greatest impact on the aggregate amount of mobility in the working population – across jobs, organisations, and occupations (DiPrete, 1993; Doeringer, 1990; Hachen, 1992). Poor economic conditions make it financially more difficult for individuals to accumulate enough resources to invest in new occupational training. In addition, poor economic conditions decrease the number of new positions within firms and the number of new firms created. Poor economic conditions also increase job insecurity, thereby making individuals less likely to give up any longevity-based employment security or compensation benefits accrued in their current firm (Feldman & Ng, 2007).

4.1.3.2 Mobility of historically disadvantaged groups

Social and legal environment factors appear to have their greatest impact on the aggregate mobility of populations that have been historically disadvantaged (Fujiwara-Greve & Greve, 2000; Rosenveld, 1992). During the past 50 years, changes in the South African social policy have increased educational and employment oportunities for these employees by either reducing barriers to entry (e.g. affirmative action legislation) or by providing resources for entry (e.g. the Job Partnerships Training Act, and the South African Skills Development Act 1998). Even government set-asides for particular geographic locations have been typically targeted at areas that have been economically distressed for considerable periods of time. However, for the general population, social and legal policies have had only modest effects on employee mobility and/or job embeddedness (DiPrete & Nonnemaker, 1997).

4.1.3.3 Occupational mobility and embeddedness

The factors that seem to be particularly salient for occupational mobility are the permeability of occupational mobility structures and industry growth (Ng, Sorensen, Eby, & Feldman, 2007). The permeability of occupational mobility structures and the high industry growth rates not only reduce barriers to entry but also increase workers' expectations that they can successfully shift into a particular new career path (Arnold, Loan-Clarke, Coombs, Wilkonson, Park, & Preton, 2006; Ng *et al.*, 2007). However, the factor that seems to embed individuals in their current occpations most strongly is level of human capital investment (Fulgate, Kinicki, & Ashforth, 2004; Wayne, Liden, Kraimer & Graf, 1999).

4.1.3.4 Organisational mobility and embeddedness

The literature to date suggests that the structure of pension and insurance benefits has the strongest effect on embedding employees in their current organisations (Kim & Feldman, 1998, 2000). Using the same logic as above, individuals are reluctant to give up on sunk costs, particularly when those sunk costs are high. It is interesting to note that pension and insurance are not typically high on the factors individuals consider when choosing organisations but tend to be more important in decisions abour leaving organisations (Buchmeuller & Valetta, 1996). The effects of compensations policies on organisational change and embeddedness are complex. For example, although it is true that high salaries can embed employees with golden handcuffs, true stars are often able to extract equally high or higher salaries in the external labour market (Pil & Leane, 2000). In general, wage

differences across organisations are positively related to external mobility decisions (Hammida, 2004), but the interactions between wages and longevity-based benefits on mobility or embeddedness decisions have not yet been explored in much depth (Feldman & Ng, 2007).

4.1.3.5   Job mobility and embeddedness

It is necessary to consider the differences between job change in organisations and external job change separately. In terms of internal job changes, the factors that appear to be the most embedding are social capital and social support. Even for individuals who feel the need for new challenges, high social capital and high social support appear to focus employees' search for new positions within their current organisations (De Janasz & Sullivan, 2004). However, the factors that seem to lead to more external mobility are the predictability of time demands and support in resolving work-life conflict (Ng & Sorensen, 2008). Guidelines on the predictability of time demands and support for work-life conflict are more likely to be set at the organisational level than at the unit level.

4.1.3.6   Individual mobility and embeddedness

In general, the research on individual differences suggests that differences affect decisions to engage in any type of mobility as opposed to any specific type of mobility (Judge *et al*, 2004). For example, although openness to experience has been linked to greater willingness to change positions in general, there is not enough evidence at this point to argue that openness to experience is strongly related to any particular type of mobility. Similarly, although individuals with social career interests appear to be more open to mobility in general, there is little evidence to suggest whether those interests have a greater impact on job, organisational and occupational mobility or embeddedness (Feldman & Ng, 2007; Ng, Eby, Sorenson, & Feldman, 2005).

4.1.3.7   Career stages

According to Ng and Feldman (2007), the factors that promote embeddedness are likely to be different as a person's career unfolds over time. Two major assertions of Super's (1957, 1984) life-space model provide the theoretical foundation for explaining this embedding process. Firstly, Super's (1992) model suggests that individuals undergo multiple stages of career development in their life-span. These stages include exploration, establishment,

maintenance, and ultimate disengagement. Individual differences (particularly self-concepts) and social roles largely govern the progression through these career stages (Super, 1990(a)). Super (1990(b)) also mentions the possibility that different career stages may occure at different ages for different people and that some people (particularly those who change organisations and occupations) may recycle through career stages more than once in their life span.

The second major assertion of Super's (1992) life-span, life-space model is that the number of roles individuals fulfil and the salience attached to those roles vary across career stages. Super's (1996) work in this regard underlies the study that factors promoting organisational embeddedness may differ across career stages (Adams, Webster, & Buyarski, 2010; Ng & Feldman, 2007). As individuals progress in their careers, they are likely to have to fulfil different roles both at and outside work. As the number of roles and the associated salience of those roles change, the collection of forces that embed individuals in their organisations and occupations changes over time.

4.2   ORGANISATIONAL COMMITMENT

The concept of organisational commitment will be discussed in the subsections to follow. The concept organisational commitment will be conceptualised, and the focus will then be shifted on theoretical models. The variables influencing the development of organisational commitment and the impact on retention will also be addressed.

4.2.1   Conceptualisation of organisational commitment

According to Meyer and Allen's (1991) definition of organisational commitment reflects three extensive elements namely (1) affective, (2) continuance and (3) normative. Commitment can therefore be defined as reflecting an affective point of reference towards the organisation, acknowledgement of the consequences relating to leaving the organisation and an ethical responsibility to remain with the organisation (Meyer & Allen, 1991). For the purposes of this study, this definition will be adopted.

According to Mathieu and Zajac (1990), various definitions and measures of organisational commitment have been formulated over the years. By examining the diverse definitions and measures, it is obvious that they have a common universal idea, namely that organisational commitment is regarded as a person's connection with or link to his or her organisation. The

definitions vary in respect of how this link is deemed to have developed. Commitment to an occupation suggests the desire to stay with an organisation in order to develop business and professional associations (Colarelli & Bishop, 1990). Commitment to an internally defined occupation may turn out to be a vital foundation of occupational significance and stability because modern organisations are in a state of flux and are less able to ensure employment protection (Colarelli & Bishop, 1990). Career commitment is differentiated by the development of individual occupational objectives, and the connection to, classification with and participation in those objectives. According to Hall (1976), career commitment should go beyond career and employment.

Job or occupational commitment involves dedication or a moderately temporary set of objective task requirements (Colarelli & Bishop, 1990). Career commitment suggests a long-term position and is linked to the personal career visualised by the individual (Hall, 1976). Organisational commitment involves commitment to an organisation and its organisational objectives (Randall, 1987) whereas career commitment entails self-developed objectives and dedication to an individual's personal profession, which may point towards employment in a number of institutes (Colarelli & Bishop, 1990). Specialised commitment refers to specialised employees' dedication to their particular line of work (Parasuraman & Nachman, 1987). Although dedication to an occupation obviously entails commitment to a profession, non-specialised workers may also be faithful to their occupations (Hall, 1976).

Attitudinal commitment has been identified as the most commonly studied type of organisational commitment and is generally determined by means of a scale developed by Porter and his colleagues (Mowday, Porter, & Steers, 1982; Mowdays, Steers, & Porter, 1979).

Mowdays *et al.* (1982, p. 26) explained attitudinal commitment as an individual's identification with the involvement in a particular organisation. Theoretically, it can be characterised by at least three factors, which include (1) a strong belief in and acceptance of the organisation's goals and values; (2) a willingness to exert considerable effort on the organisation's behalf; and (3) a strong desire to maintain membership in the organisation.

According to Mowdays *et al.* (1979), commitment as an attitude varies from the idea of job satisfaction in several ways. Commitment as a construct is more comprehensive, thus suggesting a broad affective reaction to the organisation as an entity. Job satisfaction, however, reveals an individual's reaction either to his or her occupation or to some facets of it.

Organisational commitment is the psychological connection an individual has with the organisation, which includes a sense of job involvement, loyalty and belief in the organisation's values (O'Reilly, 1989, p. 17). Here organisational commitment is reported as an employee's recognition of organissational goals and his or her enthusiasm into making an effort on the organisation's behalf (O'Reilly, 1989).

The link to the employing institute, and its objectives and principles, if highlighted through commitment, is the detailed task situation in which a member of staff fulfils his or her responsibilities which are highlighted through satisfaction (Mowdays *et al*, 1979). To a certain extent, organisational commitment tends to be more stable over time than job satisfaction, even through the organisation's daily operations may influence an employee's intensity of job satisfaction (Mowdays *et al.*, 1979).

4.2.2 Development of employee/individual commitment

According to McKenna (2006), the relations of individuals and cultures have strengthening traits, normally consequential in dedicated individuals. As an individual's on-the-job and interactive skills develop, there seem to be a positive impact on the intensity of self-esteem, which, in turn, enhances commitment in the organisation (McKenna, 2006). This part of the development process of individual commitment can be linked to the Psychological Career Resources Model developed by Coetzee (2008), in the sense that it is related to the sub-sections of self-esteem and the development of practical/creative or self/other skills identified in the model. Commitment increases by means of three phases of attitude transformation, namely compliance, identification and internalization (McKenna, 2006).

In the compliance phase, individuals obey the rules in order to obtain some kind of materialistic remuneration (McKenna, 2006). When the identification stage is reached, the demands of society are acknowledged in order to uphold good associations with co-workers (McKenna, 2006). The concluding phase, internalisation, focuses on individuals who discover that the acceptance of the society's principles of the organisation creates fundamental fulfillment because these principles are in line with the individual's personal principles (McKenna, 2006).

It may be difficult to maintain faithfulness and recognition with the organisation when the potential fear of loss of job security and the removal of benefits stare the individual in the face (McKenna, 2006). A concluding observation on commitment is that employers should

strive for enthusiasm and dedication towards the job itself instead of faithfulness towards the organisation (Peters, 1992). Nevertheless, this may prove to be challenging for those with extremely ordinary jobs (McKenna, 2006).

After explaining the development of organisational commitment, it is necessary to identify that the different levels of organisational commitment that can play a major role in the individual's career. These different levels of organisational commitment will be discussed in the next section.

4.2.3 Levels of organisational commitment

According to Riechers (1985), three levels of organisational commitment are associated with the individual's maturity and organisational dedication.
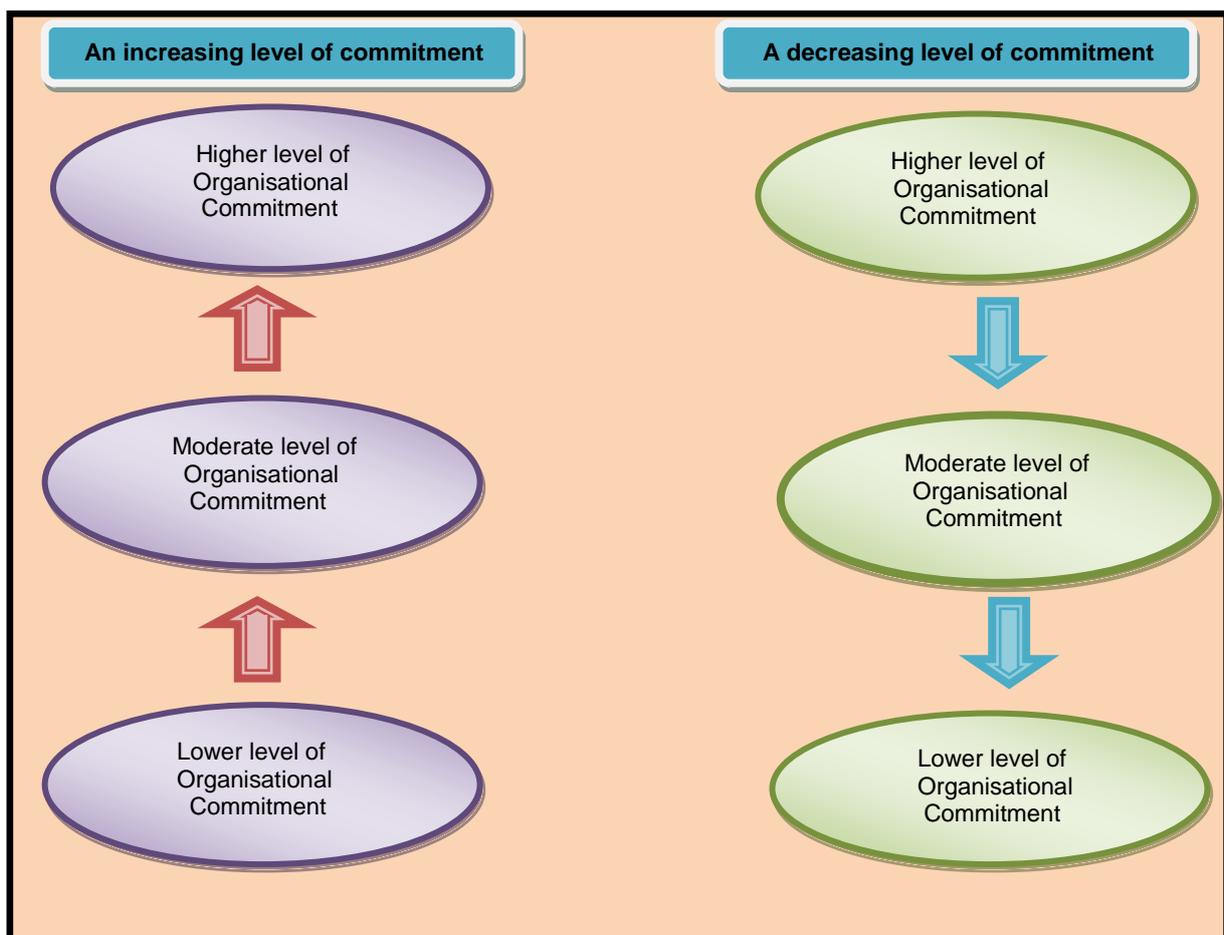
Figure 4.2. Levels of organisational development

The following sections will provide an explanation of the different levels of commitment:

4.2.3.1   Higher levels of organisational commitment

A high level of organisational commitment is distinguished by a strong recognition of the organisation's principles and enthusiasm towards making an effort to stay employed with the organisation (Reichers, 1986). The "desire to remain" suggests that the behavioural trends at this level relate strongly to the affective element of commitment, in the sense that individuals remain because they want to (Meyer & Allen, 1997).

4.23.2   Moderate levels of organisational commitment

The moderate level of organisational commitment can be described as a sensible recognition of the organisation's objectives and principles as well as the enthusiasm to make the effort to remain an employee of the organisation (Riechers, 1985). The motivation to remain with the organisation is acknowledgment of an ethical commitment linked to the normative element of commitment (Meyer & Allen, 1997). The individual remains with the organisation because he or she has to.

4.2.3.3   Lower levels of organisational commitment

A low level of organisational commitment is distinguished by a lack of recognition of organisational objectives and principles and of enthusiasm to make the effort to stay with the organisation (Riechers, 1985). The individual who functions at this level is probably disappointed with the organisation and remains with the organisation because he or she needs to do so. This level of organisational commitment is linked to the continuance element of commitment (Meyer & Allen, 1997).

After recognising and explaining the different levels of organisational commitment, it is clear that organisational commitment and the different levels thereof may have an effect on the organisation, as explained in the next section.

4.2.4   Consequences of organisational commitment

Organisational commitment can have a positive or negative effect on the organisation. These effects will be explained individually in the subsections below.

4.2.4.1 Negative consequences of low level organisational commitment

Individuals with a low level of organisational commitment have a tendency to be uncreative and some even turn out to be loafers at work (Morrow, 1993). According to Lowman (1993), organisational commitment can be seen as a work dysfunction when it is explained as under- and over-commitment. The following are characteristics of over- and under-commitment:

Table 4.3

Characteristics of Over-Commitment and Under-Commitment (Lowman, 1993)

Under-commitment	Over-commitment
• Fear of success	• Overly loyal employees
• Fear of failure	• Job and occupational burnout
• Chronic and persistent procrastination	• Obsessive-compulsive patterns at work
• Negative cultural, familial and personality factors	• Neurotic complusion to succees
• Chronic and persistent under - achievement	• Extreme high level of energy

Organisational commitment is described as the best predictor of employees' turnover compared with the more commonly used job satisfaction predictor (Manetje, 2005). It can be assumed that individuals who function in a continuance commitment setting are calculative about remaining with the organisation employing them.

4.2.4.2 Positive consequences of organisational commitment

Employees who are fully committed to the organisation, they work for, will in fact make a positive contribution towards it. It is suggested that organisations whose members indicate higher levels of commitment might show better performance and productivity and may less absent and tired (Cohen, 2003).

A steady and fruitful workforce may be a consequence of organisational commitment (Morrow, 1993). Highly committed employees tend to remain with the organisation at which they are currently employed because they are pleased with it and likely to take on

demanding work activities (Meyer & Allen, 1997). According to Morrow (1993), committed individuals are usually oriented towards accomplishment and originality, with a definitive objective of engaging in and improving performance.

Individuals who are affectively and normatively committed are more likely to remain with the organisation as a member and they will contribute more to its success than individuals who are continuancely committed (Meyer & Allen, 1997).

The organisational commitment individuals experience in or develop for a specific organisation may have an influence on their career stages in their working career. This statement will be explored in the section below.

Now that the concept of organisational commitment has been conceptualised, it is necessary to identify the model of organisational commitment which forms the theoretical framework of this study.

4.2.5 Theoretical models of organisational commitment

In the study of the literature on organisational commitment it has been established that organisational commitment can be separated into different theoretical models. Models are vital in this study because they investigate the diverse viewpoints studied and document how these are articulated in an organisational situation. The different models distinguish organisational commitment as either unidimensional or multidimensional. The sections below will explore these theoretical models in greater depth.

4.2.5.1 Allen and Meyer's model of organisational commitment

Meyer and Allen (1990) were responsible for the main contribution to the organisational commitment literature, with over 15 studies published from 1984 onwards. Meyer and Allen's (1990) three-component model of commitment was chosen for this study, because it has undergone the most extensive empirical evaluation to date and forms the foundation of the measuring instrument used for the purpose of this study (Allen & Meyer, 1996).

Meyer and Allen (cited in Allen & Meyer, 1990) designed their three-component model after identifying recurring topics in the conceptualisations. According to Allen and Meyer (1990, p. 14), commitment forms a connection between an individual and the organisation and in this

way reduces the probability of turnover. The main distinction is in the state of mind supposed to differentiate affective connection to the organisation, (identified as affective commitment), the supposed price of leaving (identified as continuance commitment), and the responsibility of staying with the organisation (identified as normative commitment) (Allen & Meyer, 1990).
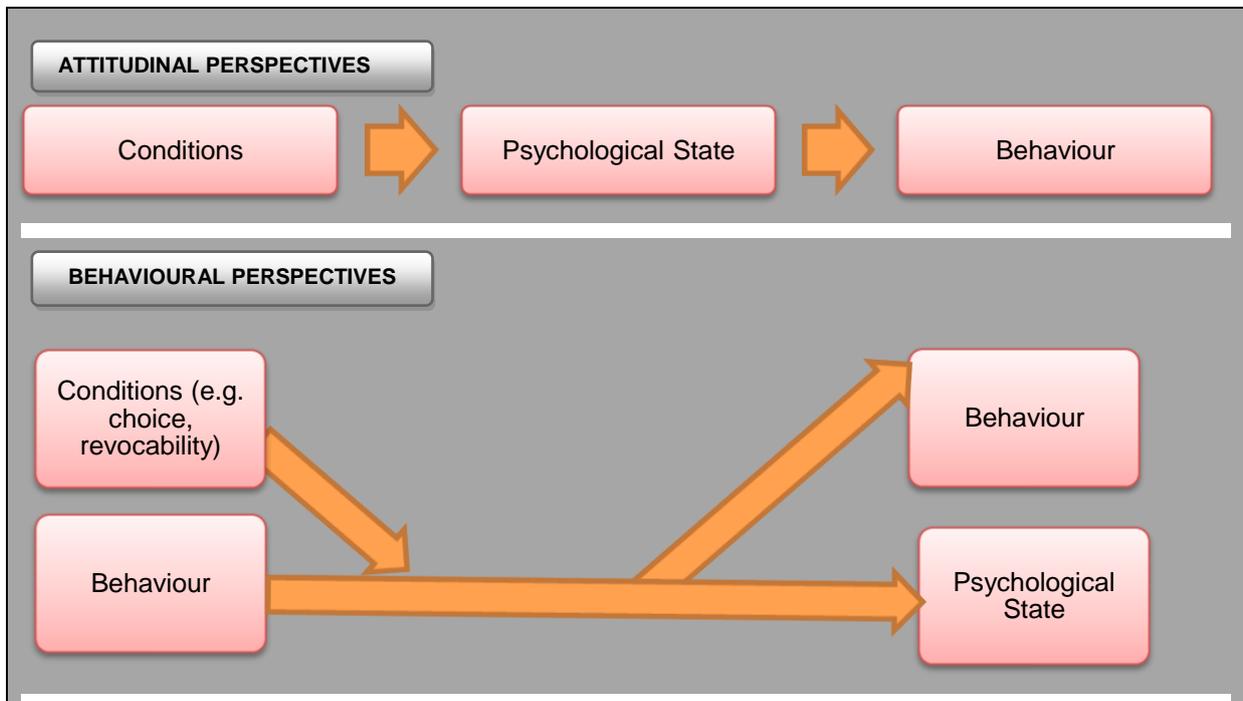
Figure 4.3. The attitudinal and behavioural perspectived on organisational commitment (Meyer & Allen, 1991, p. 63)

Meyer and Allen (1991), integrated both the attitudinal and behavioural perspectives as well as the relationship depicted in Figure 4.3. They also indicated that it is essential to develop the concept of commitment in order to embrace aspiration, needs and the duty to stay. According to Meyer and Allen (1991) the concept of commitment no longer forms part of the traditional sociopsychological definition of an attitude.
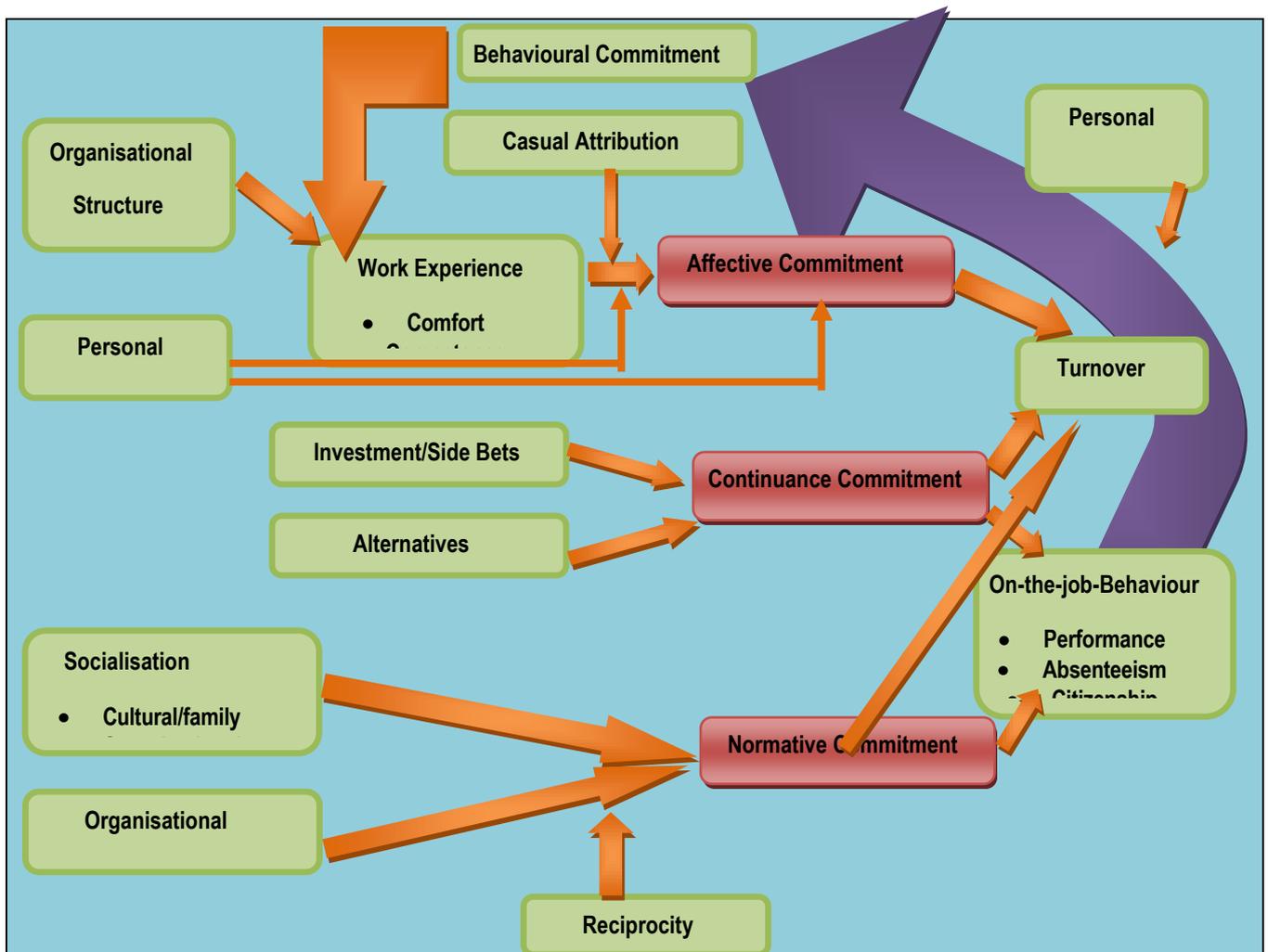
Figure 4.4. A three-component Model of Organisational Commitment (Meyer & Allen, 1991, p.68)

According to Meyer and Allen (1991), organisational commitment is a psychological condition that (1) differentiates the association with the organisation, and (2) has repercussions for the choice to continue memebership thereof. Meyer and Allen (1991) thus identified these three components as affective, continuance and normative commitment. these components will be discussed in detail below.

(a)   Affective commitment

According to Meyer and Allen (1997), affective commitment is the individual's affecting connection to, recognition as part of and participation in the organisation. Employees who are affectively committed to the organisation will probably continue work for it because they want to (Meyer & Allen, 1991). Individuals who are dedicated at an emotional level usually remain with the organisation because they see their individual employment relationship as

being harmonious with the goals and values of the organisation for which they are currently working (Beck & Wilson, 2000).

Kanter (1968) describes affective commitment as the connection of an individual's support of affective feelings towards the group. Affective commitment is an outlook or point of reference towards the organisation, which links the individuality of the individual to the organisation (Sheldon, 1971).

Hall, Schneider, and Nygren (1970) regard the affective component as the procedure whereby the objectives of the organisation and those of the individual become increasingly harmonious. Affective commitment is also considered to be a supporting factor, commitment to the objectives and principles of the organisation, to the individual's responsibility in relation to objectives and principles, and to the organisation for its own sake, apart from its merely active value (Buchanan, 1974). Some individuals put more into their careers than is required to complete the job successfully and qualify this as the affective component or organisational commitment (Gould, 1979). Affective commitment is also influenced by factors such as work challenge, role clearness, clarity about objectives and the difficulty of the objectives, openness on the part of management, peer unity, equity, individual significance, feedback, contributions and steadiness (Meyer & Allen, 1997).

Affective commitment development involves recognition of the organisation and internalisation of organisational principles and standards (Beck & Wilson, 2000).

(b)   Continuance commitment

The second component of Allen and Meyer's (1990) model of organisational commitment is continuance commitment. Continuance commitment includes the awareness of the costs associated with leaving the organisation (Meyer & Allen, 1997, p. 11). Kanter (1968, p. 504) concurs with this definition stating that it is the gain associated with sustained involvement and the costs associated with leaving the organisation. Because of the individual's awareness of consideration of expenses and threats linked to leaving the existing organisation it is considered to be calculative (Meyer & Allen, 1997). Meyer and Allen (1991) also indicate that individuals whose primary connection to the organisation is based on continuance commitment, stay because they need to.

Continuance commitment can be seen as a helpful accessory to the organisation, where the individual's relationship is based on an evaluation of the financial benefits received (Beck &

Wilson, 2000). Another perception of continuance commitment is that it is a structural occurrence, because of the individual-organisational contract and ammendments to sidetakes or saving over a period of time (Hrebiniak & Alutto, 1972).

Meyer, Allen and Gellatly (1990, p. 715) also maintain that "accrued investments and poor employment alternatives tend to force individuals to maintain their line of action and are responsible for these individuals being committed because they need to". Individuals remain with a specific organisation because of the money they add as a result of the time spent in the organisation, not because they want to. This differs from affective commitment where individuals remain with an organisation because they want to, and because they are familiar with it and its principles.

(c)   Normative commitment

Normative commitment is defined as a sense of responsibility to continue employment with a specific organisation (Meyer & Allen, 1997). The internalised normative idea of responsibility and commitment allows employees to appreciate continued memebership of a specific organisation (Allen & Meyer, 1990). The normative element is viewed as the commitment individuals think about morally regarding their right to remain with a specific organisation, in spite of how much status improvement or fulfilment the organisation provides them over the years (March & Mannari, 1977).

Normative commitment illustrates development whereby organisational procedures (which include choice and socialisation actions) and individual tendencies (which include the personal-organisational importance similarity and generalised reliability or responsibility approach) direct the way to the progression of organisational commitment (Wiener, 1982).

Commitment behaviours are generaly acknowledged behaviours that go beyond formal and/or normative prospects relating to the purpose of commitment (Wiener, 1982). Normative commitment is also regarded as the sum of internalised normative forces that unite organisational objectives and organisational wellbeing (Wiener, 1982).

According to Suliman and Iles (2000), acknowledgement of the regulations pertaining to mutual responsibility between the organisation and its employees influences the strength of normative organisational commitment. The mutual responsibility is based on the social exchange theory, which proposes that an individual who benefits has a normative responsibility to give something back to the organisation (McDonald & Makin, 2000).

Normative career commitment engenders thoughts or faithfulness to an occupation (Kidd, 2006). Meyer, Allen, and Smith's (1993) model focuses on feelings or the responsibility to remain in an occupation and a sense of accountability to stay in the occupation and organisation.

Affective, continuance and normative commitment are components of organisational commitment, instead of types of commitment because the employee-employer relationship imitates variable degrees of all three components (Meyer & Allen, 1997). The multidimensional structure or conceptualisation appears to be suitable. The lack of consensus on the definition of commitment was generally responsible for its being dealt with as a multidimensional construct (Meyer & Allen, 1997).

Additional related theories that form part of organisational commitment also need to be identified and discussed. These theories include O'Reilly and Chatman's (1986) model, Morrow's (1983) major commitments model, Randal and Cote's (1991) commitment model and Etzioni's (1961) model of organisational commitment. The reason for mentioning these older theories is that they could contribute to the results of the study, because they form the basis of the other theories.

These related theories on organisational commitment will be discussed below. It is necessary to identify these theories in order to gain a clear understanding of the development of the construct of organisational commitment.

4.2.5.2 O'Reilly's model

O'Reilly and Chatman (1986), as discussed in Meyer & Herscovitch (2001), developed their multi-dimensional structure on the basis of the hypothesis that commitment signifies a stance towards the organisation. According to O'Reilly and Chatman (1986), commitment comprises of three stages. This statement was based on Kelman's (1958) work on attitude and behaviour transformation.

The three stages of commitment identified by O'Reilly and Chatman (1986) are as follows:

(a) Compliance

Compliance concentrates on the individual accepting the impact of others generally to gain something from them, through compensation or promotion (O'Reilly, 1989). This type of commitment exists when attitude and matching behaviours are taken on in order to gain particular rewards. The character of organisational commitment in the initial compliance stage is linked to the continuance element of commitment, where the individual is calculative with the need to reside with the organisation when assessing the rewards (Beck & Wilson, 2000).

(b)   Identification

Identification occurs when individuals acknowledge the power of others in order to sustain a fulfilling self-defining connection with the organisation (O'Reilly, 1989). This type of commitment exists when an individual recognises control to create or sustain a rewarding relationship. Organisational commitment at this stage is supported by the normative element of commitment (Meyer & Allen, 1997).

(c)   Internalisation

Internatlisation occurs when the individual discovers the principles of the organistion to be fundamentally satisfying and harmonious with his or her personal principles (O'Reilly, 1989) This type of commitment exists when power is acknowledged because an individual's feelings and behaviours are encouraged and accepted and they are similar to existing morals. Organisational commitment at this stage is based on the affective element of commitment (Meyer & Allen, 1997).

The individual's psychological connection can reproduce changeable combinations of these three psychological fundamentals (O'Reilly & Chatman, 1986).

This model also forms a part of the process on how an individual's commitment is developed within himself or herself. This will be explained later on in this chapter.

Organisational commitment is thus multi-dimensional and adopts the following three types of commitment: compliance, identification and internalisation.

4.2.5.3 Morrow's model of major commitment

Morrow (1983) identified five key commitments which she thought may have a mutual influence on one another. These five different types of commitment are separated into two major groups, as depicted below.
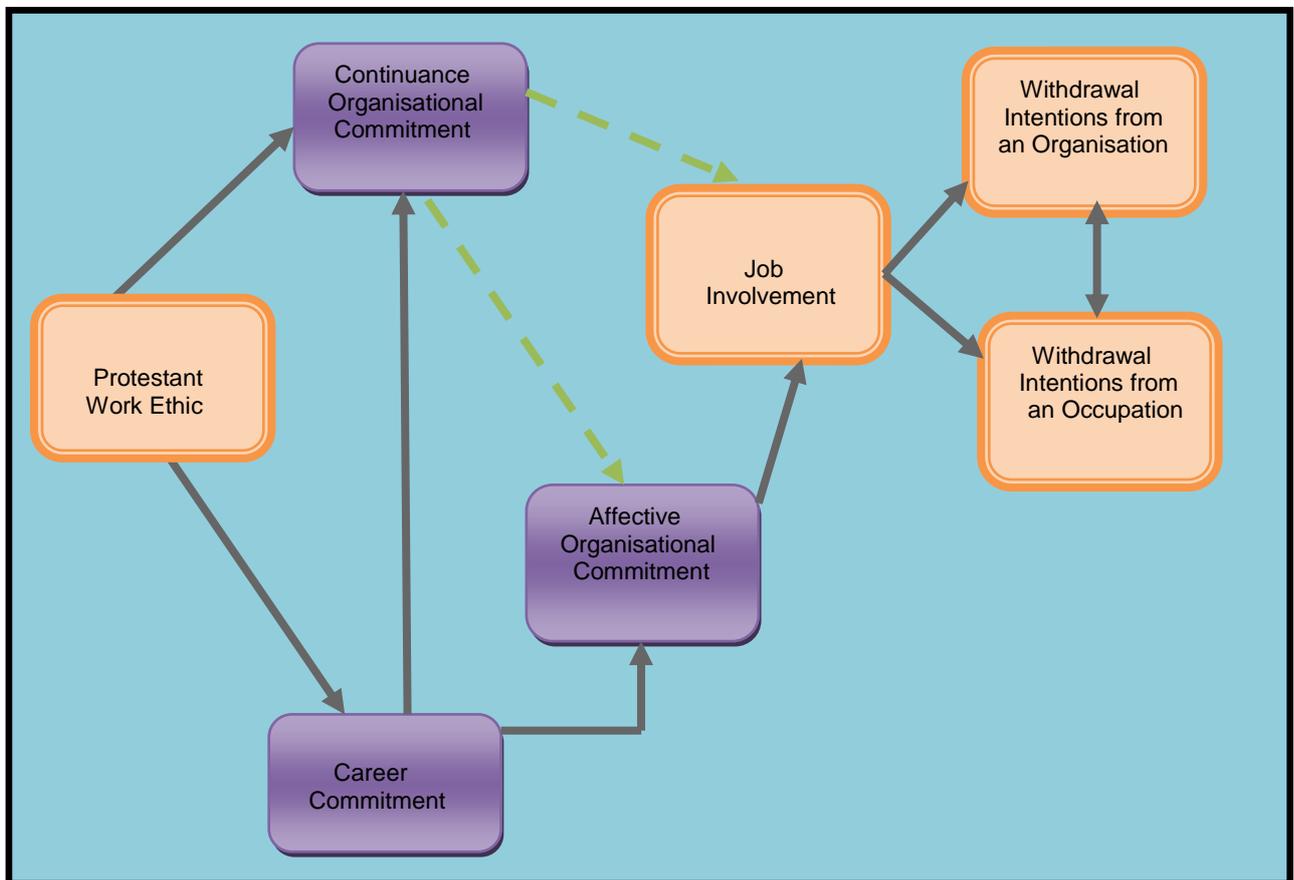
Figure 4.5. Morrow's commitment model and withdrawal intentions (Carmeli & Gefen, 2005)

The first group contain commitments that manipulate work thoughts with no relation to the organisation in which the individual is working. It comprises different types of commiment such as Protestant occupational ethics (Mirels & Garret, 1971), professional commitment (Greenhaus, 1971) and work commitment (Blau & Boal, 1987).

The second group contains commitments that may be influenced directly by the organisation in which the individual is working. It includes equal amounts of continuance and affective commitment (Allen & Meyer, 1993).

Career commitment is associated with continuance and affective commitment to the organisation (Morrow, 1983). In turn, continuance commitment to the organisation relates to affective commitment, and both of these commitments influence job involvement. According

to Morrow (1983), there may be a shared connectedness between the different levels of commitment.

4.2.5.4   Randall and Cote's commitment model

Randall and Cote's (1991) model proposes that job involvement interferes with the connection between Protestant work ethics and continuance organisational commitment, affective commitment and career commitment by job involvement (Carmeli & Gefen, 2005).
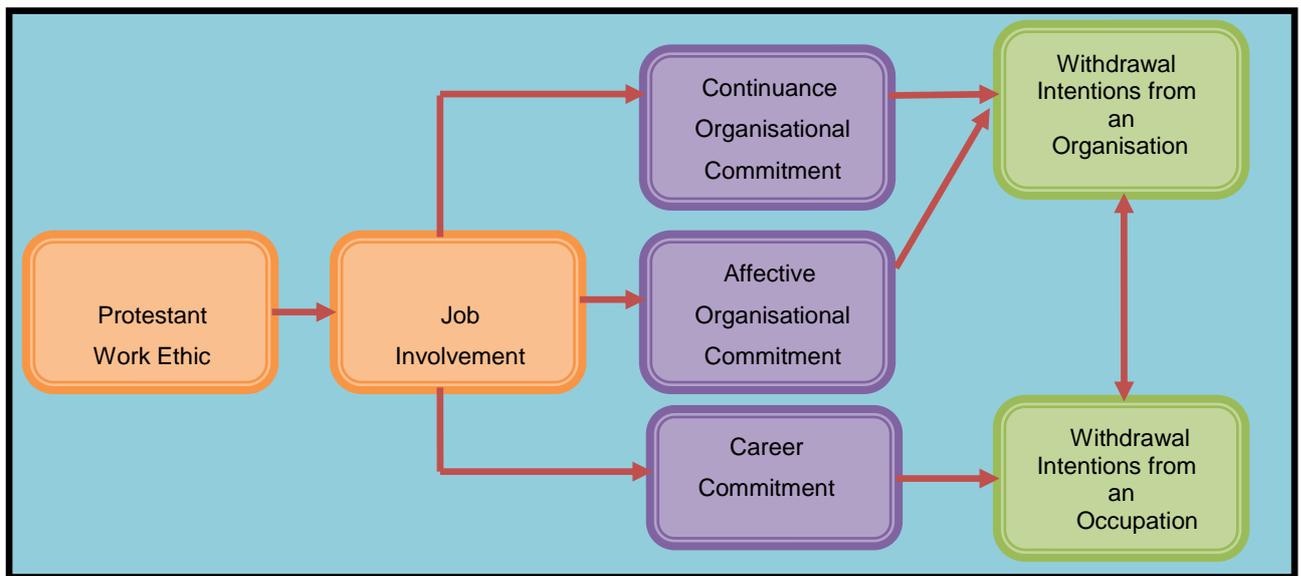
Figure 4.6. Randall and Cote's commitment model and withdrawal intentions (Carmeli & Gefen, 2005)

The essential function that Randall and Cote (1991) ascribed to job involvement is vastly different from its function in Morrow's model (Carmeli & Gefen, 2005). However, the two models can be integrated. Morrow indicates that job involvement is largely a role of situational conditions whereas Randall and Cote suggests that job involvement is primarily an invention of individual features (Carmeli & Gefen, 2005). It is necessary to explain the individual facets of this model in order to understand it.

According to Hall and Mansfield (1971), individuals with a high degree of Protestant work ethic regard an occupation as a asset, which ends when it needs to end. They also suggest that job involvement is a moderately steady personal trait (Hall & Mansfield, 1971). According to this view, job involvement should be determined by the price individuals attach to their occupation (Kanungo, 1979) - individuals with powerful work ethics should to

dedicate considerably more time to their occupation and participate more in it (Lodhal & Kejner, 1965).

Randall and Cote (1991) also suggest that job involvement should manipulate the further three forms of organisational commitment, namely affective organisational, continuance organisational and career commitment.

4.2.5.5 Etzioni's model of organisational commitment

Etzioni's (1961) model consists of the following three main perceptions, moral commitment, calculative commitment and alienated commitment. These perceptions will be investigated in the sections below.

(a) Moral commitment

Moral commitment symbolises one of two affective views of organisational commitment. Etzioni (1961), views moral commitment as originating from a representative conformity structure. It is differentiated by the acceptance and recognition of the organisation's goals (Patchen, 1970). Such types of affective organisational connection (e.g. moral involvement) are labelled, "commitment" (Wiener, 1982). Wiener (1982) used this label because of his connection with organisational identification with the commitment work of Porter and his collegues (Porter *et al*, 1974; Steers, 1977). Hance measures such as those of Hall (1970) and Porter, Steers, Mowday, and Boulian (1974) are currently suggested to operationalise the affective proportions of commitment, relating to Etzioni's (1961) moral association.

(b) Calculative commitment

The individual whi receives incentives matching contributions forms the foundation of calculative commitment. Etzioni (1961) identified this category of organisational connection as distinctive fulfillment systems based on replacement. Hence this is theoretically embedded in Barnard's (1938) substitute theory. The wilingness to retain organisational membership is not necessarily aligned to calculative commitment. It may be viewed in the broader terms of an active organisational connection. In fact, maintenance or the penalty of organisational membership – the conventional perception of calculative commitment - may be more closely linked with an affective form of organisational commitment. Consistent with Etzioni's (1961) model, such thoughts originate from disaffection (affective organisational

connection) as opposed to a calculative commitment. Moreover, maintenance of membership may imitate an individual's recognition of the organisation, and such optimistic influences may be more suitably related to moral association in the Etzioni model (Etzioni, 1961).

(c) Alienated commitment

An emotional connection to the organisation is signified by alienated commitment. Etzioni (1961) initially explained alienative involvement as being representative of a jail or military essential training camp in which a coercive fulfillment structure is established. Alienation can be regarded as a foundation for organisational commitment if an individual's commitment to the organisation is deemed to be an outcome of (1) a lack of power over the internal organisational surroundings, and (2) the supposed nonexistence of options for organisational commitment (Etzioni, 1961).

Etzioni (1961) borrowed the concept of alienated committment from the earlier work of Karl Marx (Fromm, Marx & Bottomore, 2004) who gave the concept its traditional meaning, namely a need for power which reflects a supposed incapability to transform or manage the organisation in this situation. To the alienatively dedicated individual rewards and penalty may appear accidental instead of a direct consequence of the value of work (Etzioni, 1961). The individual's supposed sense of chance reflects the sense of inability to control. Hence the pessimistic emotional connection to the organisation, recognized by Etzioni (1961) as the alienatively involved individuals grows. An individual who is alienatively dedicated to the organisation may not leave because of a lack of options or fear of serious financial loss. Alienative commitment is therefore a pessimistic organisational connection which is differentiated by means of low control of purpose to meet organisational demands combined with the intention of maintaining organisational membership (Etzioni, 1961).

4.2.6 Variables influencing the development of organisational commitment

In the section below, the variables that may influence the development of organisational commitment will be discussed.

4.2.6.1 Organisational commitment and career stages

Organisational commitment is an unstable attitude and may change on a regular basis. According to Allen and Meyer (1993), affective commitment declines in the first year when an individual is appointed in an organisation. A sensible explanation for this would be that apprentices enter organisations with idealistically high prospects (Wanous, 1980). As the newly appointed individuals discover and learn more about the job and the organisation, they experience a "reality shock" and affective reactions change accordingly (Allen & Meyer, 1993). This is the period in which many individuals leave the organisation. The affective commitment of individuals who decide to remain as employees of the organisation at this stage, will mostly remain because they want to (Mowday, Porter, & Steers, 1982).

Researchers interested in careers have indicated that chronological career stages are explained by distinctive career concerns, the relationship types required, features of occupations which are appreciated, and the psychological alterations to be completed (Brooks, 1991). The unease, principles and requirements that are well-known at the different life stages of an individual's progress through life should in addition be more important in the individual's justifications of his or her orginisational commtiment at different career stages (Brooks, 1991).

According to Cherrington, Condie and England (1979), correlations between age and commitment might exist: older individuals might be more committed to organisations than younger individuals; 2) older individuals have or perceive that they have, more optimistic occurrences in the organisation than younger individuals; and 3) there are differences in the generations in terms of their organisational commitment (Cherrington *et al*, 1979). Meyer and Allen (1993) indicated that if this perception or approach is true then it might also be expected that age will impact on normative commitment. Thus Meyer and Allen (1993) proposed that it is desirable to conduct research in which the self-regulating effects of age, organisational residence, and positional residence are isolated.

If organisational commitment as indicated above do have an influence on the individual's career stages in their working career then it is inevitable that organisational commitment will also have an influence on their career success. This is explored and discussed in the section below.

4.2.6.2 Organisational commitment and career success

Career success can be explained as the encouraging psychological, work related outcomes or achievements that individuals accumulate as a result of their work experiences (Callanan, 2003).

Joiner, Bartram and Garreffa (2004) indicated that there have been a number of research studies conducted regarding the relationship between career success and organisational commitment, but the root of this relationship is in question. Individuals who are more devoted to the organisation where they are currently employed at are more likely to be rewarded by means of promotions and compensation, this invokes Whyte's (1956) vision which states that by being loyal to the organisation the organisation will also be loyal towards you in return Randall, 1987).

Lau and Shaffer (1999) conducted a study in order to develop a conceptual model and to try and prove a connection between career success and personality. Their model was based on social theories. According to Lau and Shaffer (1999), the following personality attributes, defined by an elevated prospect to achieve or reach preffered outcomes (i.e. locus of control, self-monitoring, self esteem, optimism, and machiavellianism), are assumed to be predictors of the fit between the individual and the environment or organisation, job performance and career success.
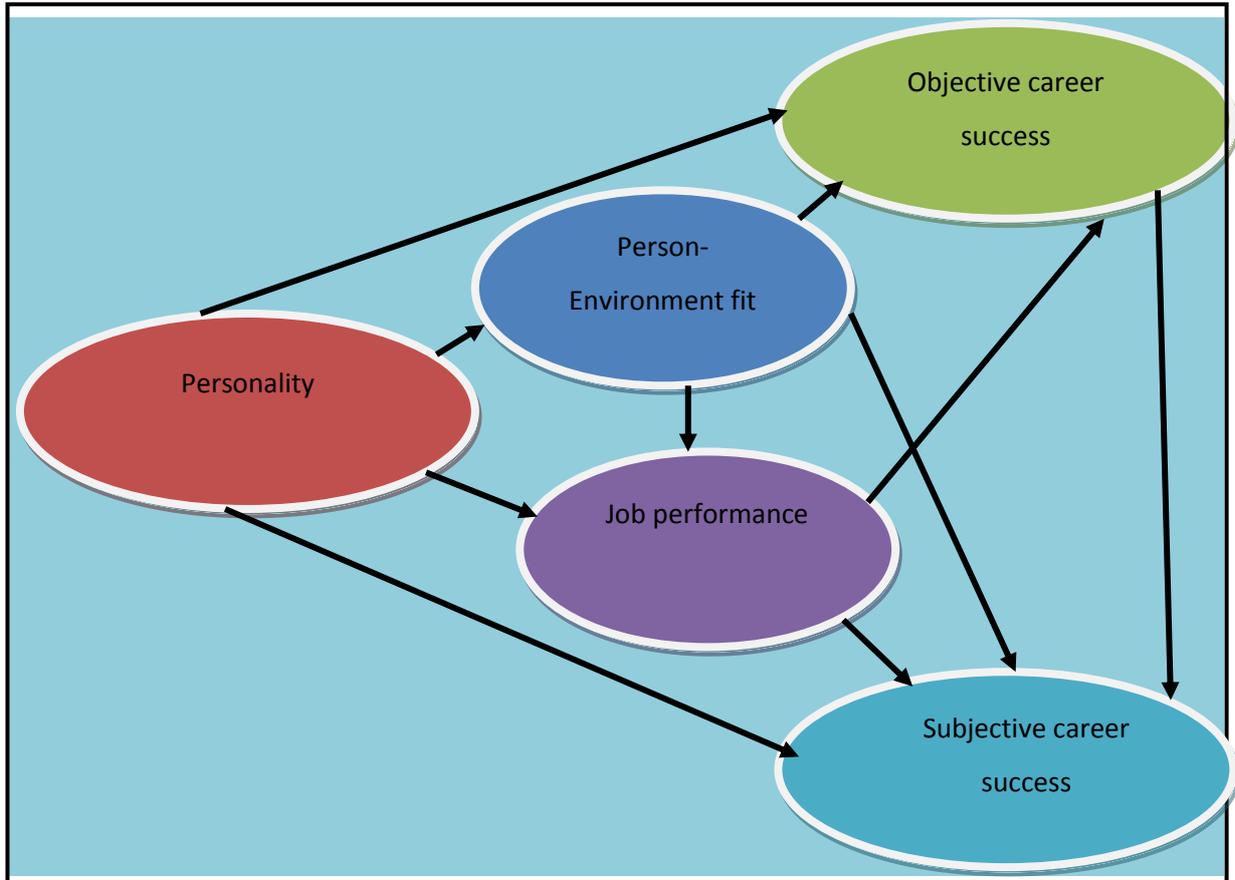
Figure 4.7. A conceptual model of career succes (Lau & Shaffer, 1999)

In their findings Lau and Shaffer (1999) found that the connection between personality and career success seems to be limited. According to Lau and Shaffer (1999), the knowledge that personality and career success is of great value to individuals and organisations. The model also seems to be of use to consultants by means of assisting them to assess their clients' career paths relative to personality factors. The model of Lau and Shaffer (1999) is especially helpful for those individuals who are facing career troubles such as career stagnation or career switch. Thus the model could help individuals to assess their own situation and could possibly determine if an individual will stay with an organisation or leave the organisation for better opportunities. This is most probably where organisational commitment will also play a role (Lau & Shaffer, 1999).

A comparable theoretical approach was made available by Romzek (1989), where practical support was established for an encouraging relationship between commitment and career satisfaction. Chang (1999) developed a practical model that furthermore supports a encouraging relationship between the two variables. On the other hand, his agrument was in the reverse fundamental direction which indicated that career success might have an

effect on individuals' connection to the organisation. Joiner *et al* (2004) proposed an encouraging connection between career success and organisational commitment.

As for the relationship between organisational commitment and satisfaction, Staw's (1973) observation was that pleasure is more possible to follow commitment than the reverse. Numerous features of job situations can influence an individual's awareness of responsibility (Staw, 1973). Thus a situation/experience within the organisation might have an influence on an individual's awareness of their responsibility and in turn might affect the individual's commitment towards the organisation.

4.2.6.3 *The psychological contract*

According to Maguire (2001), the term "psychological contract", can be defined as the individual employee's collection of prospects held, which indicates the expectations of the individual and the organisation regarding mutual giving and receiving for th duration of the working relationship. As pointed out in chapetr 2, psychological contracts feature as a significant element of the relationship between staff and the organisations they work for. Since this research is based on individuals' feelings (psychological career resources) towards their careers (i.e. the organisation) which, in turn, may influence commitment, it is necessary to include this in this chapter.

In terms of the psychological contract, relational agreement components include elements such as provision for commitment, orgsnisational loyalty and confidence in management on behalf of the member of staff in return for capable management, prospects for contribution and feelings of orgsnisational-fit in the the organisation (Cassar & Briner, 2011; Maguire, 2001). The transactional and relational features of the psychological contract also interact (Guzzo & Noonan, 1994).

Problems for the organisation in circumstances in which organisational transformation occurs, may well be a consequence of this interaction between the transactional and relational features of the psychological contract (Maguire, 2001).

Figure 4.8 provides an overview of Maguire's three-tier model of the psychological contract.
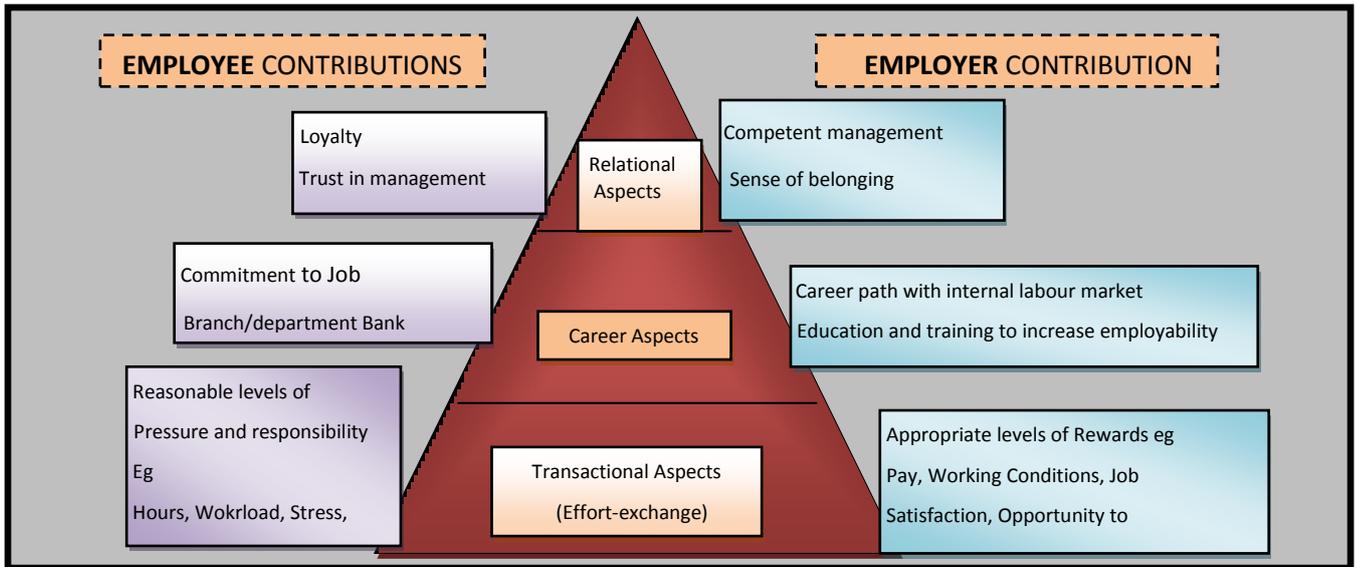
Figure 4.8. The three-tier model of the psychological contract (Maguire, 2001)

Maguire's (2001) model illustrates that, at the most fundamental level, employees are provided with sensible levels of pressure and responsibility, for example reasonable hours, a manageable workload, moderate levels of stress, appropriate autonomy, a reasonable span of control, a manageable rang od duties and appropriate responsibility in return for suitable levels of rewards, for example appropriate levels of pay, suitable working conditions, job satisfaction and the opportunity to demonstrate competence (Maguire, 2001). This aspect of the model can also be seen as the transactional component thereof (Rousseau & Wade-Benzoni, 1994). In essence, this is the basic agreement between the employee and the employer, where the employee agrees to do a specific task and the employer repays him or her in return.

The second level of the model refers to the career aspects, namely the trade of commitment, which consists of commitment to the job, department or organisation (Maguire, 2001), on behalf of the employee, in return for a profession path inside an internal labour market and/or education and training in order to enahnce employability. This is the part where a connection can be drawn towards the psychological career resources model in the sense that individuals in this stage of the psychological contract model strive to gain new skills and knowlegde in order to make them more employable. This forms part of the career enablers, variable in the psychological career reosurces model.

The third level of the three-tier model of the psychological contract refers to the relational aspects. According to Maguire (2001), the model projected that at the relational level employees would, bring in loyalty and trust in management in exchange for competent

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management, the opportunity for inputs into decision making and a work culture that provides a sense of belonging. This stage of the psychological contract model can be linked to the career drivers identified in the psychological career resources model. The individual develops feelings of belonging in the organisation and this fosters feelings of career purpose, career directedness and career venturing in the individual which, in turn, forms part of the psychological career resources model developed by Coetzee (2008).

Additional factors influencing organisational commitment are wages, the nature of work and fronge benefits. However, personality categories also form a main part of commitment because a mismatch will have consequences such as feelings of insufficiency and weariness. This will have an indirect impact on poor production (Meyers & McCaulley, 1992).

According to Silvester (2008), the critical proof of commitment is action, even though for realistic reasons, it is, often useful to try to determine commitment with an attitude measure before real action takes place.

4.3 IMPLICATIONS FOR TALENT RETENTION

A growing body of research shows strong support for the job embeddedness model (Crossley, Bennett, Jex & Burnfield, 2007; Cunningham, Fink & Sagas, 2005; Lee *et al*, 2004; Mallol *et al.*, 2007; Mitchell *et al.*, 2001; Ramesh & Gelfand, 2010). Crossley *et al* (2007) provided additional evidence for the convergent and discriminant validity of the job embeddedness measure and demonstrated the value of job embeddedness beyond that of job satisfcation, organisational commitment, and perceived alternatives. Similarly, studies by Cunningham *et al* (2005); Lee *et al* (2004) and Mallol *et al* (2007) indicated that job embeddedness predicted turnover, over and above job satisfcation and commitment. These studies have collected data from various industries such as retail, health, finance, sports and social work, demonstrating the generalisability of the job embeddedness constructs (Ramesh & Gelfand, 2010). However, almost all the published research on the job embeddedness model has been in the United States or the United Kingdom, thus leaving a major void that need to be addressed in the South African workplace context. This void can possible be addressed by means of this study, as the focus is on South African employees.

Organisations have to be able to look forward to technological advancement and be able to compete with other organisations internationally. This makes it important for an organisation to have the ability to develop through the continuous learning and development of the employees of the organisation. According to Hiltrop (1999), having and retaining skilled employees forms an important part in this process, since employees' knowledge and skills have become the key for organisations to be economically competitive. Consequently, it is necessary for employers to give employees the opportunity to develop and learn (Arnold, 2005; Bernsen, Segers, & Tillema, 2009; Herman, 2005; Kyndt, Docky, Michielsen, & Moeyaert, 2009) such that the employees sustain their capabilities as effective employees, resist being without a job, and are retained by their organisations. The opportunity to learn new or enhance existing skills forms part of the career enablers variable as identified in the psychological career resources theory (Coetzee, 2008). By learning and enhancing new and existing skills, employees can be retained by their current organisations.

Some studies have examined the relationship between job satisfaction and turnover and established a clear negative relationship (Cotton & Tuttle, 1986; Muchinsky & Morrow, 1980; Tett & Meyer, 1993), meaning that when employees are not satisfied in their current career or job, the turnover is higher and they are more likely to leave the organisation. Walker (2001) acknowledged seven factors that may improve employee retention: (1) compensation and gratitude of the performed work, (2) provision of challenging work, (3) likelihood to be promoted and to learn, (4) satisfying atmosphere within the organisation, (5) meaningful relationships with colleagues, (6) a healthy balance between the professional and personal life, and (7) good communications. Together, these factors suggest a set of workplace norms and practices that might be taken as welcoming employee engagement (Kyndt *et al*, 2009). Hytter (2007) established that the individual premises loyalty, trust, commitment, and identification and connection to the organisation have a direct influence on employee retention. It is furthermore established that organisational factors such as rewards, leadership style, career opportunities, the training and development of new and existing skills, physical working conditions, and the balance between professional and personal life have a meandering influence (Hytter, 2007). These identified factors that could improve retention of employees, forms a part of the emotional literacy and social connectivity variables in the psychological career resources model. Additional research indicates that valuable training and opportunities to learn and develop improve the retention of employees at an organisation (Arnold, 2005; Herman, 2005; Hiltrop, 1999).

Developing workforce flexibility is a central organisational strategy in pursuing innovation, adaptation and efficiency. To manage the riks, employees are being encouraged to increase their career adaptability though a combination of career resilience (Ito & Brotheridge, 2005), development activities, and network. Career adaptability enhances employability within and outside an organisation (Arthur, 1994; Ellig, 1998; Ito & Brotheridge, 2005). An emerging dilemma is that actions undertaken to build commitment as a means of motivating and retaining valued employees also may increase employee's opportunities for employment in other organisations (Cappelli, 1999).

Affective commitment is associated with reduced voluntary turnover, which enables organisations to retain the organisational specific knowledge necessary for competitive advatage (Ito & Brotheridge, 2005). However, these work practices enhance employees' career adaptability and employability, which, in turn, may increase voluntary turnover. This presents human resources practitioners with situations where advocating involvement, career resilience, and career development may not only build commitment and workforce flexibility, but also may inadvertently contribute to the departure of valued employees (Ito & Brotheridge, 2005).

An employee's intention to leave an organisation, expressed in such terms as making plans to search for a new job, reflects the potential for voluntary turnover. The significant affect-based predictors of voluntary turnover include job satisfaction (Hom & Kinicki, 2001) and affective commitment, a psychological attachment expressed as pride in the organisation and a willingness to exert extra effort (Cohen, 1993; Mathieu & Zajac, 1990; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). A more recent perspective has considered the episodic nature of voluntary turnover, including employees exploring and accepting other opportunities as part of a career plan (Lee & Mitchell, 1994; Lee, Mitchell, Wise, & Fireman, 1996).

4.4   THEORETICAL INTEGRATION

One of the most distruptive and expensive problems facing organisations today is employee turnover (Lee & Mitchell, 1994; Steel, 2002). Although firms in most industries struggle at one time or another with recruiting and retaining a talented work force, retention is particularly critical in the healthcare industry (Tzeng, 2002). To keep pace with on-going changes in governmental regulations, reimbursements and general initiatives, the healthcare and other industries have seen an increase in mergers, consolidations, and re-engineering activities (Anderson & Pulich, 2000). Such activities are a few of the unexpected shocks

employees may experience that can dramatically influence organisational retention (Mitchell *et al*, 2001).

The two of the most frequently tested attitudinal (or dispositional) constructs are job satisfaction and organisational commitment. In general, empirical results suggest satisfaction and commitment have consistent, statistically significant, and negative relationships with turnover (Irvine & Evans, 1995; Jaros, 1997). This research expands our understanding of the attitudes that lead to turnover, as well as the causes of these attitudes. Research conducted by Holtom and O'Neill (2004) seems to be consistent with research conducted in the healthcare field, in which both job satisfaction and organisational commitment have been found to be important predictors of turnover (Ingersoll, Olsan, Drew-Cates, DeVinney & Davies, 2002). Findings of a study conducted by Valentine, Godkin and Lucero (2002) indicated that organisational commitment it positively related to person-organisation fit. Research has also demonstrated that a conflict between the personal characteristics of employees and the attributes of their organisations is related to job satisfaction, low organisational commitment, substandard job performance, job stress and turnover (Ferreira *et al.,* 2010; Judge & Ferris, 1992; Peterson, 2003; Schneider, Goldstein & Smith, 1995). Research conducted by Coetzee, Schreuder and Tladinyane (2007) revealed that indivual's career orientations and career motives are significantly related to their level of organisational commitment. Coetzee and Schreuder (2009) found individuals' psychological career resources to be significantly influenced by their career orientations and career motives, and Coetzee and Bergh (2009) showed psychological career resources to be a significant predictor of subjective work experiences such as perceived life and job/career satisfaction.

There is now considerable evidence signifying the benefits to organisation of having a strongly committed workforce (Meyer & Maltin, 2010; Morrow, 2011). At present, though, individuals seeking to gain personal career growth can do so across different organisations. If such opportunities are lacking within their current organisation, it maked organisational commitment less salient to these individuals (Weng, McElroy, Morrow & Liu, 2010). The loss of such talent, on the other hand, is harmful to organisations, thus organisations strive to prevent such talent loss by developing and ensuring a committed workforce.

Keeping employees committed to the organisation is a top priority for many contemporary organisations (Neininger, Lehmann-Willenbrock, Kauffeld & Henschel, 2010). Especially in times of crises and job cuts, committing top performers to the organisation becomes a challenge. Organisations which fail to accomplish this will have reduced resources for the

capability of competing in the future (Neininger *et al*, 2010; Rappaport, Bancroft & Okum, 2003).

According to Van Rooyen, Du Toit, Botha and Rothmann (2010), retention refers to an organisation's efforts to keep in employment those employees of whom the organisation has a positive evaluation and who would normally only leave the organisation through voluntary resignation. Ramlall (2004) analysed motivation theories to offer an explanantion of how employee motivation affects employee retention within an organisation. The critical factors that affect the retention of employees as identified by Ramlall (2004) are summarised in Table 4.4. Some of the factors identified include: satisfying the needs of employees; the work environment; responsibilities; manner of supervision; fairness and equity within the workplace; individual growth and development as well as feedback.

Table 4.4

Factors Influencing the Retention of Employees

Factors identifies	Explanation
Satisfaction of needs of the employee	An individual has multiple needs based on individual, family and cultural values
Work environment	Employees want to work in a productive, respectful and friendly environment
Responsibilities	Given that an employee feels competent to perform, he or she might seek additional responsibilities and want to be rewarded in a fair and equitable manner
Supervision	Some individuals might feel a need to coach an develop others and to influence the organisation's goals and objectives
Fairness and equity	Employees want to be treated in a fair and equitable manner and do not want to be deiscriminated against
Effort	Employed want the task to be challenging and satisfying
Employee development	Employees want to work in an environment that provides a challenge, offers new learning opportunities and offers opportunities for advancement and development
Feedback	Employees want to receive timely and open feedback form their supervisors

As individuals are becoming increasingly responsible for managing their own careers (Briscoe & Hall, 2006), firms find themselves having to work harder to generate organisational commitment (Ng & Feldman, 2010).

The theoretical integration addresses research aim 4, namely to conceptualise the theoretical relationship between the psychological career meta-competencies constructs (psychological career resources, career adaptability, and hardiness) and the retention-related disposition constructs (job embeddedness and organisational commitment). In addition, based on the theoretical relationship between the psychological career meta-competencies and retention-related dispositions constructs, the theoretical integration further addresses research aims 5 and 6, namely to construct a theoretical integrated psychological career profile of the career agent that may be used to inform retention practices and to outline the implications of the psychological career profile for talent retention practices.

Chapters 2, 3 and 4 provided a comprehensive literature review of the three independent variables (psychological career resources, career adaptability and hardiness) and the two dependent veriables (job embeddedness and organisational commitment) that are of relevance to this research study in an attempt to answer the first, second and third research questions, which is how does the literature conceptualise individual career behaviour and retention in the 21st century, how the three psychological career meta-compencies constructs (psychological career resources, career adaptability and hardiness) are conceptualised and explained by theoretical models in the literature and how the two retention-related dispositions constructs job embeddedness and organisational commitment are conceptualised and explained by theoretical models in the literature.

Figure 4.9 provides a diagrammatic illustration of the proposed integrated theoretical relationship between the psychological career meta-competencies (psychological career resources, career adaptability and hardiness) and the retention-related dispositions (job embeddedness and organisational commitment). Table 4.5 provides an overview of the hypothesised relationship between the constructs. Figure 4.10 will provide an overview of the proposed psychological career profile for staff retention.

Context

- Globalisation
- Need to develop psychological career competencies
- Career self-management (Career Agent)
- 21st century, new world of work

Retention of talented staff

Psychological Career Resources
An individual's psychological career resources profile reflects the career consciousness of a person (Coetzee, 2008)

Career Adaptability
The ability to adjust and to fit into a new career-related situation (Koen *et al*, 2010)

Hardiness
A collection of personality characteristics that function as a flexible resource during the encounter with demanding life events (Breed, Cilliers & Visser. 2006)

Job Embeddedness

Definition
Feldman and Ng (2007) defined job embeddedness as the forces that keep people in their current employment situations.

Sub-elements

- Fit
- Links
- Sacrifice

Influencing variables

- Age
- Gender
- Race

Organisational Commitment

Definition
Meyer and Allen (1991; 1997)defined organisational commitment as a psychological connection individuals have with their organisation, characterised by strong recognition with the organisation and a yearning to contribute towards the accomplishment of organisational goals.

Sub-elements

- Affective Commitment
- Continuance Commitment
- Normative Commitment

Influencing variables

- Age
- Gender
- Race
- Career Development
- Self-efficiency

Figure 4.9. Integrated overview of the hypothesised relationship between the psychological career meta-competencies (psychological career resources, career adaptability and hardiness) and the retention-related dispositions (job embeddedness and organisational commitment)

4.4.1 Work and careers in the 21st century

The literature review indicated that individuals' career scenery has become more multifaceted, vibrant, and open, and career theory indicates signs of moving in that direction as well (Richardson *et al.*, 2005; Savickas, 2005). Careers have changed radically over the last two decades due to major social, economic, technological, and organisational changes. Traditional careers related to rapid, upward mobility in a single hierarchy have increasingly been replaced by boundaryless careers that are fairly unpredictable and uncontrollable, and often involve horizontal mobility acorss organisational boundaries (Arthur *et al.*, 1999; Arthur & Rousseau, 1996; Colakoglu, 2011; DeFillippi & Arthur, 1994).

4.4.2 Career self-management

It became evident from the literature review that educated individuals became entrepreneurs of their own career, building a portable repetiore of competencies to maintain and enhance their market value (Hoekstra, 2011). They choose job fitting their personal goals as far as market conditions allow. Organisations are varying to commit those persons they value most in the labour market and offer temporary and non-committing contracts to the easier replaceable majority. Individuals are responsible for manageing their own careers, and hence for negotiating employment conditions and opportunities for further development (Sullivan, 1999). As individuals are becoming increasingly responsible for managing their own careers (Briscoe & Hall, 2006), firms find themselves having to work harder to generate organisational commitment. (Ng & Feldman, 2010).

4.4.3 Retention challenges

As indicated in the literature review, retention can be described as initiatives taken by management to keep employees from leaving the organisation, such as rewarding employees for performing their jobs effectively; ensuring harmonious woking relations between employees and managers; and maintaining a safe healthy work environment (Cascio, 2003). Redman and Wilkonson (2009) indicated in their research that organisations need to take cognisance of the changing priorities of job candidates and what attracts them to jobs and organisations.

According to Kerr-Phillips and Thomas (2009), South Africa is experiencing a universal skills crisis, particularly pertaining to the retention of the country's top talented and knowledged employees. This deficiency leads to the reduction or loss of intellectual and technical

individuals, with a negative result that impacts the economic and social growth of the country (Du Preez, 2002).

From the literature review it was possible to identify the key challenges for retention, which include: Individual characteristics, workplace structures, environmental conditions, stress, job satisfaction, organisational commitment, remuneration, career opportunities, conflict with colleagues and supervisors, unmet career expectations, job enrichment and specialised skills.

Furthermore it was possible to identify the key retention challenged related to South Africa as well. These retention challenges include: organisational culture, business dynamics, diversity, new demographic employee pool, ethnicity, language, eductaion, opportunities, competitiveness, personal characteristics, self-centeredness and exclusiveness.

The identified retention challenges might serve as a means to reveal the organisation's support of, or commitment to, their employees and in turn promote a mutual attachment by employees. Employees' organisational commitment is associated with their belief that the identified retention factors are motivated by the aspiration to retain good employees and to be fair in the treatment of employees (Döckel *et al*, 2006).

4.4.4   Psychological career resources

The constructs psychological career resources was defined and explained as in Figure 3.9 and all the subscales (career preferences, career values, career drives, career enablers and career harmonisers) were explained in great depth in Chapter 3. The factors influencing the development of psychological career resources were identified and discussed as age, gender and race. If an individual's psychological career resources profile is developed within the context of his or her career, it might possibly be easier to retain such an individual seeing that he or she might be much more career driven, socially connected, emotional literate and might have a focused career purpose.

4.4.5   Career adaptability

The construct career adaptability was defined and explained as in Figure 3.9 and all the subscales (concern, control, curiosity, cooperation and confidence) were explained in great depth in Chapter 3. The factors influencing the development of career adaptability were identified and discussed as age, gender, race, career development and self-efficacy. If an

individual is more adaptable within the context of his or her career, it might possibly be easier to retain such an individual seeing that he or she might take on new opportunities within the organisation and might be able to adjust to change.

4.4.6 Hardiness

The construct hardiness was defined and explained as in Figure 3.9 and all the subscales (commitment, control and challenge) were explained in great depth in Chapter 3. The factors influencing the development of career adaptability were identified and discussed as age, gender, race, the organisation, family life, school and work, retirement and recreation. If an individual turns opportunities and challenges into positive experiences he or she might most probably be easier to retain within an organisation, seeing that the individual might be experiencing feelings of happiness and success.

4.4.7 Job embeddedness

The construct job embeddedness was defined and explained as in Figure 4.9 and all the subscales (fit, links and sacrifice) were explained in great depth in Chapter 4. The factors influencing the development of job embeddedness were identified and discussed as organisational staffing and compensation policies; structure of pension and insurance benefits; intro-organisational networks; organisational socialisation practices; social capital; social support and group cohesiveness; relational demography (race differences); amount of predictability of time demands; support in resolving work-life conflict and family and friendship networks. An adaptable positive individual might feel a sense of purpose and might be more embedded within his or her career and will not decide to leave the organisation. By developing an individual's job embeddedness within the career context, could possibly ensure that the talented staff are retained within the organisation.

4.4.8 Organisational commitment

The construct organisational commitment was defined and explained as in Figure 4.6 and all the sub-elements (affective commitment, continuance commitment and normative commitment) were explained in great depth in Chapter 4. The factors influencing the development of organisational commitment were identified and discussed as career stages; career success; the psychological contract; age, race and gender. If an individual show signs of adaptability and have a positive outlook in life and within the work context, he or she will

probably be easier to retain within the organisation. The reason for this is that an adaptable, positive individual might feel a sense of belonging and might be much more committed towards the organisation and might be less inclined to leaving the organisation.

Furthermore, the relationships between the five constructs were also explored. Figure 4.10 provides a conceptual overview of the five constructs and how they may relate to each other on a theoretical level. It is hypothesised that individuals' psychological career meta-competencies (psychological career resources, career adaptability and hardiness) will be significantly related to their retention-related dispositions (job embeddedness and organisational commitment).
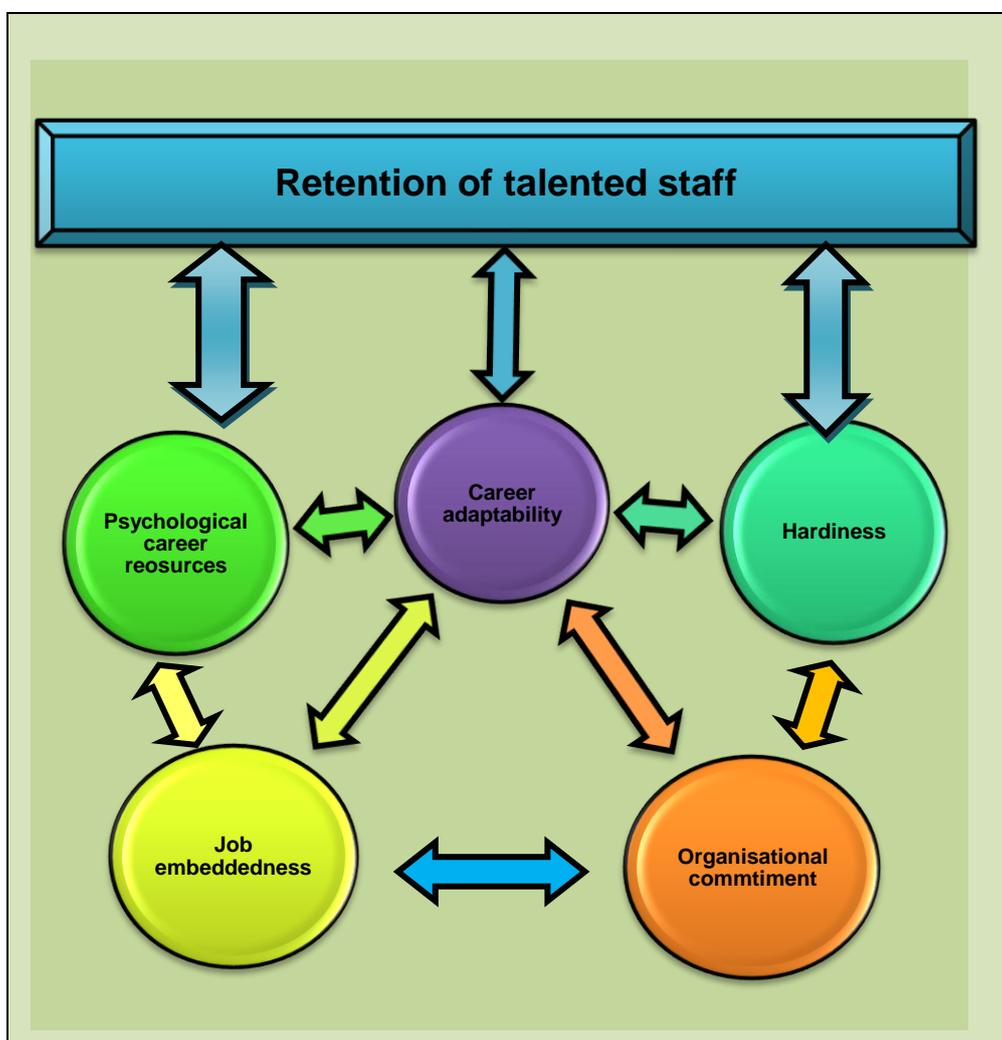
Figure 4.10.   Overall   hypothesed   relationship   between   psychological   career   meta-competencies (psychological career resources, career adaptability, hardiness) and the retention-related dispositions (job embeddedness and organisational commitment).

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It is important however to explore the relationship between the sub elements of each of the three relevant constructs as this might also provide human resource practitioners meaningful guidance in terms of the relationship between the various constructs and therefore an indication of the necessary actions to take for the retention of talented employees. Based on the literature review, the hypothesised relationships are outlined in figure 4.10. Table 4.5 displays the integrated hypothesised theoretical relationship between the psychological career meta-competencies (psychological career resources, career adaptability and hardiness) and the retention-related dispositions (job embeddedness and organisational commitment) in terms of four psychological behavioural dimensions: cognitive, affective, conative and interpersonal. The theoretical relationship can be utilised by human resource practitioners and career counsellors in order to assist individuals to develop their weaker psychological career resources, enhance their career adaptability, hardiness attributes, job embeddedness and organisational commitment in order to enhance the retention of talented staff as a desired outcome. In order to assist human resource practitioners and career counsellors further, the research attempt to develop an empirically tested psychological career-related behavioural profile, illustrated in Figure 4.11 and summarised in Table 4.5.

Table 4.5

Psychological Profile Constituting Psychological Career Resources, Career Adaptability, Hardiness,Job Embeddedness and Organisational Commitment.

Psychological behavioural dimensions	Psychological Career Resources	Career Adaptability	Hardiness	Job embeddedness	Organisational Commtiment
Cognitive	**Career Preferences** - Stability/Expertise - Managerial - Variety/Creativity - Independence/Autonomy **Career Harmonisers** - Self esteem	Concern Control	Challenge	Sacrifice	Normative
Affective	**Career Harmonisers** - Emotional literacy	Confidence	Commitment		Affective
Conative	**Career values** - Growth/development - Authority/Influence **Career enablers** - Practical/Creative skills **Career Drivers** - Growth and development - Authority/influence **Career Harmonisers** - Behavioural adaptability	Curiosity	Control	Links	Continuance
Interpersonal	**Career harmonisers** - Social connectivity **Career Enablers** - Self/Other skills	Cooperation		Fit	
Implications for retention	Psychological career resources will possibly have a positive effect on the retention of talented staff	Career adaptability will possibly have a positive effect on the retention of talented staff	Hardiness will possibly have a positive effect on the retention of talented staff	Job embeddedness will possibly have a positive effect on the retention of talented staff	Organisational commitment will possible have a positive effect on the retention of talented staff
Implications for staff retention purposes	- Enhance responsibility - Promote social connectivity - More growth and development opportunities - Development of self – esteem - Assist with career purpose - Assist with career direction	- Enhance cooperation within the workplace - Provide secure environment to promote confidence - Assist employees with coping of difficulties	- Assist individuals with coping styles - Enhance employees' commitment with regards to difficult situations - Assist employees' with the necessary skills to be able to deal with challenges in the workplace	- Assist individuals with connections between the organisation and the community - Assist individuals with forming links between the workplace and the community and family - Assist	- Assist individuals to develop their feelings towards the organisation - Ensure that employees are happy does not have a reason to leave the organisation

					employees with how to manage the sacrifice between family time and work	
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Figure 4.11 illustrates the theoretical hypothesised psychological career profile that comprises the psychological career meta-competencies and the retention-related dispositions.
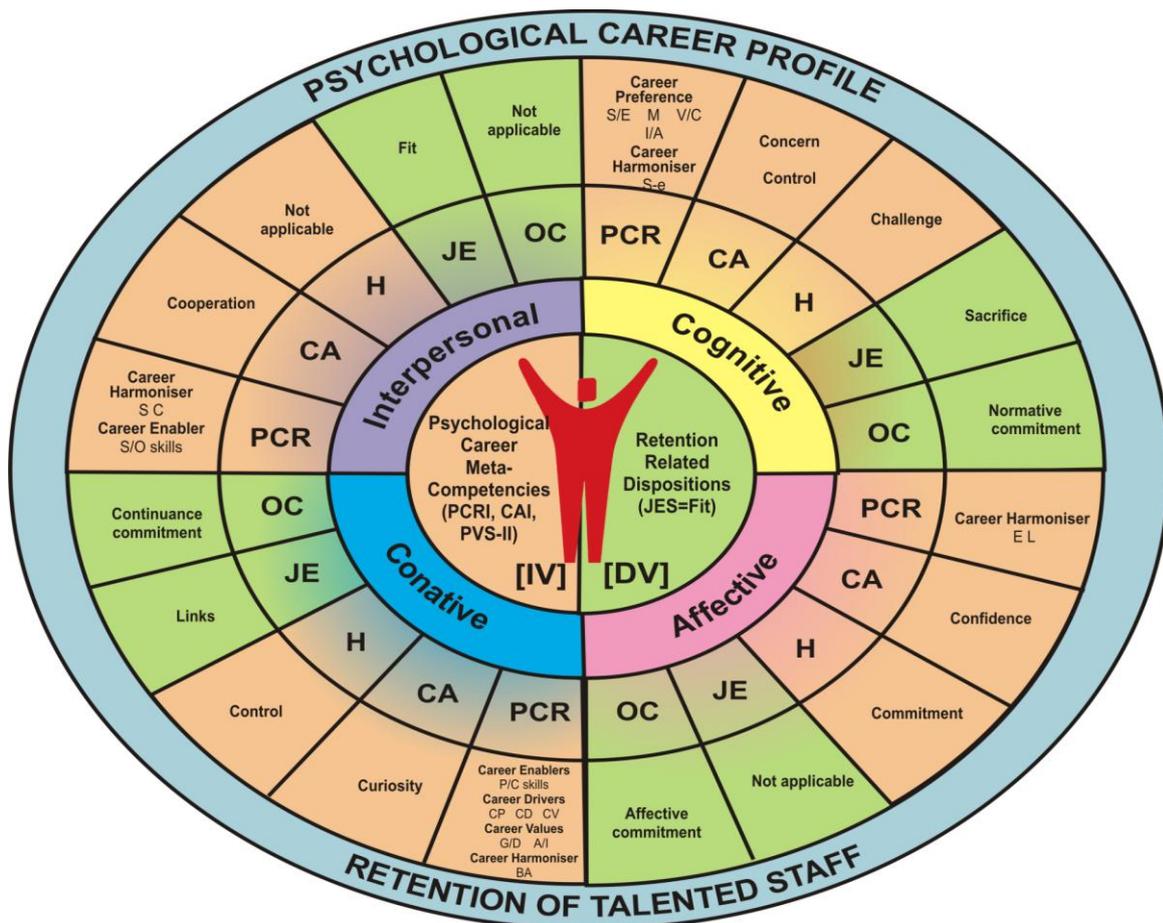
Figure 4.11. Theoretical psychological career profile for staff retention. *Note*: PCRI: Psychological career resources; CA: Career adaptability; H: Hardiness; JE: Job embeddedness; OC: Organisational commitment; IV: Independent variable; DV: Dependent variable.

As shown in Figure 4.11, the theoretical psychological career profile is described in terms of the psychological behavioural dimensions: cognitive, affective, conative and interpersonal levels.

On a **cognitive level**, the retention of individuals may be influenced by their career preferences and career harmonisers (psychological career resources), concern and control (career adaptability), control, commitment and challenge (hardiness), sacrifice (job embeddedness) and normative commitment (organisational commitment) (Coetzee, 2008; Ferreira *et al.*, 2010; Savickas, 2002; Schreuder & Coetzee, 2011). Career development support practices and career counselling should focus on creating a work environment that provide stability, managerial opportunities, enhance creativity, provide independence, and enhance positive self-esteem as well as social connectivity. Furthermore, it is important for organisations to assist individuals with coping skills, commitment towards the organisation as

well as how to deal with challenges within the workplace. Employees should also be assisted with the dealing with the sacrifice that needs to be made between work and family time. Organisations should also be assisted within these interventions to enhance individuals' organisational commitment and engage them in managing their own careers.   Such interventions could possibly assist organisation with the retention of talented staff.

On an **affective level**, individuals' retention may be influenced by their career harmonisers (psychological career resources), curiosity (career adaptability), commitment (hardiness) and affective commitment (organisational commitment) (Allen & Meyer, 1990; Brown *et al.*, 2003; Coetzee & Bergh, 2009; Ferreira *et al.*, 2010).   Career development support practices and career counselling should assist individuals with gaining personal insight.   This may help individuals to improve their personal self-esteem, behavioural adaptability, emotional intelligence, social connectivity, curiosity and commitment but also to utilise their emotions appropriately within the work context.   This will ensure that the employees feel a sense of belonging (he or she fits in the organisation) towards the organisation and show an emotional connection with the organisation.   Having a high personal self-esteem and ability to manage and utilise emotions within the career context, could possibly assist organisations with the retention of talented staff.

On a **conative level**, individuals' retention may be influenced by their career values, career enablers and career drivers (psychological career resources), cooperation and confidence (career adaptability), control, commitment and challenge (hardiness), fit, links and sacrifice (job embeddedness) and continuance- and normative commitment (organisational commitment) (Coetzee, 2008; Koen *et al.*, 2010; Maddi, 2002; Meyer & Allen, 1991; Mitchell & Lee, 2001; Savickas, 1997).   Career development support practices and career counselling could possibly assist individuals to encouraging their growth and development of different skills, provide opportunities for authority and influence, and assist employees to establish career purpose and direction. By assisting individuals in the suggested manner, their cooperation, confidence, job embeddedness and commitment towards the organisation might increase.   This in turn might assist organisations with the retention of talented staff.

On an **interpersonal level**, individuals' retention may be influenced by their career harmonisers (psychological career resources), cooperation and concern (career adaptability), fit and links (job embeddedness) and affective-, continuance- and normative commitment (organisational commitment) (Coetzee, 2008; Ferreira *et al.*, 2010; Koen *et al.*, 2010; Maddi, 2002; Meyer & Allen, 1991; Mitchell & Lee, 2001; Savickas, 1997; 2001; 2002).   Effective interaction and social connectivity with others may create a feeling of security within the

individual, which might have a positive effect on the retention of talented staff. Career development support practices and career counselling could assist individual to enhance their self-esteem, behavioural adaptability, emotional literacy, cooperation and address concerns, which might have a positive effect on their commitment towards the organisation. It is also important for organisations to help individual fit into the organisation and assist them with dealing with the connection and sacrifice between the work situations and the community, which include their family.

Based on the hypothesised theoretical models, the following theoretical hypotheses are formulated:

4.4.9 Hypothetical relationship between psychological career resources and career adaptability

Individuals with a highly developed psychological career resources profile, which include an individual's conscious, career-related cognitions of their career preferences, values, skills, attitudes and behaviours that are understood and regarded by individuals as being helpful in realising their goals and achieving career success, might be much more adaptable within the work or career context. If an individual is more adaptable within the context of his or her career, it might possibly be easier to retain such an individual seeing that he or she might take on new opportunities within the organisation and will be able to adjust to change.

4.4.10 Hypothetical relationship between psychological career resources and hardiness

An individual with a well-developed psychological career resources profile might show stronger feelings of commitment and control in a difficult situation. Such an individual might also be able to regard any challenge within his or her work or career environment as a positive experience. If an individual turns opportunities and challenges into positive experiences he or she might most probably be easier to retain within an organisation, seeing that the individual will be experience feelings of happiness and success.

4.4.11 Hypothetical relationship between psychological career resources and job embeddedness

An individual with a well-developed psychological career resources profile might show stronger feelings of fit with the organisation and community, better ties with the people within the

organisation as well as the community and this might ensure that the individual remain with the organisation due to the sacrifices if he or she would have to make should he or she decide to leave the organisation.

4.4.12 Hypothetical relationship between psychological career resources and organisational commitment

An individual with a well-developed psychological career resources profile might show stronger feelings of commitment towards the organisation. This means the individual might be more committed or connected to the organisation on an emotional (affective) level, such an individual will also not decide to leave the organisation due to the cost associated with leave the organisations (continuance commitment). An individual with a well-developed psychological career resources profile might also feel a strong sense of responsibility towards the organisation (normative commitment), which in turn might influence their decision to leave the organisation.

4.4.13 Hypothetical relationship between career adaptability and hardiness

An individual who plans his or her career, makes certain decision based on this planning, explores new opportunities and has the confidence to implement these decision in order to carry out the activities needed to accomplish his or her career objectives, might be highly career adaptable. Such an individual might be committed and in control of his or her work or career situation and he or she will in turn welcome challenges occurring within the workplace and deal with them as optimistically as possible. A highly adaptable individual with a positive outlook in life and within the work context might probably be easier to retain within the organisation. The reason for this is that an adaptable, positive individual might feel a sense of purpose and might be much more committed towards the organisation and will not decide to leave the organisation.

4.4.14 Hypothetical relationship between career adaptability and job embeddedness

An individual who plans his or her career, make certain decision based on this planning, explore new opportunities and have the confidence to implement these decision in order to carry out the activities needed to accomplish his or her career objectives, might be highly career adaptable. Such an individual might show stronger feelings of fit with the organisation and community, have better ties with the people within the organisation as well as the

community and this might ensure that the individual remain with the organisation due to the sacrifices if he or she would have to make should he or she decide to leave the organisation.

4.4.15 Hypothetical relationship between career adaptability and organisational commitment

An individual who plans his or her career, makes certain decision based on this planning, explore new opportunities and have the confidence to implement these decision in order to carry out the activities needed to accomplish his or her career objectives, might be highly career adaptable. This means the individual might be more committed or connected to the organisation on an emotional (affective) level, such an individual will also not decide to leave the organisation due to the cost associated with leave the organisations (continuance commitment). An individual who are career adaptable might also feel a strong sense of responsibility towards the organisation (normative commitment), which in turn might influence their decision to leave the organisation.

4.4.16 Hypothetical relationship between hardiness and job embeddedness

An individual who plans his or her career, make certain decision based on this planning, explore new opportunities and have the confidence to implement these decision in order to carry out the activities needed to accomplish his or her career objectives, might be highly career adaptable. Such an individual might show stronger feelings of fit with the organisation and community, better ties with the people within the organisation as well as the community and this will ensure that the individual remain with the organisation due to the sacrifices if he or she would have to make should he or she decide to leave the organisation.

4.4.17 Hypothetical relationship between hardiness and organisational commitment

An individual who plans his or her career, make certain decision based on this planning, explore new opportunities and have the confidence to implement these decision in order to carry out the activities needed to accomplish his or her career objectives, is an individual who is highly career adaptable. This means the individual might be more committed or connected to the organisation on an emotional (affective) level. Such an individual might also not decide to leave the organisation due to the cost associated with leave the organisations (continuance commitment). An individual with a well-developed hardy personality might also feel a strong sense of responsibility towards the organisation (normative commitment), which in turn might influence their decision to leave the organisation.

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4.4.18 Hypothetical relationship between job embeddedness and organisational commitment

An individual with strong feelings of fit towards the organisation and community, better ties with the people within the organisation as well as the community and who will remains with the organisation due to the sacrifices if he or she would have to make should if a decision is made to leave the organisation. This means the individual might be more committed or connected to the organisation on an emotional (affective) level, such an individual will also not decide to leave the organisation due to the cost associated with leave the organisations (continuance commitment). An individual who is job embedded might also feel a strong sense of responsibility towards the organisation (normative commitment), which in turn will influence their decision to leave the organisation.

4.7 CHAPTER SUMMARY

Chapter 4 conceptualised the constructs job embeddedness and organisatinal commitment by means of a comparative examination of the basic literature and research on these constructs. The variables influencing the development of job embeddedness and organisational commitment were discussed. The chapter concluded with the implications job embeddedness and organisational commitment have on retention.

Herewith the literature research aims 3, 4, 5 and 6 were achieved:

Research aim 3: To conceptualise the retention-related dispositions constructs of job embeddedness and organisational commitment and how individuals' biographical characteristics influence the development of these dispositions.

Research aim 4: To conceptualise the theoretical relationship between the psychological career meta-competencies constructs (psychological career resources, career adaptability, and hardiness) and the retention-related disposition constructs (job embeddedness and organisational commitment).

Research aim 5: Based on the theoretical relationship between the psychological career meta-competencies and retention-related dispositions constructs, to construct a theoretical integrated psychological career profile of the career agent that may be used to inform retention practices.

Research aim 6: To outline the implications of the psychological career profile for talent retention practices.

Chapter 5 discusses the empirical investigation with the specific aim of determining the statistical strategies that can be employed to investigate the relationship dymamics between the psychological career meta-competencies construct variables (psychological career reosurces, career adaptability, and hardiness), and the retention-related dispositions construct variables (job embeddedness and organisational commitment.

CHAPTER 5: THE EMPIRICAL RESEARCH

5.1 INTRODUCTION

This chapter deals with the statistical strategies that were employed to assess whether a psychological career-related profile can be constructed for retention purposes by investigating the relationship dynamics between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment). Research hypotheses will be formulated on the relationship between the various construct variables. A nonexperimental quantitative survey design will be used to achieve the empirical research objectives. The advantages of the survey research approach are the savings in time and money, no interview prejudice, precise results, the assurance of greater confidentiality for the participants and the fact that the sample does not need to be that large in relation to the population (Babbie & Mouton, 2007; Salkind, 1997).

The primary disadvantage of the survey design is that results can only be generalised to the sample population at the time of the survey (De Vos *et al.*, 2011). In essence, this means that the conclusions of this study can merely be generalised to the individuals who participated in the study because the sample is too small to generalise to the total population. The research hypotheses are tested by means of descriptive, correlation and inferential (multivariate) statistics.

The empirical phase consisted of nine steps, as indicated below:

Step 1:   determination and description of the sample
Step 2:   choice and substantiation of the psychometric battery
Step 3:   administration of the psychometric battery
Step 4:   capture of the criterion data
Step 5:   formulation of the research hypotheses
Step 6:   statistical processing of the data
Step 7:   reporting and interpretation of the results
Step 8:   integration of the research
Step 9:   drawing research conclusions, highlighting the limitations and making recommendations

Steps 1 to 6 are addressed in this chapter and steps 7 to 9 in chapters 6 and 7.

5.2   DETERMINATION AND DESCRIPTION OF THE SAMPLE

According to Bless and Higson-Smith (1995), a population can be defined as the complete set of objects or cluster of people that forms part of the purpose of the research and about which the researcher would like to identify certain characteristics. A sample is drawn from a population and can be defined as the section of the entire population that has been drawn, and in which the researcher is interested in (De Vos, 2003; Bless, & Higson-Smith, 1995). According to Bless and Higson-Smith (1995), the main decisive factor when making a decision on sample size is the degree to which the sample will be representative of the entire population.

For the purpose of this empirical study, a convenience sample was chosen (Mouton & Marais, 1996). Convenience sampling is a technique whereby a sample of participants is drawn from a group that is conveniently accessible to the researcher. The units selected for inclusion in the sample are the easiest to access (Black, 1999). The manner in which the sample of participants is selected depends on the goals of the research project. When the research questions require an accurate description of the general population, a convenience sampling technique must be used (Mouton & Marais, 2006).

Black (1999) identified a number of advantages of convenience sampling, including the following:
- Gathering the information/sample is easy.
- Gathering information on a sample requires little effort on the part of the researcher.
- It is an inexpensive way of ensuring a sufficient number of participants in the study.

A disadvantage of convenience sampling is that it can lead to over- or underrepresentation of particular groups in the sample. The sample may therefore be highly unrepresentative (Black, 1999)

In the current study, the population consisted of 2 500 individuals who were enrolled for further studies in the human resource management field at a South African distance learning higher education insitution. The total population of students who attended the annual study

school was taken as the sample (N = 370). A total of 355 questionnaires were identified as usuble for the purpose of the study (n = 355). A response rate of 89.6% was thus achieved.

The profile of the sample is described according to the following biographical variables: gender, race, age, marital status and employment status. The decision to include these categories of biographical variable was based on the exploration of the variables that influence the constructs of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment, in the literature review.

5.2.1   Composition of gender groups in the sample

Table 5.1 and figure 5.1 illustrate the gender distribution of the participants included in the sample. There were 71% female participants and 29% males in the sample (n = 355).

Table 5.1

Gender Distribution of the Sample (n = 355)

Gender				
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**Males**	103	29.0	29.0	29.0
	Females	252	71.0	71.0	100.0
	Total	355	100.0	100.0	
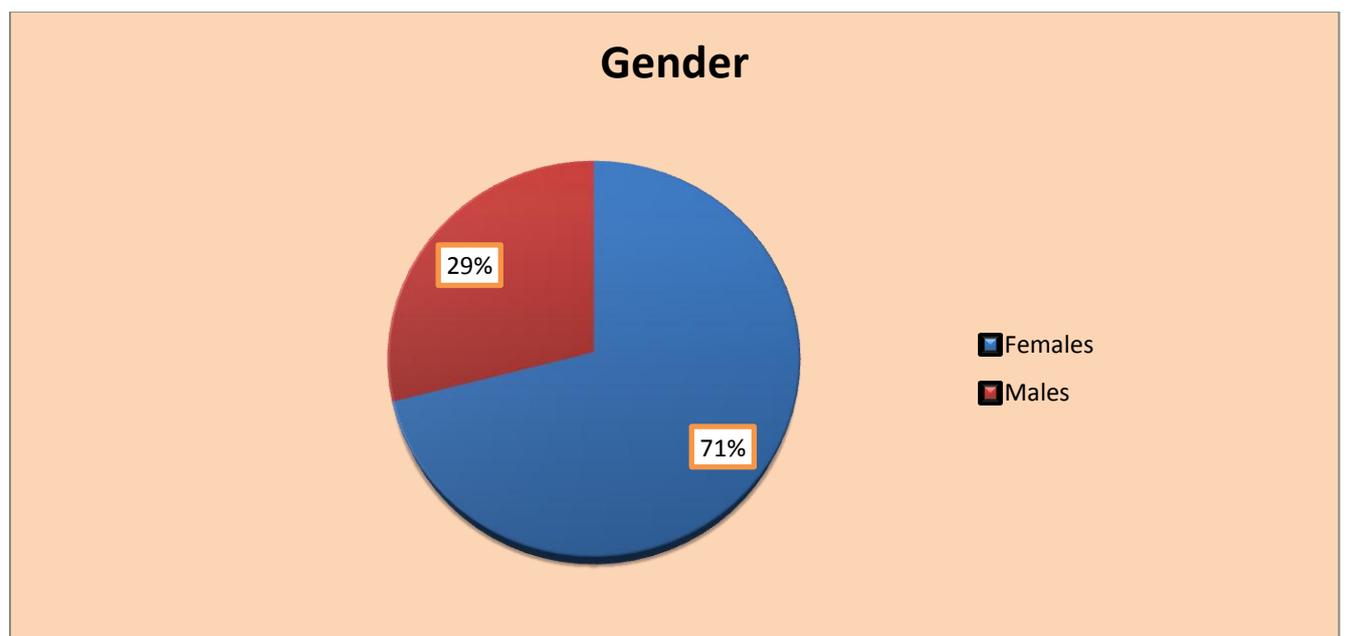
Figure 5.1: Sample distribution by gender (*n* = 355)

5.2.2 Composition of race groups in the sample

Table 5.2 and figure 5.2 depict the race distribution of the sample. The distribution of the sample indicates the blacks (92.2%) comprised Africans (85.4%), coloureds (5.4%) and Indians (1.4%). The whites comprised 7.3% and others (0.6%) (n = 355).

Table 5.2

Race Distribution of Sample (n = 355)

Race group				
	Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid **African**	303	85.4	85.4	85.4
Coloured	19	5.4	5.4	89.7
Indian	5	1.4	1.4	92.1
White	26	7.3	7.3	99.4
Other	2	.6	.6	100.0
Total	355	100.0	100.0	
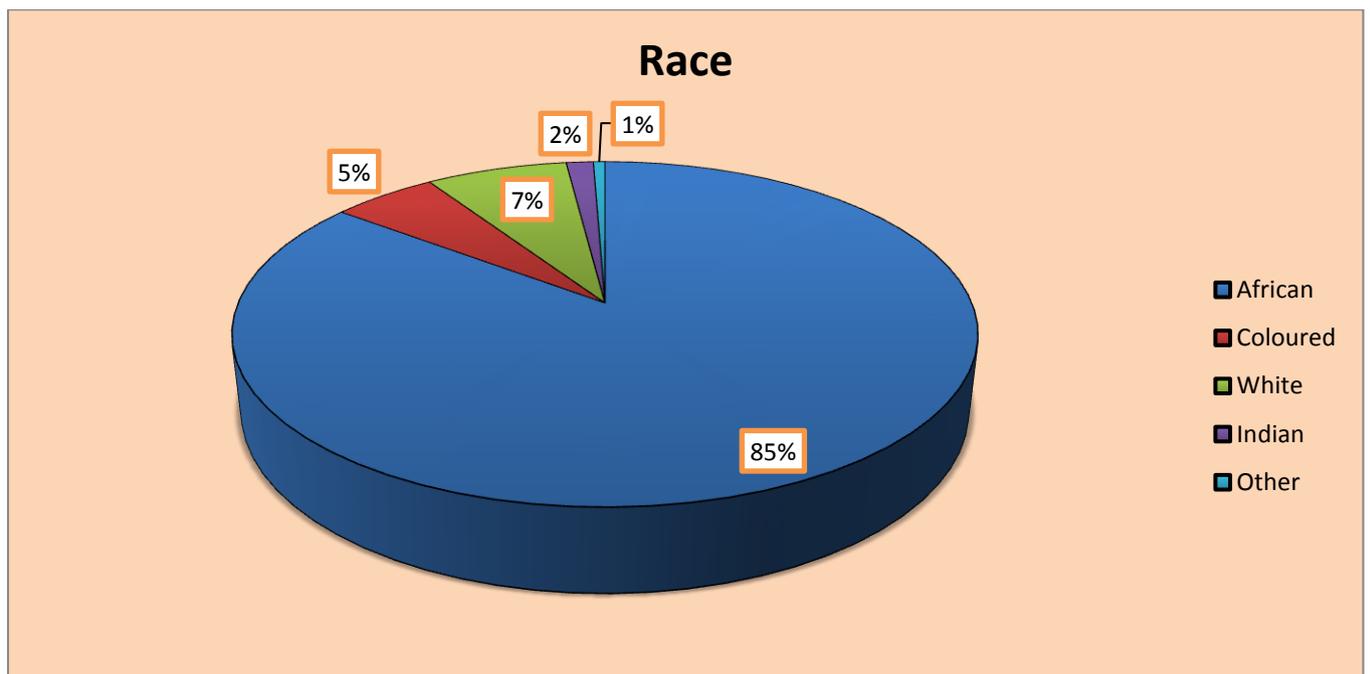
Figure 5.2. Sample distribution by race (n = 355)

5.2.3 Composition of age groups in the sample

Although the age of the respondents was measured in categories, ranging from 20 to over 56 years, the frequencies seemed to be concentrated around the 26 to 40 age group

(77.4%). Table 5.3 and figure 5.3 indicate the age distribution of the participants in the sample. Participants aged 25 years and younger comprised 13.5%; those between the ages of 26 and 40 years 63.9%; those aged between the ages of 45 and 55 years 21.4%; and those who were 56 and older 1.1% of the total sample (*n* = 355).

The age groups are represented in Table 5.3 according to Schein's (1978) and Super's (1957) career life stages. Participants younger than 25 are at the stage of entering the world of world/basic training, the socialisation/exploration stage, those aged between 26 and 40 at the full membership/establishment/achievement stage, those aged between 41 and 55 in the maintenance/mid-career crisis stage and those older than 56 in their mid-/late career stage.

Table 5.3

Age Distribution of Sample (n = 355)

	Age					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**	**Super's (1957) and Schein's (1974) career life stages**
Valid	**25 years and younger**	48	13.5	13.5	13.5	Exploration stage
	26 to 40 years	227	63.9	63.9	77.5	Establishment stage
	41 to 55 years	76	21.4	21.4	98.9	Maintenance stage
	56 and older	4	1.1	1.1	100.0	Late career stage
	Total	355	100.0	100.0		

Age

25 Years and Younger — 14%
26-40 Years — 64%
45-55 Years — 21%
56 and Older — 1%
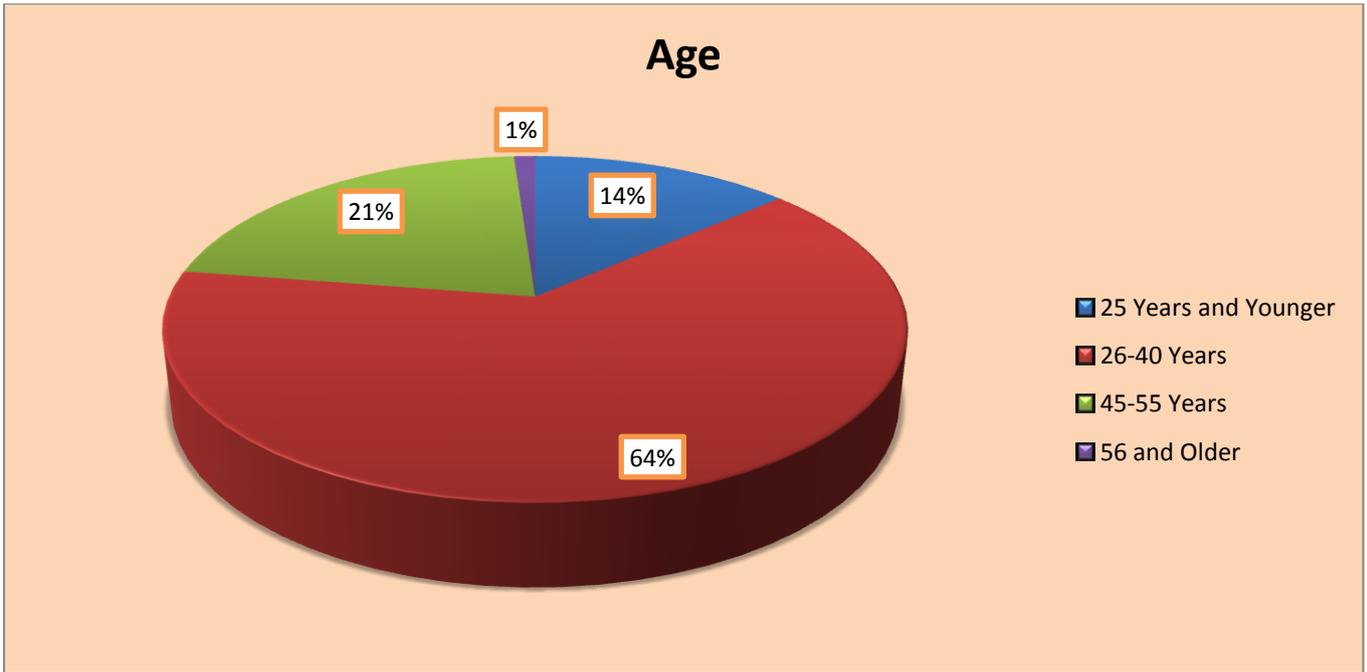
Figure 5.3. Sample distribution by age (*n* = 355)

5.2.4 Composition of marital status in the sample

Table 5.4 and figure 5.4 indicate the marital status distribution of participants in the sample. The majority of employees were single (54.6%) or married (37.7%). Only 6.2% were divorced or separated and 1.4% widowed.

Table 5.4

Marital Status Distribution of the Sample (n = 355)

Marital status				
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**Single**	194	54.6	54.6	54.6
	Married	134	37.7	37.7	92.4
	Widowed	5	1.4	1.4	93.8
	Separated/Divorced	22	6.2	6.2	100.0
	Total	355	100.0	100.0	
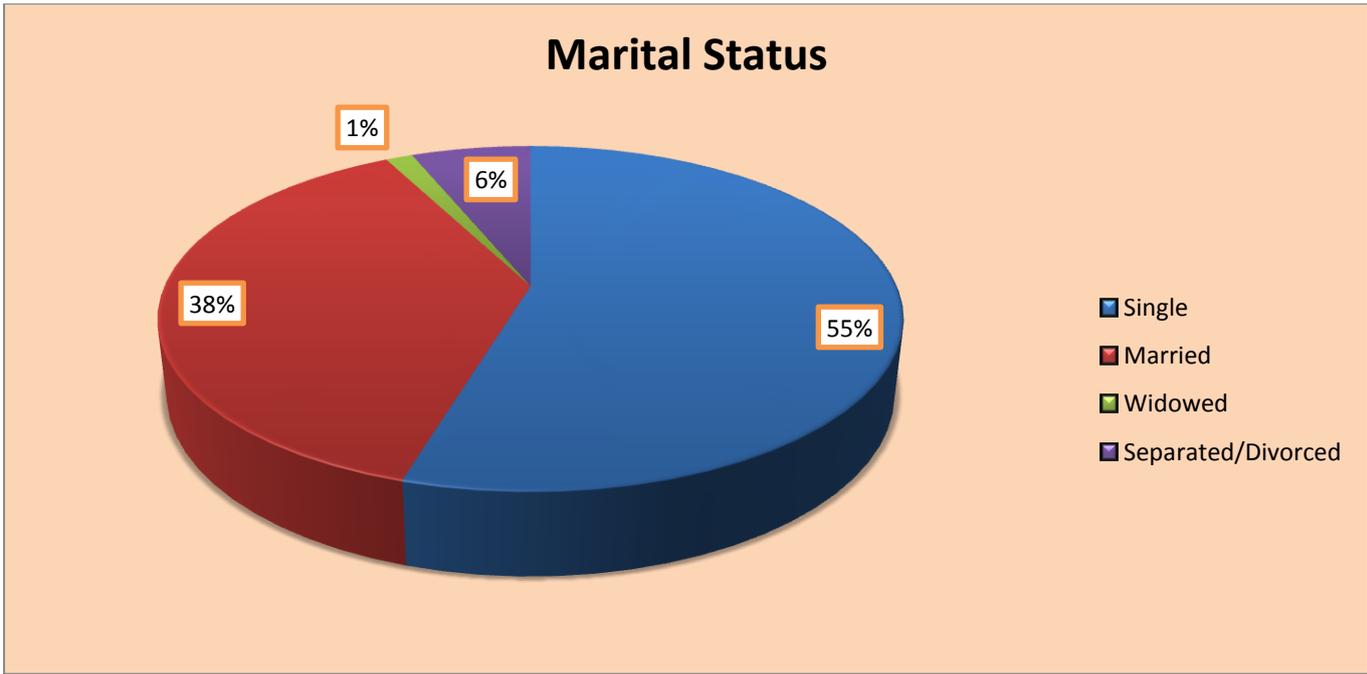
Marital Status

Figure 5.4. Sample distribution of marital status (*n* = 355)

5.2.5 Composition of the employment status of the sample

Table 5.5 and figure 5.5 indicate the employment status distribution of the sample. The distribution of the sample implied that of the participants (*n* = 355), 76.1% were employed full time, 9.6% were unemployed, 8.5% were employed part time, 4.8% were school/graduates and 1.1% were self-employed.

Table 5.5

Frequency Distribution: Employment Status Profile of the Sample (n = 355)

		Frequency	Percent	Valid Percent	Cumulative Percent
Employment Status					
Valid	**School/Graduate**	17	4.8	4.8	4.8
	Unemployed	34	9.6	9.6	14.4
	Part-time employed	30	8.5	8.5	22.8
	Full-time employed	270	76.1	76.1	98.9
	Self-employed	4	1.1	1.1	100.0
	Total	355	100.0	100.0	

Figure 5.5. Sample distribution of employment status (n = 355)

5.2.6 Summary

In summary, the biographical profile obtained for the sample showed that the main sample characteristics that needed to be considered in the interpretation of the empirical results were as follows: gender, race, age, marital status and employment status. Table 5.6 indicates that the participants in the sample were predominantly black Africans, females, employed, single and between the ages 26 and 40 years (establishment stage).

Table 5.6

Summary of Frequency Distribution: Biographical Profile of Sample (n = 355)

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Males	103	29.0	29.0	29.0
	Females	252	71.0	71.0	100.0
	Total	355	100.0	10.0	
Race	African	303	85.4	85.4	85.4
	Coloured	19	5.4	5.4	9.7
	Indian	5	1.4	1.4	92.1
	White	26	7.3	7.3	99.4
	Other	2	.6	.6	100.0
	Total	355	100.0	10.0	
Age	25 and younger	48	13.5	13.5	13.5
	26–40 years	227	63.9	63.9	77.5
	41–55 years	76	21.4	21.4	98.9
	56 and older	4	1.1	1.1	100.0
	Total	355	100.0	100.0	
Marital status	Single	194	54.6	54.6	54.6
	Married	134	37.7	37.7	92.4
	Widowed	5	1.4	1.4	93.8
	Separated/divorced	22	6.2	6.2	100.0
	Total	355	100.0	100.0	
Employment status	School/graduate	17	4.8	4.8	4.8
	Unemployed	34	9.6	9.6	14.4
	Part-time employed	30	8.5	8.5	22.8
	Full-time employed	270	76.1	76.1	98.9
	Self-employed	4	1.1	1.1	100.0
	Total	355	100.0	100.0	

5.3   CHOOSING AND MOTIVATING THE PSYCHOMETRIC BATTERY

The consideration given to the selection of the psychometric battery was guided by the literature review. The literature review can be categorised as exploratory research in which the relevant models and theories of psychological career meta-competencies (psychological career resources, career adaptability and hardiness) and retention-related dispositions (job enbeddedness and organisational commitment) were presented in an integrated manner. The psychometric instruments were considered for their applicability to the relevant models and theories of the research. Particular emphasis was placed on the validity and reliability of the various instruments.   Reliablity refers to the precision, accuracy and stability of a measuring instrument. A measuring instrument is reliable if it accurately and consistently

produces the same measure and is valid if it measures exactly what it is supposed to measure (Neuman, 2000). Reliability also refers to the precision, accuracy and stability of the measuring instrument, in that it accurately and consistently produces the same measurement (Neuman, 2000; Tredoux & Durrheim, 2002).

The following measuring instruments were used for this research study:

- the Psychological Career Resources Inventory (PCRI), developed by Coetzee (2008) to measure the psychological career resources construct
- the Career Adaptability Inventory (CAI), developed by Savickas (2010), to measure the career adaptability construct
- the Personal Views Survey (PVS-II), developed by Maddi and Kobasa (2001), to measure the hardiness construct
- the Job Embeddedness Scale (JES) developed by Mitchell *et al*. (2001), to measure the job embeddedness construct
- the Organisational Commitment Scale (OCS), developed by Meyer and Allen (1997), to measure the organisational commitment construct

The PCRI (Coetzee, 2008), CAI (Savickas, 2010), PVS-II (Maddi & Kobasa, 2001), JES (Mitchell *et al*., 2001) and OCS (Meyer & Allen, 1997) were chosen on the basis of their suitability, validity, reliability and cost effectiveness. The research instruments will be discussed in the sections that follow:

5.3.1 The Psychological Career Resources Inventory (PCRI)

The discussion below explores the rationale, purpose, administration, interpretation, validity, reliability and reasons for choosing the PCRI.

5.3.1.1 *Rationale and purpose*

The PCRI (Coetzee, 2008) is a self-rating measure, consisting of multifactors such as career preference, career values, career enablers, career drivers and career harmonisers. The aim of the instrument is to measure an individual's psychological career resources profile.

5.3.1.2 Dimensions of the PCRI

The questionnaire consists of 63 items and measures five dimensions (career preference, career values, career enablers, career drivers and career harmonisers) and the following 15 subscales of psychological career resources: stability/expertise; managerial; variety/creativity; independence/autonomy; growth/development; authority/influence; practical/creative skills; self/other skills; career purpose; career directedness; career venturing; self-esteem; behavioural adaptability; emotional literacy; and social connectivity.. The following is a detailed description of the five dimensions:

- *Career preferences (17 items)*

This dimension measures the individual's preferences (stability/expertise, managerial, variety/creativity and independence/autonomy) which drive people's career choices and moves.

- *Career values (8 items)*

This dimension measures the individual's reasons for a particular career preference (growth/development and authority/influence).

- *Career enablers (8 items)*

This dimension measures the skills people need in their career planning and decision making, which include practical/creative skills and self/other skills.

- *Career drivers (8 items)*

This dimension measures the individual's career drivers (career purpose, career directedness and career venturing), which include the individual's sense of clarity about his or her future career goals and targets as well as the precision in terms of where and how support will be found for achieving these career goals or finding new career opportunities.

- *Career harmonisers (20 items)*

This dimension measures the individual's career harmonisers (self-esteem, behavioural adaptability, emotional literacy and social connectivity), which are meta-competencies that facilitate proactive and adaptable career behaviour.

5.3.1.3 Administration

The PCRI is a self-administered questionnaire. Respondents receive clear instructions on how to complete it and the questionnaire takes about 15 minutes to complete. Respondents rate the statements on a six-point Likert-type scale based on their self-perceived psychological career resources.

5.3.1.4 Interpretation

Each subscale (career preference, career values, career enablers, career drivers and career harmonisers) is measured separately and reflects the participants' psychological career resources on these dimensions. Hence it is possible to analyse which dimensions are perceived to be true for the respondent and which are not. The higher the score, the truer the statement is for the respondent. Subscales with the highest mean scores are regarded as the respondents' dominant psychological career resource. Responses are measured in terms of the following scale:

1 = Never
2 = Rarely
3 = Sometimes
4 = Often
5 = Almost always
6 = Always

5.3.1.5 Reliability and validity of the PCRI

Research findings on the internal consistency reliability of this questionnaire indicate that it is a reliable measuring instrument for measuring psychological career resources (Coetzee, 2008).

An exploratory factor analysis indicated that the PCRI items not only satisfied the psychometric criteria of both convergent and discriminant validity, but also that the content was appropriate to the theoretical constructs that were considered (Coetzee, 2008). Research by Coetzee (2008) showed that the Cronbach Alpha for each subscale ranged from .71 to .88. Research by Ferreira (2010) indicated that the Cronbach Alpha internal consistency coefficients for each subscale ranged from .68 to .84.

5.3.1.6   Motivation for using PCRI

The PCRI was designed for the measurement of psychological career resources in the South African context, which are relevant to this research study. The PCRI has proven reliability and validity in the South African context (Coetzee, 2008; Ferreira, 2010).

Since the purpose of the research study was not to make individual predictions based on the PCRI, but instead, to investigate broad trends and certain relations between variables, the measuring instrument was deemed acceptable for the purpose of this study.

5.3.2   Career Adaptability Inventory (CAI)

The discussion below explores the rationale, purpose, administration, interpretation, validity, reliability and motivation for the CAI.

5.3.2.1   Rationale and purpose

The CAI (Savickas, 2010) is regarded as a self-rating measure consisting of multifactors, namely concern, control, curiosity, cooperation and confidence. The measuring instrument is used to determine an individual's career adaptability.

5.3.2.2   Dimensions of the CAI

The questionnaire consists of 55 items and measures five dimensions of career adaptability, namely concern, control, curiosity, cooperation and confidence. Each of these dimensions has a number of items or structured questions to measure it. The following is a detailed description of the five dimensions.

- *Concern (11 Items)*

This dimension measures the individual's concern about his or her vocational future.

- *Control (11 Items)*

This dimension measures the individual's control in order to assist his or her preparation for a vocational future.

- *Curiosity (11 Items)*

This dimension measures the construct associated with the display of curiosity by exploring possible selves and future scenarios.

- *Cooperation (11 Items)*

This dimension measures an individual's cooperation displayed within his or her career.

- *Confidence (11 Items)*

This dimension measures the individual's confidence in pursuing his or her aspirations.

5.3.2.3 Administration

The CAI is a self-administered questionnaire and takes about ten minutes to complete. Clear instructions for its completion are provided. The items are structured in a statement format with a five-point Likert-type rating scale for each statement. Respondents rate the statements on the basis of their self-perceived career adaptability.

5.3.2.4 Interpretation

Each subscale (concern, control curiosity, commitment and cooperation) is measured separately and reflects the participants' career adaptability on these dimensions. Hence it is possible to analyse which dimensions are perecived to be true for the participants and which

are not. The higher the score, the truer the statement is for the respondent. Subscales with the highest mean scores are regarded as the respondents' dominant career adaptability attribute.   The ratings are defined as follows:

1 = Strongest
2 = Very strong
3 = Strong
4 = Somewhat strong
5 = Not strong

5.3.2.5   Reliability and validity of the CAI

Research findings on the reliability of this questionnaire indicate that it is a reliable measuring instrument for measuring career adaptability (Savickas, 2010). The validity of the construct was confirmed by Dries, Van Esbroeck, Van Vianen, De Cooman and Pepermans (2012) in a Belgium context as well as by Maree (2012) in a South African further educational context. No previous studies have been done in the South African organisational context on the construct of career adapatbility.

5.3.2.6   Motivation for using CAI

The CAI was designed for the measurement of career adaptability in the organisational context, which was relevant to this research study.

Since the purpose of the research study was not to make individual predictions on the basis of the CAI, but rather to investigate broad trends and certain relationships between variables, the measuring instrument was deemed acceptable for the purpose of this study.

5.3.3   The Personal Views Survey (PVS-II)

The following discussion explores the rationale, purpose, administration, interpretation, validity, reliability and reason for using the PVS-II.

5.3.3.1 Rationale and purpose

The measuring instrument, the PVS-II (Maddi & Khoshaba, 2001) is regarded as a self-rating measure, consisting of multifactors, namely control, commitment and challenge. The measuring instrument is used to determine an individual's hardiness.

5.3.3.2 Dimensions of the PVS-II

The questionnaire consists of 50 items and measures three dimensions of hardiness, namely control, commitment and challenge. Each of these dimensions has a number of items or structured questions to measure it. The following is a detailed description of the three dimensions:

- *Commitment (15 Items)*

This dimension indicates that an individual is fully involved as a social being.

- *Control (17 Items)*

This dimension indicates that an individual believes that he or she can influence life events. The emphasis is on personal responsibility.

- *Challenge (18 Items)*

This dimension indicates that an individual regards change instead of stability as the norm of life.

5.3.3.3 Administration

The PVS-II is a self-administered questionnaire and takes about 15 minutes to complete. Clear instructions are provided for its completion. The items are structured in a statement format with the rating scale for each statement. Respondents rate the statements on the basis of their self-perceived hardiness.

5.3.3.4 Interpretation

A four-point Likert-type scale is used for rating both the existing and preferred responses of the questionnaire. Each subscale (commitment, control and challenge) is measured separately and reflects the participants' hardiness on these dimensions. Hence it is possible to analyse which dimensions are perecived to be true for the participants and which are not. The higher the score, the truer the statement is for the respondent. Subscales with the highest mean scores are regarded as the respondents' dominant hardiness attribute. The ratings are defined as follows:

0 = Not at all true
1 = A little true
2 = Reasonably
3 = Completely true

A negative score on commitment is indicative of low self-worth and alienation in many situations in life, such as family relations, friendships and the work environment. A negative score on control indicates a feeling of powerlessness. A negative score on challenge indicates that change or adverse events is/are perceived as a threat to the individual.

5.3.3.5 Reliability and validity of the PVS-II

Research findings on the reliability of this questionnaire indicate that it is a reliable measuring instrument for measuring PVS-II (Maddi & Kobasa, 2001). Kobasa (1982) reports significant test-retest correlation of .85 for *commitment*, .68 for *control* and .70 for *challenge*, which are consistent with the available research reports.

The subscales of the PVS-II indicate a significant internal validity of .85 for *commitment*, .70 for *control* and .71 for *challenge* (Kobasa *et al*., 1982). The combination of subscales reveal a stable correlation of .61 over a period of five years.

5.3.3.6 Motivation for using PVS-II

The PVS-II was designed for the measurement of hardiness in various contexts, which is relevant to this research study.

Since the purpose of the research study was not to make individual predictions based on the PVS-II, but instead to investigate broad trends and certain relations between variables, the measuring instrument was deemed acceptable for the purpose of this study.

5.3.4   The Job Embeddedness Scale (JES)

The discussion below deals with the rationale, purpose, administration, interpretation, validity, reliability and reason for using the JES.

5.3.4.1   Rationale and purpose

The measuring instrument, the JES (Mitchell *et al.*, 2001), is regarded as a self-rating measure, consisting of multifactors, namely fit, links and sacrifice.   The measuring instrument is used to determine an individual's job embeddedness.

5.3.4.2   Dimensions of the JES

The questionnaire consists of 17 items and measures three dimensions of job embeddedness, namely fit, links and sacrifice. Each of these dimensions has a number of items or structured questions to measure it. The following is a detailed description of the three dimensions:

- *Fit (7 Items)*

This dimension measures the individual's perceived compatibility with job, organisation and community.

- *Links (6 Items)*

This dimension measures the individual's connection with other people, groups and organisations.

- *Sacrifice (10 Items)*

This dimension measures the costs associated with what individuals have to give up if they leave a job or organisation.

5.3.4.3   Interpretation

A six-point Likert-type scale is used for rating both the existing and preferred responses of the questionnaire. Each subscale (fit, links and sacrifice) is measured separately and reflects the participants' job embeddedness on these dimensions. Hence it is possible to analyse which dimensions are perecived to be true for the participants and which are not. The higher the score, the truer the statement is for the respondent. Subscales with the highest mean scores are regarded as the respondents' dominant job embeddedness attribute. The ratings are defined as follows:

1 = Strongly disagree
2 = Moderately disagree
3 = Slightly disagree
4 = Slightly agree
5 = Moderately agree
6 = Strongly agree

5.3.4.4   Administration

The JES is a self-administered questionnaire and takes about 15 minutes to complete. Clear instructions are provided for its completion. The items are structured in a statement format with a rating scale for each statement. Respondents rate the statements on the basis of their self-perceived job embeddedness.

5.3.4.5   Reliability and validity of the JES

Research findings on the reliability of this questionnaire indicate that it is a reliable measuring instrument for measuring job embeddedness (Mitchell *et al.*, 2001). The internal consistency reliability (Cronbach Alpha) of the items measuring the job embeddedness construct was .89 (Mallol *et al.*, 2007). Similar to the results of Mitchell *et al.* (2001),

including low scores for sacrifice-community (.66) and links-organisation (.64), the internal consistency reliability estimates (Cronbach Alpha) for all the other variables were higher than the recommended .7.

5.3.4.6   Motivation for using JES

The JES was designed for the measurement of job embeddedness in the organisational context, which is relevant to this research study.

Since the purpose of the research study was not to make individual predictions based on the JES, but instead to investigate broad trends and certain relations between variables, the measuring instrument was deemed acceptable for the purpose of this study.

5.3.5   The Organisational Commitment Survey (OCS)

The following discussion explores the rationale, purpose, administration, interpretation, validity, reliability and reason for using the OCS.

5.3.5.1   Rationale and purpose

The OCS was designed to measure organisational commitment as a three-dimensional construct (Meyer & Allen, 1997).

5.3.5.2   Dimensions of the OCS

The OCS is a questionnaire comprising 24 structured statements or items, measuring affective, continuance and normative commitment of organisational commitment (Meyer & Allen, 1997).   The scale has 24 structured questions or items, eight per dimension of organisational commitment.

The following is s detailed description of the dimensions:

- *Affective commitment (8 items)*

This dimension measures the individual's emotional attachment to, identification with and involvement in the organisation. Affective commitment means that individuals remain with the organisation because they want to (Meyer & Allen, 1997).

- *Continuance commitment (8 items)*

This dimension measures the individual's commitment to the organisation based on the costs associated with leaving it. This means that individuals whose key connection to the organisation is based on continuance commitment continue as employees of the organisation because they need to (Meyer & Allen, 1997).

- *Normative commitment (8 items)*

This dimension measures individual's feelings of responsibility to remain with the organisation. Normative commitment entails individuals staying with the organisation because they have to (Meyer & Allen, 1997).

5.3.5.3   Administration

The OCS is a self-administered questionnaire and takes about ten minutes to complete, even though there is no limit time. Clear instructions for its completion are provided. The items are structured in a statement format with a rating scale for each statement. Respondents rate the statements on the basis of their self-perceived organisational commitment.

5.3.5.4   Interpretation

Participants are confronted with statements in the questionnaire and are expected to rate their response as "strongly agree", "disagree", "sometimes disagree", "neutral", "sometimes agree", "agree" and "strongly agree" (Babbie, 1998).

A seven-point Likert-type scale is used for respondents to rate their responses. Each subscale (affective commitment, continuance commitment and normative commitment) is

measured separately and reflects participants' organisational commitment on these dimensions. Hence it is possible to analyse what dimensions are perceived to be true for the participants and which are not. The higher the score, the truer the statement is for the respondent. Subscales with the highest mean scores are regarded as the respondents' dominant organisational commitment attribute. The ratings are defined as follows:

1 = Strongly disagree

2 = Moderately disagree

3 = Slightly disagree

4 = Neither agree nor disagree

5 = Slightly agree

6 = Moderately agree

7 = Strongly agree

5.3.5.5   Reliability and validity of the OCS

Subsequent research studies indicated substantial support for the reliability and validity of the affective, continuance and normative organisational commitment scales. The internal reliability consistencies of the OCS dimensions vary between .85 for affective commitment, .79 for continuance commitment and .73 for normative commitment (Meyer & Allen, 1997). The general reliability estimates exceed .70 (Meyer & Allen, 1997).

It was found that the correlation between the OCS and antecedent variables confirm that the scale is a valid measure of organisational commitment and can be used for potential research (Meyer & Allen, 1997). The construct validity is based on the reality that the three constructs are linked, as predicted in the proposed antecedent variables (Meyer & Allen, 1997).

The above statement confirms that the OCS is a valid measure of organisational commitment.

5.3.5.6   Motivation for using the OCS

The OCS was used for the purpose of this research study because it allows the specific nature of organisational commitment to be measured instead of only the affective scale,

which is often used (Meyer *et al.*, 1993). The psychometric assets of the OCS also make it a valid and reliable measure of the three-component structure of organisational commitment in the South African context (Ferreira, 2010; Ferreira *et al.*, 2010).

Since the purpose of the research study was not to make individual predictions based on the OCS, but instead, to investigate broad trends and certain relations between variables, the measuring instrument was deemed acceptable for the purpose of this study.

Hence the inclusion of the OCS in this research study would promote an understanding of the construct of organisational commitment.

5.3.6 Limitations of the psychometric battery

Self-reporting instruments have a number of disadvantages. Self-reports focus on individuals' verbalisations of their feelings towards themselves or others. Individuals may be unwilling or even unable to reveal aspects or feelings about themselves. The self-perceptions will only be accurate to the extent that the individual is willing to express himself or herself honestly (Bartram, 1996; Neuman, 2000). Another disadvantage of self-reports is the possibility of faking and a spurious response set (the tendency to rate oneself in a favourable light, the set to respond "true" no matter what the content of the inventory item may be and the set to respond deviantly) (Borg & Gall, 1989). When using self-reporting instruments, the results may be biased because of the tendency of test takers to be dishonest and their ability to respond to certain constructs. In addition, the nature of the instruments may potentially limit the nature of the methods used to determine their validity and compare them with other instruments (Baron, 1996; Bartram, 1996; Tredoux & Durrheim, 2002).

In conclusion, the five instruments, namely the PCRI, CAI, PVS-II, JES and OCS, were selected after an extensive review of several instruments designed to measure the psychological career meta-competencies (psychological career resources, career adaptability and hardiness) and the retention-related dispositions (job embeddedness and organisational commitment). A decisive factor in the selection of these instruments was the ability to use statistical correlation analysis to determine the degree of the relationship between the multiple variables used in this study. However, the limitations of the five

instruments should be taken into consideration during the interpretation of the results emanating from the research findings.

5.4 DATA COLLECTION

According to De Vos (2003), questionnaires, checklists, indices and scales form the categories of the different data gathering methods in a quantitative research approach.

The following data collection procedure was followed:

- A questionnaire on biographical information was included, containing questions on the variables, gender, age, race, marital status and employment status.
- The PCRI, CAI, PVS-II, JES and OCS were distributed to all the respondents in the sample.
- The respondents completed the questionnaires during group administration and the researcher collected the questionnaires as soon as they had been completed.

This data collection method is identified as personal questionnaires (De Vos *et al.,* 2011). He (2003) adds that the researcher should keep his or her involvement in the completion of the questionnaire to a minimum. This means that the researcher should remain in the background in order to prevent any problems, but is allowed to encourage the respondent to complete the questionnaires. Using personal questionnaires as the data collection approach ensures a high response rate, which is an advantage. With the assistance of the coordinators of the discussion class, a time slot was allocated for the collection of data from the sample. The purpose of the study was explained and directions for completing the questionnaires were provided. In terms of ethics, permission for the research was obtained from the institution's research ethics committee. A cover letter stated that completing and returning the questionnaires constituted an agreement granting permission to use the results for research purposes only.

5.5 ETHICAL CONSIDERATIONS

According to De Vos *et al.* (2011) and Louw and Delport (2006), ethics is defined as a set of moral principles which refers to the quality of research procedures relating to adherence to professional, legal and social obligations towards the research participants. The procedures

followed in the research adhered to all the ethical requirements necessary to ensure ethical accountability.

Permission to conduct the research was obtained from the Department of Industrial and Organisational Psychology at the University of South Africa. To ensure that the researcher fulfilled the ethical requirements, the following ethical principles were adhered to:

- The research was conducted within recognised parameters.
- Approval was obtained form the host institution.
- Both classical and recent resources were used to analyse and describe the concepts.
- Experts in the field of research were consulted to ensure a scientific research process.
- All the resources that were consulted were acknowledged by means of references.
- Informed consent was obtained from the participants.
- The participants were informed about the results of the research.

Ethical and employment equity issues were taken into consideration. The anonymity of the participants was ensured both during data collection and and analysis. The Employment Equity Act 55 of 1998 requires all psychological tests and other similar assessments to be valid, reliable, fair and not biased against any employee or any specific group of employees. In order to comply with legislation, care was taken in the choice and administration of the psychometric battery. The validity of items was evaluated, a reliable process was followed during data collection and the data were analysed, reported and interpreted in a valid, reliable, fair and unbaised manner.

5.6   FORMULATION OF RESEARCH HYPOTHESES

A hypothesis is a precise statement in which something is predicted (De Vos *et al.*, 2011; Trochim, 2006). It describes in real terms what the researcher anticipates or predicts will happen in the research study.

In the literature review chapters, the central research hypothesis was formulated to determine the relationship dynamics between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) as the set of independent variables and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as the set of dependent variables. The

following research hypotheses were with a view to achieving the empirical objectives of the study:

In order to address the research questions, the following research hypotheses were formulated:

Table 5.7

Research Hypotheses

Empirical research aims	Research hypothesis	Statistical procedure
Research aim 1 To assess the empirical interrelationships between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as manifested in a sample of respondents in the South African context	**H01:** There are no statistically significant positive interrelationships between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment). **Ha1:** There are statistically significant positive interrelationships between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment).	Correlation analysis
Research aim 2 To conduct an empirical investigation into the overall statistical relationship between the psychological career meta-competencies construct variables (psychological career	**H02:** The psychological career meta-competencies construct variate (psychological career resources, career adaptability and hardiness) as a composite set of independent latent variables are not significantly and positively related to the retention-related dispositions construct variate (job embeddedness and	Canonical correlation analysis

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resources, career adaptability and hardiness) as the set of independent latent variables and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as the set of dependent latent variables

organisational commitment) as a composite set of dependent latent variables.

Ha2: The psychological career meta-competencies construct variate (psychological career resources, career adaptability and hardiness) as a composite set of independent latent variables are significantly and positively related to the retention-related dispositions construct variate (job embeddedness and organisational commitment) as a composite set of dependent latent variables.

Research aim 3

To empirically investigate whether the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) positively and significantly predict the retention-related dispositions construct variables (job embeddedness and organisational commitment)

H03: The psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) do not positively and significantly predict the retention-related dispositions construct variables (job embeddedness and organisational commitment).

Multiple regression analysis

Ha3: The psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) positively and significantly predict the retention-related dispositions construct variables (job embeddedness and organisational commitment).

Research aim 4

On the basis of the overall statistical relationship

H04: The theoretically hypothesised psychological career profile model does not have a good fit with the empirically

Structural equation model

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between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment), to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model

manifested structural model.

Ha4: The theoretically hypothesised psychological career profile model has a good fit with the empirically manifested structural model.

Research aim 5

To assess whether the biographical variables (age, gender, race, marital status, job level and employment status) moderate the relationship between the psychological career meta-competencies construct variate (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variate (job embeddedness and organisational commitment).

H05: The biographical variables (gender, race, age, marital status, job level and employment status) do not significantly and positively moderate the relationship between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.

Ha5: The biographical variables (gender, race, age, marital status, job level and employment status) significantly and positively moderate the relationship between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.

Hierarchial moderated regression analysis

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| Research aim 6 | **H06:** There are no significant mean | Test for |
| To empirically investigate whether significant differences exist between the subgroups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates. | differences between the sub-groups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.

Ha6: There are significant mean differences between the subgroups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates. | significant mean differences |

Note: H0 (null hypothesis); Ha (alternative hypothesis)

5.7 DATA ANALYSIS

The Statistical Package for the Social Science 2.0 (SPSS, 2003) programme and the SAS program 9.2 (SAS Institute, 2000) were used for the statistical analysis. The specific techniques used in this research study are discussed below.

De Vos (2003) views data analysis as the procedure whereby data are dissected into essential parts to findn answers to the research questions and to test the research hypothesis. According to Trochim (2006), data analysis usually involves the following three main steps:

(1) cleaning and organising the data for analysis
(2) describing the data
(3) testing the research hypotheses and models

The data cleaning and organising phase involves examining the data, checking the data for accuracy, entering the data in the processor, transforming the data and developing and documenting a database structure that integrates the different measures. For the purpose of this research, this step of the process was done by a statistician.

The description of the data stage is used to portray the basic characteristics of the data in a study. This involves simple summaries of the sample and the instrument. Together with straightforward graphics analysis, they form the foundation of virtually every quantitative analysis of data. Descriptive statistics analysis solely describes what the data show (Trochim, 2006).

According to Trochim (2006), testing the research hypotheses is the final stage of the data analysis process. This stage uses correlational and inferential (multivariate) statistics to examine thesis statements, research questions and hypotheses. In many instances, the conclusions from the inferential statistics extend further than only the immediate data. Hence inferential statitistics are used to make inferences from the data to more general situations, and descriptive data are simply used to explain what is happening with the data per se.

The process of detemining the overall psychological career-related profile of the sample of participants entailed investigating whether a relationship exists between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions (job embeddedness and organisational commitment); whether biographical groups (age, gender, race, marital status, job level and employment status) act as significant moderators of this relationship; and whether the biographical variables identified as significant moderators differ significantly in relation to the construct variables.

The investigation process comprised three major stages, each consisting of various steps of statistical analysis, as depicted in Figure 5.6:

Stage 1: Descriptive statistical analysis	Stage 2: Correlational analysis	Stage 3: Inferential and multivariate statistics
Internal consistency reliability		Canonical correlation analysis
Unidimensionality analysis	Pearson product moment correlations	Standard multiple regression analysis
Means, standard deviations, kurtosis and skewness and frequency data		Structural equation modelling
Test for assumptions		Hierarchically moderated regression analysis
		Test for significant mean differences

Figure 5.6. Data analysis process

5.7.1   Stage 1: descriptive statistical analysis

Descriptive statistics involve a process of statistical analysis of numerical data, discrete or continuous, that provide information on centring, spread and normality. The results of this type of analysis can be in tabular or graphic layout. The descriptive statistics used in this study were frequencies, means and standard deviations (De Vos *et al.*, 2011; Salkind, 1997).

This stage consisted of the following four steps:

(1) determining the internal consistency reliability of the measuring instruments by means of the Cronbach Alpha coefficient

(2) evaluating the unidimensionality of the various instruments by using Rasch analysis

(3) determining the means and standard deviations, kurtosis and skewness of the categorical and frequency data

(4) testing assumptions (correlation analysis, canonical correlation analysis, multiple regression analysis and tests for significant mean differences)

5.7.1.1   Step 1: internal consistency reliability

The reliability of an instrument can be defined in terms of the internal consistency with which each item in a scale correlates with each other item, ensuring that a test measuring the same thing more than once has the same outcome results (Terre Blanche & Durrheim, 2002). According to Anastasi (1976), a range between .80 and .90 will mirror a desirable and reliable coefficient, particularly for individual measures. According to Tredoux and Durrheim (2002), reliability coefficients as low as .60 and .30 can even be regarded as acceptable for broad group measures. The internal consistency reliability estimates refer to how the strong items in a scale relate to one another (Terre Blanche & Durrheim, 2002). It is necessary to establish the reliability of constructs measured by means of different items to ensure confidence in the interpretation of the results. The Cronbach Alpha is one of the most widely used methods of calculating the internal reliability consistency (Terre Blanche & Durrheim, 2002). In the current study, item reliability analyses were conducted for subscale items that did not correlate highly.

The Cronbach Alpha coefficient was used in this study to determine the internal consistency reliabilities of the instruments. The Cronbach Alpha coefficient ranges from 0, which means that there is no internal consistency, to 1, which is the maximum internal consistency score (Terre Blanche & Durrheim, 2002). This means that the higher the alpha, the more reliable the item or test will be. A Cronbach Alpha coefficient of .75 is considered a desirable reliability coefficient (Terre Blanche & Durrheim, 2002). However, in group testing, reliabilities as low as .30 are acceptable.

5.7.1.2   Step 2: unidimensionality analysis

Rasch analysis was used to evaluate the unidimensionality of the two scales by calculating the infit and outfit chi-square statistics to obtain an indication of how well the items measured the underlying constructs. Rasch analysis determines the relationship between person ability and item difficulty or endorsement for each unidimensional dimension separately (Fox & Jones, 1999). This implies that the whole continuum of the latent trait is evaluated through

the items and invariantly for all groups or individuals (Hair, Black, Babin, & Anderson, 2010). Rasch analysis therefore determines both the item and person reliability.

5.7.1.3 Step 3: means and standard deviations, kurtosis and skewness and frequency data

The means and standard deviations for all the dimensions of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment were determined in the empirical study. The main advantage of the mean is that the sample mean is generally a better estimate of the population mean (Tredoux & Durrheim, 2002). Christensen (2001) defines a standard deviation as a "measure of the extent to which a group of scores vary about their mean". A small standard deviation indicates that the scores cluster closely around the mean, whereas a large standard deviation indicates that the scores deviate considerably from the mean (Christensen, 2001).

In this study, skewness and kurtosis were also used. Skewness refers to a measure of symmetry (or a lack thereof). A set of data (or distribution of data) is categorised as symmetrical if if looks the same on each side of a central point. Kurtosis measures whether data are either peaked or flat in relation to the normal distribution. Skewness and kurtosis values ranging between the -1 and +1 normality range are recommended for conducting parametric tests (Howell, 2008).

According to Tredoux and Durrheim (2002), one of the main reasons why researchers construct frequency distribution is to describe the distribution of scores on a variable. Because the biographical items included in the measuring instruments are categorical, the reponses to such questions are presented by means of frequency distribution.

5.7.1.4 Step 4: tests for assumptions

In most circumstances, the objective of research is to make valid inferences from a sample of data from a population. However, random samples from a larger population will not provide exact values that are applicable to the whole population. For this purpose, statistical methods are used to make it possible to determine the confidence with which such inferences can be made. Cohen, Cohen, West, and Aiken (2003) suggest that one can either

make use of confidence intervals or null hypothesis testing as a method of statistical inferences.

The following assumptions underlying multivariate procedures and tests for significant mean differences addressed in this study were used and will be discussed in more detail below:

(1) the accuracy of data entered into the data file and missing values

(2) the ratio of cases to independent variables

(3) outliers (univariate and multivariate)

(4) normality, linearity and homoscedasticity

(5) multicollinearity and singularity

(6) Levene's test for homogeneity of variance

(a)   The accuracy of data entered into the data file and missing values

In order to ensure accuracy of the data, screening was conducted for possible miscoding. Frequency statistics for each of the items were requested (by means of the SPSS [2.0] frequency procedure) and these were scrutinised in terms of minimum and maximum values as well as means and standard deviations. All the items fell within the possible range of values, and the data were therefore deemed acceptable for further scrutiny. Since only completed questionnaires were accepted for this study, no missing data were detected.

(b)   Ratio of cases to independent variables

According to MacCallum, Browne, and Sugawara (1996), determination of sample size is a key factor to consider in achieving adequate statistical power. A rule of thumb when determining an adequate sample size for the testing of a multiple correlation coefficient is N ≥ 50 + 8m (where m is the number of independent variables). In this equation, the standard conventional Alpha level and medium-sized relationships between the independent and dependent variables were assumed (p = .05 and $β$ = .20). Based on the equation above, the required sample was N = 74. The sample of N = 304 obtained in this study was therefore considered highly satisfactory for achieving adequate statistical power for detecting effects by means of the correlation and regression analyses to be performed.

Tabachnick and Fidell (2001) describe an outlier as a case with such an extreme value on one variable (univariate) or such a extraordinary combination of scores on two or more variables (multivariate) that it unjustifiably influences the statistics obtained from the analyses.

Outliers in this study were detected by visually examining the boxplots of standardised normal scores for each variable.

Multivariate normality refers to the assumption that each variable (and all linear combinations of the variables) are normally distributed. When the residuals of analysis are normally distributed and independent, the assumption of multivariate normality is met (Tabachnick & Fidell, 2001).   According to Tabachnick and Fidell (2001), statistical inferences become weaker as distributions depart from normality. These authors note that even when statistics are used purely descriptive, normality, linearity and homoscedasticity of variables enhances the analysis – hence the recommendation that one should improve the normality of variables.   Normality of variables can be assessed by means of various methods. The present study made use of skewness and kurtosis as well as the Kolmogorov-Smirnov test.

When testing for linearity, the assumption is tested that there is a straight-line relationship between two variables, when a line is fitted to the X and Y-values on a bivariate scatterplot (Tabachnick & Fidell, 2001). The present study tested this assumption by visually inspecting bivariate scatterplots. According to Kinnear and Gray (2000), the data points created should take the outline of an ellipse, where the longer axis slopes upwards from left to right. A thinner ellipse indicates a stronger degree of linear relationship.

The assumption of homoscedasticity for ungrouped data assumes that the variability of scores for one continuous variable is more or less the same at all values of another continuous variable. This assumption is closely related to the assumption of normality because when the assumption of multivariate normality is met, the relationships between the variables are homoscedastic (Tabacknick & Fidell, 2001). Bivariate scatterplots for all

possible variable pairs were once again utilised in order to test for linearity and homoscedasticity. No problems were detected in the scatterplots.

(e) Multicollinearity and singularity

Multicolinearity occurs when variables are very highly correlated (r = .90), whereas singularity occurs when variables correlate perfectly. The presence of such high correlations it indicates that they do not hold any additional information needed in the analysis (Tabachnick & Fidell, 2001). The present study made use of tolerance, VIF (variance inflation factor), eigen-values and condition indices in order to test for the assumptions of multicolinearity and singularity. No problems were detected in the tests.

(f) Levene's test for homogeneity of variance

According to Gastwirth, Gel, and Miao (2009), Levene's test can be used to test whether specific samples have equal variances (refered to as homogeneity of variance). Some statistical tests, such as analysis of variance, assume that variances are equal across all samples or groups. Levene's test is used to verify that assumption.

5.7.2 Stage 2: correlation analysis

Correlation statistics tested the direction and strength of the relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment).

Pearson's product moment correlation coefficient (r) is used to calculate the direction of and strength between variables (Steyn, 2001):

- A negative value reflects an inverse relationship.
- The strength of the linear relationship is determined by the absolute value of ρ.
- A strong correlation does not imply a cause-effect relationship.

For the purpose of this study, a cut-off point of $r \geq$ .30 (medium effect) at $p \leq$ .05 was used to determine the practical significance of correlation coefficients (Cohen, 1988).

5.7.3 Stage 3: inferential and multivariate statistical analysis

Inferential and multivariate statistics were performed to enable the researcher to make inferences about the data.

This stage entailed the following five steps:

(1) conducting canonical correlation analysis to assess the overall relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) as the set of independent latent variables, and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as the set of dependent latent variables

(2) conducting standard multiple regression analysis to assess whether the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) positively and significantly predict the retention-related dispositions construct variables (job embeddedness and organisational commitment)

(3) performing structural equation modelling (SEM) to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model

(4) performing hierarchically moderated regression analysis to assess whether the biographical variables (age, gender, race, marital status, job level and employment status) moderate the relationship between the psychological career meta-competencies construct variate (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variate (job embeddedness and organisational commitment)

(5) conducting tests for significant mean differences to determine whether significant differences exist between the groups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.

5.7.3.1 *Step 1: canonical correlation analysis*

Canonical correlation analysis was used to examine the overall potential relationships between two independent multivariate sets and the strength of association between the two sets of canonical variates or the weighted sum of the variables in the analysis (the psychological career meta-competencies construct variables of psychological career

resources, career adaptability and hardiness, as the composite set of independent latent variables, and the retention-related dispositions construct variables of job embeddedness and organisational commitment as the set of dependent latent variables). As in Pearson product moment correlations, canonical correlation analysis does not imply causality. The analysis provides insight into the potential relationships in the complete data set (Tabachnick & Fidell, 2001). Helio plots were also further used to illustrate the overall canonical correlation between the independent and dependent canonical variates.

Canonical correlation analysis is a multivariate statistical model that facilitates the study of linear interrelationships between two sets of variables (Hair *et al.*, 2010). In effect, it represents the bivariate correlation between the two canonical variates. In sum, canonical correlation analysis is more general than multiple regression and discriminant analysis because it can deal with multiple variables that may be metric and nonmetric (Hair *et al.*, 2010).

Canonical correlation analysis develops a canonical function that maximises the canonical correlation cofficient between the two canonical variates. Each canonical variate is interpreted with canonical coefficients, the correlation of the individual variables and their respective variates (Hair *et al.*, 2010). Canonical correlation analysis corresponds to principal components analysis and factor analysis in the creation of the optimum structure or dimensionality of each variable set that maximises the relationship between independent and dependent variable sets. Whereas principal components analysis and factor analysis attempt to explain the linear relationship between a set of observed variables and an unknown number of factors/variates, canonical correlation analysis focuses more on the linear relationship between two variates.

The result of applying canonical correlation is a measure of the strength of the relationship between the two sets of multiple variables (canonical variates). The measure of the strength of the relationship between the two variates is expressed as a canonical correlation coefficient (*Rc*).

Canonical correlation analysis has several advantages for researchers. Firstly, canonical correlation analysis limits the probability of committing Type I errors. The risk of a Type I error relates to the likelihood of finding a statistically significant result when it does not exist. Increased risk of Type I error results when the same variables in a data set are used for too

many statistical tests. Canonical correlation can assess the relationships between the two sets of variables (independent and dependent) in a single relationship instead of using separate relationships for each dependent variable. Secondly, canonical correlation analysis may better reflect the reality of research studies.   The complexity of research studies involving human and/or organisational behaviour may suggest multiple variables that represent a concept and this may poseproblems when the variables are examined separately. Moreover, it can identify two or more unique relationships, if they exist. Hence canonical corelation analysis is both technically able to analyse the data involving multiple sets of variables and is theoretically consistent with the purpose (Hair *et al.*, 2010).

As with other multivariate techniques, canonical correlation analysis should be subjected to validation methods to ensure that the results are specific, not only to the sample data, but can also be generalised to the population. Although few diagnostic procedures have been developed specifically for canonical correlation analysis, the results should be viewed within the limitations of the technique. According to Hair *et al.* (2010), the following are some of the limitations that can have the greatest impact on the results and their interpretation:

- Canonical correlation reflects the variance shared by the linear composites of the sets of variables, not the variance extracted from the variables.
- Canonical weights derived in computing canonical functions are subject to a great deal of instability.
- Canonical weights are derived to maximise the correlation between linear composites, not the variance extracted.
- The interpretation of the canonical variates may be difficult because they are calculated to maximise the relationship and facilitate interpretation. The rotation of variates in factor analysis is limited.

The redundancy index of a canonical variate is the percentage of variance explained by its own set of variables multiplied by the squared canonical correlation for the pair of variates. Thus, for example, the redundancy indices for the independent variables explaining the dependent variables are

RI_{y1}: $x = SV_{x1} \times Rc_1^2$
RI_{y2}: $y = SV_{x2} \times Rc_2^2$

In the current study, *multiple regression* was performed in order to determine the proportion of variance that is explained by the independent variables (psychological career resources, career adaptability and hardiness) regarding the scores of the dependent variables (job embeddedness and organisational commitment).

According to Terre Blanche & Durrheim, 2000), multiple regression analysis is one of the most commonly used multivariate methods used to study the separate and collective contributions of several independent variables to the variance of the dependent variables. The analysis procedure is used to build models for explaining scores of the dependent variable from scores on a number of other independent variables (Terre Blanche & Durrheim, 2000). According to Neuman (2000), multiple regression results highlight two things. Firstly, the R^2 values indicate how well a set of variables explains a dependent variable, and secondly, the regression results measure the direction and size of the effect of each variable on a dependent variable.

In this study, during the process of statistical analysis, regression analyses were performed to identify the PCRI variables, CAI variables and the PVS-II variables that would provide the best possible rationalisation of the dependent variables (JES & OCS).

5.7.3.3 Step 3: structural equation modelling (SEM)

SEM is a multivariate procedure that combines multiple regression and factor analysis when examining the reseach hypotheses of causality in a system (Garson, 2008; Hair et al*., 2010). SEM is divided into two different parts, namely a measurement model and a structural model. The measurement model deals with the relationships between the measured and latent variables, whereas the stuctural model only deals with the relationships between the latent variables. In the context of the present study, SEM analysis was performed in order to test the relationship between the composite canonical variables obtained from the canonical correlation anlaysis model.

The ability of SEM to distinguish between the indirect and direct relationships of variables and to analyse the relationships between latent variables without random error differentiates SEM from other simpler, relational modelling processes such as multiple regression (Hoyle,

1995). As a confirmatory approach, a model is postulated on the basis of theory and empirical evidence from previous research. The SEM process focuses on validating the measurement hypothesised model by obtaining estimates of the parameters of the model and by assessing whether the model itself provides a good fit to the data (Garson, 2008).

In this study, model adequacy was evaluated by means of goodness-of-fit measures.

5.7.3.4   Step 4: hierarchical moderated regression analysis

Saunders (1956) was the first author to describe stepwise or hierarchical moderated regression analysis as a method of emprically detecting how a variable influences or "moderates" the nature of a relationship between variables. One variable (say, x) moderates the relationship between two other variables (say, y and z) if the degree of association between y and z varies as a function of the value held by x (Hair *et al.*, 2010).

Predictor-criterion relationship analysis provides information on the strength of the relationship, expressed in terms of coefficients of correlation, by slopes of regression lines or by percentages of misclassifications (Hair *et al.*, 2010; Stone & Hollenbeck, 1984).

The existence of a moderating effect is determined by exploring the statistical significance of the difference in R x values for two regression models: (1) a model with only main effects terms, and (2) a model with both main effects terms and intercation terms. However, the existence of a moderating effect is indicated by statistically significant differences in independent and dependent variable correlation coeficients for two or more moderator variable-based subgroups.

5.7.3.5   Step 5: test for significant mean differences

In order to determine whether there were any significant differences between the mean scores of males and females, a t-test (for parametric data) and Mann-Withney U test (for nonparametric data) were conducted to be able to identify significant differences between marital status groups. The t-test is a statistical test for analysing the data differences between the means of two groups (Terre Blanche & Durrheim, 2000). The test for significant means difference was used to determine whether statistically significant differences existed between the groups of the biographical variables that acted as significant

moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.

5.7.4 Level of significance

The most widely used statistical differences are based on $p \leq .05$ as a rule of thumb, therefore providing 95% confidence in the results being accepted as the standard when applied in other research contexts (Neuman, 2000). However, the researcher can make two types of errors (Type I and Type II errors). A Type I error occurs when the researcher falsely rejects a null hypothesis, by stating that a relationship exists when in fact there is no relationship. A Type II error occurs when the researcher falsely accepts a null hypothesis by stating that a relationship exists, when in fact there is no relationship between the variables.

The level of significance expresses statistical significance in terms of giving the specific probability. Various levels of significance are identified. Table 5.8 indicates the different levels of statistical significance.

Table 5.8

Different Levels of Statistical Significance (Tredoux & Durrheim, 2002)

Probability	Level	Significance
p	.10	Less significant
p	.01 to .05	Significant
p	.001 to .01	Very significant
p	.001	Extremely significant

When a test of significance reveals a *p*-value lower than the chosen significance level, the null hypothesis is rejected and the results are referred to as statistically significant.

5.7.4.1 Level of significance: correlational statistical analysis

Statistical differences are based on $p \leq .05$ as a rule of thumb, therefore providing 95% confidence in the results being accepted as the standard when applied in other reseach contexts (Neuman, 1997; 2000). However, the reseacher can make two types of errors (Type I and Type II errors). A Type I error occurs when the researcher falsely rejects a null hypothesis, by stating that a relationship exists when in fact no relationship exists. A Type II error occurs when the researcher falsely accepts a null hypothesis by stating that a

relationship exists, when in fact no relationship exists between variables. Effect sizes can be used to determine whether the relationship between two variables is practically significant or important (Steyn, 2001).

The absolute values of the Pearson Product moment Correlations Coefficient (r) provide an indication of the effect size (Cohen, 1988; Cohen *et al.*, 2003).

Small effect: $r \leq .20$
Medium effect: $r \geq .30 \leq .49$
Large effect: $r \geq .50$

The significance levels of $p \leq .05$ and $r \geq .30$ (moderate practical effect size) was chosen as the cut-off point for rejecting the null hypotheses.

The level of significance of a canonical correlation generally considered to be the minimum that is acceptable for interpretation is $p \leq .05$, which (along with the $p \leq .01$ level) has become the generally accepted level for considering a correlation coefficient to be statistically significant. In addition to a separate test of each canonical function, a multivariate test of all canonical roots was also provided. This can also be used to evaluate the significance of discriminant functions, including Wilks' lambda, Hotelling's trace, Pillai's trace and Roy's greatest characteristic root (gcr) The practical significance of the canonical functions, represented by the size of the canonical correlations, should also be considered when deciding which functions to interpret. Rule of thumb – *Rc* loadings $\geq .30$ guidelines have been established on suitable sizes for canonical correlations. However, the decision is usually based on the contribution of the findings to a better understanding of the research problem being studied.

5.7.4.2 Level of significance: standard multiple regression and hierarchical moderated regression

The levels of statistical significance of the multiple regression used in this study were as follows:

- $F(p) < .001$
- $F(p) < .01$
- $F(p) < .05$ as the cut-off for rejecting the null hypotheses

According to Cohen (1992), the guiding principles for interpreting the degree of practical significance of multiple regression models are as follows:

Adjusted R^2 ≤.12 (small practical effect size); R^2 ≥.13≤.25 (moderate practical effect size); R^2 ≥.26 (large practical effect size). Specific emphasis is placed on the relationship between the strength of a moderator and statistical significance and the magnitude of the increment in R^2 associated with the moderator (Hartman & Moers, 1999).

According to Cohen *et al* (2003), the *F*-statistic for the increase in R^2 equals the square of the t-statistic for the interaction term. For example, a significant t-value of the coefficient of the interaction term implies a significant moderating effect of X1 and Y.

The effect size (which indicates practical significance) in the case of moderated multiple regression is determined by the following formula (Steyn, 1999):

$f^2 = (R^2 - R1^2) / (1 - R^2)$
f^2 = practical effect size (.02 = small; .15 = moderate; .35 = large)
R^2 = variance explained

5.7.4.3   Level of significance: (SEM)

The Goodness-of-Fit Index (GFI) indicates the relative amount of the variance or covariances in the sample predicted by the estimates of the population. In addition, the Adjusted Goodness-of-Fit Index (AGFI) is a measure of the relative amount of variance accounted for by the model, corrected for the degrees of freedom in the model relative to the number of variables. GFI and AGFI range between 0 and 1 and when models fit well, these indices will be closer to 1.0. The non-Normed Fit Index (NNFI), the Tucker-Lewis Index (TLI), as it is termed, in the statistical package AMOS 17.0 which was utilised in the present study is a relative measure of covariation explained by the model (Garson, 2008). With regard to the TLI, it is generally accepted that a value of less than .90 indicates that the fit of the model can be improved (Hoyle, 1995), although Hu and Bentler (1999) suggest a revised cut-off value close to .95.

To overcome the problem of sample size, Brown and Cudeck (1993) suggest using the Root Mean Square Error of Approximation (RMSEA) and its 90% confidence interval. The primary principle of the RMSEA is that it evaluates the extent to which the model fails to fit the data. The RMSEA estimates the overall amount of error – it is a function of the fitting function value relative to the degrees of freedom. The RMSEA point estimates should be .05 or less, and the upper limit of the confidence interval should not exceed .08 (Raykov & Marcoulides, 2000). Hu and Bentler (1999) suggested a value of .06 as being indicative of a good fit between the hypothesised model and the observed data. Fabrigar, Wegener, MacCullum, and Strahan (1999) elaborated on these cut-off points and noted that RMSEA values ranging from .08 to .10 indicate a mediocre fit, while those greater than .10 indicate a poor fit.

RMR is the mean absolute value of the covariance residuals. Its lower bound is zero but there is no upper bound, which depends on the scale of the measured variables. The closer RMR is to 0, the better the model fit will be. The literature indicates that rules of thumb such as that RMR should be < .10, or .08, or .06, or .05, or even .04 for a well-fitting model. These rules of thumb are not unreasonable, but since RMR has no upper bound, an unstandardised RMR above such thresholds does not necessarily indicate a poorly fitting model. Because RMR is difficult to interpret, standard SRMR is recommended instead. Unstandardised RMR is the coefficient that results from taking the square root of the mean of the squared residuals, which are the amounts by which the sample variances and covariances differ from the corresponding estimated variances and covariances, estimated on the assumption that the model is correct. Fitted residuals result from subtracting the sample covariance matrix from the fitted or estimated covariance matrix (Garson, 2008).

Standardized RMR (SRMR): SRMR is the average difference between the predicted and observed variances and covariances in the model, based on standardised residuals. Standardised residuals are fitted residuals (see above), divided by the standard error of the residual (this assumes a large enough sample to assume stability of the standard error). The smaller the SRMR, the better the model fit will be. SRMR = 0 indicates perfect fit. A value less than .05 is widely considered to be a good fit, and below .08, an adequate fit. The literature indicates rules of thumb setting the cut-off at < .10, .09, .08, and even .05, depending on the authority cited. SRMR tends to be lower simply because of a larger sample size or more parameters in the model. To obtain SRMR in AMOS, select Analyze, Calculate Estimates as usual. Then Select Plugins, Standardized RMR – this brings up a

blank Standardized RMR dialog. Leave this blank dialog open and then re-select Analyze, Calculate Estimates, and the Standardized RMR dialog will display SRMR in the previously blank dialog box (Garson, 2008).

5.7.4.4   Level of significance: tests for significant mean differences

The analysis is only significant and valid if the probability associated with it is less than $p \leq$ .05.

5.8   CHAPTER SUMMARY

This chapter discussed the empirical investigation. The population and determination of the sample, the measuring instruments and the data collection and data analysis processes were discussed. The chapter concludes with the formulation of the research hypotheses relating to the study.

Chapter 6 addresses the following empirical research aims:

Research aim 1: To assess the empirical interrelationships between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as manifested in a sample of respondents in the South African context.

Research aim 2:   To conduct an empirical investigation into the overall statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) as the set of independent latent variables and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as the set of dependent latent variables.

Research aim 3:   To empirically investigate whether the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) positively and significantly predict the retention-related dispositions construct variables (job embeddedness and organisational commitment).

Research aim 4: Based on the statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability

and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment), to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

Research aim 5: To assess whether the biographical variables (age, gender, race, marital status, job level and employment status) moderate the relationship between the psychological career meta-competencies construct variate (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variate (job embeddedness and organisational commitment).

Research aim 6: To empirically investigate whether significant differences exist between the subgroups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.

Chapter 6 discusses the reporting and interpretation of the results and the integration of the empirical findings.

CHAPTER 6: RESEARCH RESULTS

This chapter discusses the statistical results of this study and integrates the empirical findings with the literature review. The statistical results are reported in terms of descriptive, correlational and inferential (multivariate) statistics.

6.1   DESCRIPTIVE STATISTICS

This section dicusses the three steps relevant to the descriptive statistics, namely determining (1) the internal consistency reliability of the measuring instruments by means of the Cronbach Alpha coefficient; (2) the uni-dimensionality of the instruments by means of Rasch analysis; and (3) the means and standard deviations, kurtosis and skewness of the categorical data and frequency data.

6.1.1   Reporting of internal consistency reliability

This section reports on the internal consistency and item reliability of the following measurement instruments and sub-scales: the Psychological Career Resources Inventory (PCRI), the Career Adaptability Inventory (CAI), the Personal Views Survey (PVS-II), the Job Embeddedness Scale (JES) and the Organisational Commitment Scale (OCS).

6.1.1.1   Reporting of scale reliability: Psychological Career Resources Inventory the (PCRI)

Table 6.6 indicates the Cronbach alpha coefficient values for each of the five subscales of the PCRI. The internal consistency coefficients ranged from .70 to .89 (high) for the total sample (n = 355). The total PCRI scale obtained a Cronbach Alpha coefficient of .95 (high), which can be considered adequate for the purpose of the current study. Rasch analysis was used to evaluate the uni-dimensionality of the five sub-scales by calculating the infit and outfit chi-square statistics to determine how well the items measure the underlying constructs.

Table 6.6 indicates that most of the sub-scales obtained adequately high reliabilities. The career harmoniser subscale obtained an Alpha coefficient of .89 and the career enabler subscale an Alpha coefficient of .83. Overall, for the purpose of this study, the psychometric properties of the PCRI were regarded as acceptable. Previous research conducted by Coetzee (2008) obtained similar results in this regard. Because the Alpha coefficients for the overall and five sub-scales were deemed to be adequate, no item-reliability analyses were conducted (Terre Blanche & Durrheim, 2002).

Table 6.1 indicates acceptable item separation for all the dimensions (> 2.00) (Bond & Fox, 2007). The person separation index for most of the dimensions was somewhat lower compared with the guideline (> 2.00), which indicates that useful and logical information was obtained from the participants and that participants in other settings would probably provide the same anwers. According to the infit and outfit statistics, the participants responded to the items consistently.

Table 6.1

Person and Item Reliability (PCRI) (n = 355)

Dimension	Infit (SD)	Outfit (SD)	Separation	Reliability	Cronbach Alpha
Scale overall					
Person	1.08 (.00)	1.02 (-.2)	4.29	.95	.95
Item	1.01 (.00)	1.02 (.2)	9.12	.99	-
Career Values					
Person	1.06 (.00)	1.00 (-.1)	2.35	.85	.85
Item	.99 (.00)	1.00 (.2)	9.66	.99	-
Growth/Development					
Person	.99 (-.1)	.98 (.1)	.98	.49	.74
Item	1.02 (.2)	.98 (-.2)	5.22	.96	-
Authority/Influence					
Person	.91 (-.2)	1.03 (.00)	1.39	.66	.64
Item	1.01 (-.2)	1.03 (-.4)	14.84	1.00	-
Career Preferences					
Person	1.06 (.00)	1.02 (-.1)	2.39	.85	.86
Item	.99 (.00)	1.02 (.3)	7.89	.98	-
Stability/Expertise					
Person	.99 (.00)	.99 (.00)	1.14	.57	.74
Item	1.00 (.00)	.99 (-.1)	2.86	.89	-
Managerial					
Person	.98 (-.1)	.96 (-.1)	1.50	.69	.75
Item	1.00 (.00)	.96 (-.4)	6.46	.98	-
Variety/Creativity					
Person	1.01 (.00)	.99 (-.1)	1.33	.64	.72

Item	.97 (-.4)	.99 (-.1)	5.57	.97	-
Independence/Autonomy					
Person	.98 (-.2)	.98 (-.1)	1.64	.73	.74
Item	1.00 (-.1)	.98 (-.3)	7.13	.98	-
Career Drivers					
Person	1.03 (.00)	.96 (-.1)	2.26	.84	.85
Item	1.03 (.3)	.96 (-.2)	13.65	.99	-
Career Purpose					
Person	.98 (-.1)	.98 (-.1)	1.45	.68	.83
Item	.99 (-.1)	.98 (-.3)	1.46	.68	-
Career Directedness					
Person	1.00 (-.1)	1.00 (-.1)	1.98	.80	.81
Item	.98 (-.5)	1.00 (-.3)	5.95	.97	-
Career Venturing					
Person	.84 (-.3)	1.05 (.1)	1.86	.78	.71
Item	1.12 (-.4)	1.57 (-.9)	22.81	1.00	-
Career Enablers					
Person	1.03 (-.1)	1.00 (-.1)	2.12	.82	.83
Item	.99 (-.4)	1.00 (-.2)	6.72	.98	-
Practical/Creative Skills					
Person	1.01 (-.2)	.98 (-.2)	1.57	.71	.70
Item	.97 (-.7)	.98 (-.4)	5.57	.97	-
Self/Other Skills					
Person	1.00 (-.1)	.99 (-.1)	1.72	.75	.79
Item	1.01 (.00)	.99 (-.2)	5.36	.97	-
Career Harmonisers					
Person	1.06 (-.1)	1.04 (-.1)	2.84	.89	.89
Item	1.02 (-.1)	1.04 (.2)	7.21	.98	-
Self-esteem					
Person	.99 (-.1)	.99 (-.1)	1.46	.68	.82
Item	1.00 (.00)	.99 (-.1)	2.23	.83	-
Behavioural adaptability					
Person	1.00 (-.1)	1.00 (-.1)	1.98	.80	.81
Item	.98 (-.5)	1.00 (-.3)	5.95	.97	-
Emotional Literacy					
Person	1.00 (-.1)	1.01 (-.1)	1.58	.71	.71
Item	1.00 (-.3)	1.01 (-.1)	2.22	.83	-
Social Connectivity					
Person	1.00 (-.2)	.97 (-.2)	1.60	.72	.74
Item	1.01 (.00)	.97 (-.5)	8.01	.98	-

6.1.1.2 Career Adaptability Inventory (CAI)

Table 6.7 indicates the Cronbach Alpha coefficients of each of the five sub-scales of the CAI. These coeffiicients varied from .80 to .90 for the total sample (n = 355). The total CAI scale obtained a Cronbach Alpha coeficient of .97 (high) which was considered adequate for the

purpose of the current study. Rasch analysis was used to evaluate the uni-dimensionality of the five scales by calculating the infit and outfit chi-square statistics to determine how well the items measured the underlying constructs.

Table 6.7 indicates that most of the sub-scales had adequately high reliabilities. The control, curiosity and confidence sub-scales obtained an Alpha coefficient of .90, while the cooperation variable obtained an Alpha coefficient of .85. However, for the purpose of this study, the psychometric properties of the CAI were regarded as acceptable. Because the Alpha coefficients for the overall and five sub-scales were deemed adequate, no item-reliability analyses were conducted (Terre Blanche & Durrheim, 2002). Since the purpose of this study was not to make individual predictions on the basis of the CAI, but to investigate the relationship between and broad trends in the variables, the CAI was also regarded as psychometrically acceptable.

Table 6.2 demonstrates acceptable item separation for all the dimensions (> 2.00) (Bond & Fox, 2007). The person separation index for most of the dimensions was somewhat higher than the guideline (> 2.00), which indicates that useful and logical information was obtained form the participants and that participants in other settings would probably have given same anwers. According to the infit and outfit statistics, individuals responded to the items consistently.

Table 6.2

Person and Item Reliability (CAI) (n = 355)

Dimension	Infit (SD)	Outfit (SD)	Separation	Reliability	Cronbach Alpha
Scale overall					
Person	1.06 (-.1)	1.02 (-.2)	5.27	.97	.97
Item	1.01 (-.3)	1.02 (-.1)	6.93	.98	-
Concern					
Person	1.01 (-.1)	1.01 (-.1)	2.61	.87	.88
Item	1.01 (.00)	1.01 (-.1)	6.87	.98	-
Control					
Person	1.02 (-.1)	1.01 (-.1)	2.55	.87	.90
Item	1.00 (-.2)	1.01 (.00)	5.33	.97	-
Curiosity					
Person	1.00 (-.2)	1.00 (-.2)	2.84	.89	.90
Item	1.01 (-.2)	1.00 (-.3)	6.16	.97	-
Cooperation					
Person	1.07 (-.1)	1.01 (-.2)	2.40	.85	.85

Item	1.00 (-.3)	1.01 (-.1)	9.03	.99	-
Confidence					
Person	1.04 (-.2)	1.03 (-.2)	2.72	.88	.90
Item	1.01 (-.3)	1.03 (-.1)	4.25	.95	-

6.1.1.3 Personal Views Survey (PVS-II)

Table 6.8 indicates the Cronbach Alpha coefficient values of each of the three sub-scales of the PVS-II. These coefficients varied from .59 to .76 for the total sample (n = 355). The total PVS-II scale obtained a Cronbach Alpha coefficient of .87 (high) which was deemed adequate for the purpose of the current study. Rasch analysis was used to evaluate the uni-dimensionality of the sub-scales by calculating the infit and outfit chi-square statistics to determine of how well the items measured the underlying constructs.

Table 6.8 indicates that most of the sub-scales had adequately high reliabilities. The commitment sub-scale obtained an Alpha coefficient of .76 (high), while the challenge sub-scale obtained one of .59 (medium). However, for the purpose of this study, the psychometric properties of the PVS-II were regarded as acceptable. Because the Alpha coefficients for the overall and three sub-scales were regarded as adequate, no item-reliability analyses were conducted (Terre Blanche & Durrheim, 2002). Since the purpose of this study was not to make individual predictions on the basis of the PVS-II, but to investigate the relationship and broad trends between the variables, the PVS-II was also deemed to be psychometrically acceptable.

Table 6.3 indicates acceptable item separation for all the dimensions (> 2.00) (Bond & Fox, 2007). The person separation index for most of the dimensions was somewhat lower compared with the guideline (> 2.00), which indicates that useful and logical information was obtained from the participants and that participants in other settings would probably have given the same anwers. According to the infit and outfit statistics, individuals responded to the items consistently.

Table 6.3

Person and Item Reliability (PVS-II) (n = 355)

Dimension	Infit (SD)	Outfit (SD)	Separation	Reliability	Cronbach Alpha
Scale overall					
Person	1.01 (-.1)	1.01 (-.1)	2.56	.87	.87
Item	1.01 (.00)	1.01 (.1)	9.45	.99	-
Commitment					
Person	1.02 (.00)	1.00 (.00)	1.76	.76	.76
Item	1.01 (.1)	1.00 (.1)	6.78	.98	-
Control					
Person	1.01 (-.1)	1.01 (.00)	1.60	.72	.71
Item	1.01 (.00)	1.01 (.00)	6.86	.98	-
Challenge					
Person	1.01 (-.1)	1.01 (-.1)	1.28	.62	.59
Item	1.00 (-.1)	1.01 (.1)	9.86	.99	-

6.1.1.4   Job Embeddedness Scale (JES)

Table 6.9 indicates the Cronbach Alpha coefficient values of each of the three sub-scales of the JES. These coefficients varied from .77 to .87 for the total sample (n = 355). The total JES scale obtained a Cronbach Alpha coefficient of .90 (high) which was considered adequate for the purpose of the current study. Rasch analysis was used to evaluate the uni-dimensionality of the three sub-scales by calculating the infit and outfit chi-square statistics to determine how well the items measured the underlying constructs.

Table 6.9 indicates that most of the sub-scales had adequately high reliabilities. The sacrifice sub-scale obtained an Alpha coefficient of .87 (high), while the links sub-scale obtained one of .77 (high). However, for the purpose of this study, the psychometric properties of the JES were deemed acceptable. Because the Alpha coefficients for the overall and three sub-scales were regarded as adequate, no item-reliability analyses were conducted (Terre Blanche & Durrheim, 2002). Since the purpose of this study was not to make individual predictions on the basis of the JES, but to investigate the relationship between and broad trends in the variables, the JES was also deemedto be psychometrically acceptable.

Table 6.4 demonstrates acceptable item separation for all the dimensions (> 2.00) (Bond & Fox, 2007). The person separation index for most of the dimensions was somewhat higher

compared with the guideline (> 2.00) except for links, which indicates that useful and logical information was obtained form the participants and that participants in other settings would probably have given the same anwers. According to the infit and outfit statistics, individuals responded to the items consistently.

Table 6.4

Person and Item Reliability (JES) (n = 355)

Dimension	Infit (SD)	Outfit (SD)	Separation	Reliability	Cronbach Alpha
Overall scale					
Person	1.06 (-.1)	1.03 (-.1)	3.02	.90	.90
Item	1.00 (-.1)	1.03 (.2)	7.48	.98	-
Fit					
Person	1.04 (-.1)	1.02 (-.1)	2.18	.83	.84
Item	1.01 (-.1)	1.02 (-.3)	8.43	.99	-
Links					
Person	1.01 (-.1)	1.01 (-.1)	1.84	.77	.77
Item	1.00 (-.2)	1.01 (-.1)	7.34	.98	-
Sacrifice					
Person	1.03 (-.2)	1.03 (-.2)	2.50	.86	.87
Item	1.00 (-.3)	1.03 (.00)	5.25	.96	-

6.1.1.5 Organisational Commitment Scale (OCS)

Table 6.5 provides the Cronbach Alpha coefficient values of each of the three sub-scales of the OCS. These coefficients varied from .56 to .74 for the total sample (n = 355). The total OCS scale obtained a Cronbach Alpha coefficient of .82 (high) which was considered adequate for the purpose of the current study. Rasch analysis was used to evaluate the uni-dimensionality of the three sub-scales by calculating the infit and outfit chi-square statistics to determine how well the items measured the underlying constructs.

Table 6.5 indicates that the sub-scales had adequately high reliabilities. The continuance commitment sub-scale obtained an Alpha coefficient of .74 (high), while the affective commitment sub-scale obtained one of .56 (medium). However, for the purpose of this study, the psychometric properties of the OCS were regarded as acceptable. Because the alpha coefficients for the overall and three sub-scales were deemed adequate, no item-reliability analyses were conducted (Terre Blanche & Durrheim, 2002). Since the purpose of this study

was not to make individual predictions on the basis of the OCS, but to investigate the relationship between and broad trends in the variables, the OCS was also considered to be psychometrically acceptable.

Table 6.5 indicates acceptable item separation for all the dimensions (> 2.00) (Bond & Fox, 2007). The person separation index for most of the dimensions was somewhat lower compared with the guideline (> 2.00), which indicates that useful and logical information was obtained fromthe participants and that participants in other settings would probably have given the same anwers. According to the infit and outfit statistics, the individuals responded to the items consistently.

Table 6.5

Person and Item Reliability (OCS) (n = 355)

Dimension	Infit (SD)	Outfit (SD)	Separation	Reliability	Cronbach Alpha
Overall scale					
Person	1.02 (-.4)	1.02 (-.4)	2.30	.84	.82
Item	1.00 (-.2)	1.02 (.1)	5.05	.96	-
Affective Commitment					
Person	1.00 (-.3)	1.00 (-.2)	1.43	.67	.56
Item	1.00 (.00)	1.00 (.00)	6.57	.98	-
Normative Commitment					
Person	1.14 (-.2)	1.13 (-.3)	1.72	.75	.73
Item	1.01 (-2.2)	1.13 (-1.6)	4.05	.94	-
Continuance Commitment					
Person	1.06 (-.3)	1.06 (-.2)	1.87	.78	.74
Item	1.00 (-.3)	1.06 (.1)	4.98	.96	-

6.1.2 Reporting of means and standard deviations

This section provides the descriptive information on each of the five instruments' sub-scales. The means and standard deviations for each of the five measuring instruments (the PCRI, CAI, PVS-II, JES & OCS) were calculated and are reported in the subsections below.

6.1.2.1 Psychological Career Resources Inventory (PCRI)

The PCRI is scored by obtaining a mean score across all the items in each sub-scale. A mean score is obtained by summing all the individual scores for each sub-scale and then dividing the total score for each sub-scale by 5. Each individual sub-scale can range from 1 to 5.32. A 1 is the minimum score if a person scores each of the items applicable to the sub-scale as a 1; likewise, a score of 5.32 is possible if all items are scored as a 6 applicable to the subscale, and the three most preferred statements refer to the same sub-scale. Table 6.6 provides the descriptive information for the five PCRI sub-scales. The descriptive information consists of the minimum score, the maximum score, the mean and the standard deviation on each sub-scale.

Table 6.6

Means and Standard Deviations of the PCRI (n = 355)

	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
Career Preference	3.89	5.43	4.86	1.92	-.71	.74
Stability/Expertise	5.11	5.43	5.28	.11		
Managerial	4.52	5.21	4.78	.94		
Variety/Creativity	4.58	5.15	4.95	.84		
Independence/Autonomy	3.89	4.86	4.32	.39		
Career Values	4.14	5.54	5.13	3.87	-.91	1.65
Growth/Development	5.24	5.54	5.42	.16		
Authority/Influence	4.14	5.50	4.84	.68		
Career Enablers	4.03	5.16	4.70	6.40	-.43	-.26
Practical/Creative skills	4.03	4.68	4.47	.29		
Self/Other skills	4.57	5.16	4.89	.23		
Career Drivers	3.72	5.71	4.95	7.00	-.93	1.98
Career Purpose	5.32	5.44	5.39	.05		
Career Directedness	3.72	5.71	4.69	.79		
Career Venturing	4.15	5.71	4.75	.84		
Career Harmonisers	4.01	5.21	4.68	13.36	-.41	-.13
Self-esteem	4.94	5.21	5.09	.10		
Behavioural adaptability	4.24	5.02	4.66	.28		
Emotional literacy	4.07	4.41	4.22	.14		
Social connectivity	4.43	5.11	4.75	.34		

The mean scores ranged from 5.42 to 4.22. The sample of participants obtained the highest scores on the growth and development sub-scale (*M* = 5.42; *SD* = .16), and the lowest scores on the emotional literacy sub-scale (*M* = 4.22; *SD* = .14). The standard deviations of the sub-scales were fairly similar, all ranging from -.13 to 1.98. All the means on the PCRI indicated a right skewed distribution (skewness < 0). The skewness values ranged from .93 to -.41,

indicating that the distribution was flatter than a normal distribution with a wider peak. The kurtosis values ranged from -.26 to 1.98, indicating that the probability for extreme values was less than for a normal distribution, and the values were more widely spread around the mean.

6.1.2.2 Career Adaptability Inventory (CAI)

Individual sub-scale scores for the CAI are computed by summing the appropriate items. Because each item score can range from 1 to 5, each individual sub-scale score can range from 3.67 to 3.78. A 1 will be the minimum score that will result if a person scores each of the items in the sub-scales as a 1; likewise a score of 24 is possible if all five items are scored as a 5. Table 6.7 provides the descriptive information on the CAI sub-scales.

Table 6.7

Means and Standard Deviations of the CAI (n = 355)

	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
Concern	3.82	3.36	4.12	6.79	-.19	-.59
Control	4.05	3.74	4.39	6.93	-.43	-.41
Curiosity	3.77	3.43	4.16	7.08	-.05	-.63
Cooperation	3.67	2.61	4.05	7.21	-.09	-.48
Confidence	3.99	3.78	4.21	6.88	-.21	-.71

The mean scores ranged from 4.05 to 4.39. The sample of participants obtained the highest scores on the control sub-scales (*M* = 4.39; *SD* = 6.93), and the lowest scores on the cooperation sub-scale (*M* = 4.05; *SD* = 7.21). The standard deviations of the sub-scales were fairly similar, all ranging from 6.79 to 7.21. All the means on the CAI indicated a right skewed distribution (skewness < 0). The skewness values ranged between -.05 and -.43, indicating that the distribution was flatter than a normal distribution with a wider peak. The Kurtosis values ranged from -.41 to -.71, indicating that the probability for extreme values was less than for a normal distribution, and the values were more widely spread around the mean.

6.1.2.3 Personal Views Survey (PVS-II)

Individual sub-scale scores for the PVS-II were computed by summing the appropriate items. Because each item score can range from 1 to 4, each individual sub-scale score can range from 3.67 to 3.78. A 3.67 will be the minimum score that will result if a person scores each of the items in the sub-scales as a 1; likewise, a score of 24 is possible if all four items are scored as a 4. Table 6.8 provides the descriptive information on the PVS-II sub-scales.

Table 6.8

Means and Standard Deviations of the PVS-II (n = 355)

	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
Commitment	1.87	1.39	2.31	6.46	.52	.02
Control	1.91	1.37	2.59	6.47	.11	-.17
Challenge	2.46	1.80	3.43	5.71	.45	-.09

The mean scores ranged from 3.43 to 2.31. The sample of participants obtained the highest scores on the challenge sub-scales (*M* = 3.43; *SD* = 5.71), and the lowest scores on the commitment sub-scale (*M* = 2.31; *SD* = 6.46). The standard deviations of the sub-scales were fairly similar, all ranging from 5.71 to 6.47. All the means on the PVS-II indicated a right skewed distribution (skewness < 0). The skewness values ranged from .11 to .52, indicating that the distribution was flatter than a normal distribution with a wider peak. The Kurtosis values ranged from -.09 to .02, indicating that the probability for extreme values was less than for a normal distribution, and the values were more widely spread around the mean.

6.1.2.4 Job Embeddedbess Scale (JES)

The JES scores are determined by calculating a mean score across all the items relating to the fit, links and sacrifice sub-scales. A mean score is obtained by summing all the individual scores in a scale and then dividing the total by the number of items in the scale. Table 6.9 provides the descriptive information on the JES sub-scales.

Table 6.9

Means and Standard Deviations of the JES (n = 355)

	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
Fit	4.48	3.47	5.04	6.73	-.64	-.02
Links	4.05	3.64	4.68	6.48	-.42	-.46
Sacrifice	3.94	3.64	4.68	1.94	-.34	-.56

The mean scores ranged from 5.04 to 4.68. The sample of participants obtained the highest scores on the fit sub-scales (*M* = 5.04; *SD* = 6.73), and the lowest scores on the links (*M* = 4.68; *SD* = 6.48) and sacrifice (*M* = 4.68; *SD* = 1.94) sub-scales. The standard deviations of the sub-scales were fairly similar, all ranging from 6.48 to 1.94. All the means on the JES indicated a right skewed distribution (skewness < 0). The skewness values ranged from -.34 to -.64, indicating that the distribution was flatter than a normal distribution with a wider peak. The Kurtosis values ranged from -.02 to -.56, indicating that the probability for extreme values was less than for a normal distribution, and the values were more widely spread around the mean.

6.1.2.5 Organisational Commitment Scale (OCS)

The OCS scores are determined by calculating a mean score across all the items relating to the affective, continuance and normative commitment sub-scales. A mean score is obtained by summing all the individual scores in a scale and then dividing the total by the number of items in the scale. Table 6.10 provides the descriptive information on the OCS sub-scales.

Table 6.10

Means and Standard Deviations of the OCS (n = 355)

	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
Affective Commitment	3.95	3.08	4.71	7.28	.00	.68
Continuance Commitment	4.12	3.21	4.76	9.92	-.14	-.66
Normative Commitment	4.11	3.61	4.70	7.55	-.19	-.23

The mean scores ranged from 4.70 to 4.76. The sample of participants obtained the highest scores on the continuance commitment sub-scales (*M* = 4.76; *SD* = 9.92), and the lowest scores on the normative commitment sub-scale (*M* = 4.70; *SD* = 7.55). The standard deviations of the sub-scales were fairly similar, all ranging from 7.28 to 9.92. All the means on the OCS

indicated a right skewed distribution (skewness < 0). The skewness values ranged from -.14 to .00, indicating that the distribution was flatter than a normal distribution with a wider peak. The Kurtosis values ranged from -.23 to .68, indicating that the probability for extreme values was less than for a normal distribution, and the values were more widely spread around the mean.

6.1.3   Interpretation of means and standard deviations

6.1.3.1   Psychological Career Resources Inventory (PCRI)

This section interprets the results reported in Tables 6.6 to 6.10.

The high scores obtained for the growth/development, career purpose, stability/expertise and self-esteem variables suggest that the participants preferred working in organisations in which they could grow and develop their skills and self-esteem and experience feelings of stability and career purpose.   However, the feelings of emotional literacy and independence/autonomy seemed to be slightly out of balance, which implies that the participants may have felt less confident in expressing their emotions appropriately in the work context. The reliabilities of the PCRI emotional literacy and independence/autonomy competence may have been low because the participants were predominantly between the ages of 26 and 40, and found themselves in the establishment career stage, when they were settling down, choosing a permanent position, learning to relate to other individuals and developing a realistic self-concept (Coetzee, 2008). Being able to express emotions in the work context improves communication. Ferreira (2010) also found that growth/development is important to individuals in the establishment career stage.

6.1.3.2   Career Adaptability Inventory (CAI)

The high scores obtained for the control and confidence variables suggest that the participants recognised control and confidence as the most important variable embedded in their career paths (Savickas, 2005; 2010). They seemed to prefer working in environments in which they could take control of certain situations, which in turn could also improve their confidence.   A possible reason for this finding is that the majority of the participants were full-time employees in

middle or senior management positions, which requires a a great deal of responsibility, control and confidence. However, cooperation and concern seemed to be slightly less important, which implies that the participants felt less favourable about working together in joint operations in their careers. The participants probably preferred working alone (in isolation) throughout their careers, which could also be a result of their level of employment.

6.1.3.3 Personal Views Survey (PVS-II)

The high scores obtained for the challenge variable suggest that the participants recognised challenge as the most important variable embedded in their career paths. Individuals who thrive on challenge are motivated to become catalysts in their environment, and these participants would be more likely to remain in their current organisation because they regard the cost of leaving the organisation as too high. These findings are in line with the findings of Kobassa (1982) and Maddi (1999), which indicated that highly challenged individuals are characterised by cognitive flexibility and tolerance for ambiguity. This allows these individuals to integrate unexpected or otherwise stressful events more easily.

However, commitment and control seemed to be slightly less important, which implies that the participants were less likely to involve themselves in a number of life situations, including work, family, interable to believe in the certainty, significance and interest value of why they are doing something and what they are doing. Considering the fact that the participants were predominantly in the establishment phases of their careers, the findings seem to be in agreement with Super's (1990) view that this stage represents the period during which the life structure of young adults becomes a more stable period as they begin to settle down, become committed to contributing towards an occupation, company or person and start to establish socially supportive networks (Greenhaus *et al.*, 2010).

6.1.3.4 Job Embeddness Scale (JES)

The high scores obtained for the fit variable suggest that the participants recognised it as the most important variable embedded in their career paths. Put differently, fit includes the individual's compatibility with his or her work and community settings. An example of high work

fit is if the individual values being environmentally friendly and works for an organisation that supports recycling, or if he or she is a good fit with his or her job. An example of high community fit would be enjoying music and living in an area that offers many opportunities to watch live bands in concert or being able to join an adult recreational league in the area to play a favourite sport. The findings in this study correspond to those of Mitchell *et al.* (2001a).

However, links and sacrifice seemed to be slightly less important, which implies that the participants placed more value on how they fit into a specific organisation than on their links or connections with their family or community. These links are not necessarily in the workplace and may involve not only an employee but also his or her family members. Links include both formal and informal ties that an individual has with other people. One example of a work link is a strong connection with one's supervisor or coworkers. An example of a community link is a strong connection to a group of friends who spend every weekend together, or having relatives residing in the same area Mallol *et al.* (2007). According to Mitchell *et al.* (2001b), the higher the number of links between the individual and the work, the more he or she is bound to the job and the organisation. Participants also regard sacrifice as less important. Sacrifice includes all the benefits an individual must give up if he or she decides to leave the job. Put simply, it is the perceived loss of material or psychological benefits that are currently available or will be available in the future. An example of work sacrifice is a lost opportunity for promotion if the individual is up for a promotional review soon, or the loss of childcare if that is one of the benefits the employer provides. An example of community sacrifice is leaving a neighbourhood in which all the neighbours help one another or leaving a highly regarded neighbourhood school (Holtom & O'Neil, 2004).

6.1.3.5   *Organisational Commitment Scale (OCS)*

The high scores for the continuance commitment variable suggest that the participants seemed to be more focused on the costs, consequences and risks of leaving the organisation. This could imply that individuals were staying with their current organisations because they felt the economic risks and costs would be too high if they decided to leave their current organisation. According to Spector (2008), continuance commitment is produced by the benefits accrued from working for the organisation and by the lack of available alternative jobs.

However, the participants' feelings of normative commitment were slightly out of balance, which implies that they may not have experienced any obligation to continue working at a specific organisation. The lower scores on normative commitment in this study concurred the findings of Ferreira *et al.* (2010). These findings in the present study suggest that participants also felt a weaker sense of obligation towards their employer, based on their own values being met or favours received from the organisation.

6.2   CORRELATIONAL STATISTICS

In order to investigate the relationship between the variables in this study, the descriptive statistics had to be transformed into explanatory (correlational) statistics to determine whether the results provided adequate evidence in support of research hypotheses H01 and Ha1.

6.2.1   Reporting of the Pearson product moment correlation coefficients between variables

Since the data were parametric, the inter-relationships between the variables were computed using Pearson's product moment correlations. These correlations allowed the researcher to identify the direction and strength of the relationship between each of the variables. In terms of statistical significance, it was decided to set the value at a 95% confidence interval level ($p \leq$ .05) and the practical size at $r \geq .30 \geq .50$ (medium to large effect) (Tredoux & Durrheim, 2002).

6.2.1.1   Reporting of the Pearson product moment correlation coefficients (PCRI & JES)

Table 6.11 indicates the Pearson product moment correlations obtained for the PCRI and JES.

- The results indicate that there was a significant positive relationship between the three career preference variables, stability/expertise (r = .14; small effect; $p \leq$ .05), managerial (r = .17; small effect; $p \leq$ .05) and variety/creativity (r = .15; small effect; $p \leq$ .05), and fit.

- A significant positive relationship was evident between the career preference variables of managerial (r = .14; small effect; $p \leq .05$) and links and between managerial (r = .13; small effect; $p \leq .05$) and sacrifice.

- The results indicate that there was a significant positive relationship between one career value's variable, namely growth/development (r = .12; small effect; $p \leq .05$), and fit. There did not seem to be any relationship between any of the career value variables and the JES variables, links and sacrifice.

- The results indicate that there was a significant positive relationship between the two career enabler variables, practical/creative skills (r = .16; small effect; $p \leq .05$) and self/other skills (r = .24; small effect; $p \leq .05$), and fit.

- A significant positive relationship was evident between two of the career enabler variables, namely practical/creative skills (r = .11; small effect; $p \leq .05$) and self/other skills (r = .12; small effect; $p \leq .05$), and links.

- A significant positive relationship was evident between two of the career enabler variables, namely practical/creative skills (r = .12; small effect; $p \leq .05$) and self/other skills (r = .14; small effect; $p \leq .05$), and the JES variable, sacrifice.

- The results indicate that there was a significant positive relationship between the career driver variable, career directedness (r = .25; small effect; $p \leq .05$) and the JES variable, fit.

- A significant positive relationship was evident between the career driver variables, career directedness (r = .16; small effect; $p \leq .05$) and links.

- A significant positive relationship was evident between one of the career driver variables, namely career directedness (r = .14; small effect; $p \leq .05$), and the JES variable, sacrifice.

- The results indicate that there was a significant positive relationship between the career hamoniser variables, self-esteem (r = .20; small effect; $p \leq .05$), behavioural adaptability (r = .22; small effect; $p \leq .05$), emotional literacy (r = .17; small effect; $p \leq .05$) and social connectivity (r = .18; small effect; $p \leq .05$), and the JES variable, fit.

- A significant positive relationship was evident between the career harmoniser variable, self-esteem (r = .14; small effect; $p \leq .05$) and the JES variable, links.

- A significant positive relationship was evident between the career harmoniser variables, self-esteem (r = .11; small effect; $p \leq .05$) and behavioural adaptability (r = .11; small effect; $p \leq .05$), and the JES variable, sacrifice.

Table 6.11
Pearson Product-Moment Correlations: PCRI and JES (n = 355)

PCRI Scale		Fit	Links	Sacrifice
Career Preference	r	.15+	.09	.10*
	p	.00**	.09	.05
Stability/Expertise	r	.14+	.02	.04
	p	.01**	.69	.48
Managerial	r	.17+	.14+	.13+
	p	.00**	.11*	.12*
Variety/Creativity	r	.15+	.04	.04
	p	.01**	.46	.45
Independence/Autonomy	r	.04	.07	.10
	p	.47	.17	.06
Career Values		.10	-.01	-.01
		.07	.90	.93
Growth/Development	r	.12+	-.02	-.02
	p	.02*	.74	.72
Authority/Influence	r	.05	.00	.01
	p	.32	.95	.90
Career Enablers		.22+	.13+	.14+
		.00**	.02*	.01**
Practical/Creative skills	r	.16+	.11+	.12+
	p	.00**	.05*	.03*
Self/Other skills	r	.24+	.12+	.14+
	p	.00**	.02*	.01*
Career Drivers		.19+	.07	.07
		.00**	.17	.22
Career Purpose	r	.10	-.01	-.01
	p	.06	.79	.89
Career Directedness	r	.25+	.16+	.14+
	p	.00**	.00**	.01**
Career Venturing	r	.10	.03	.01
	p	.07	.61	.79
Career Harmonisers		.24+	.11+	.11+
		.00**	.05*	.05*
Self-esteem	r	.20+	.14+	.11+
	p	.00**	.01**	.03*
Behavioural Adaptability	r	.22+	.09	.11+
	p	.00**	.10	.04*
Emotional literacy	r	.17+	.07	.08
	p	.00**	.21	.15
Social Connectivity	r	.18+	.03	.02
	p	.00**	.58	.74

***p ≤ .001 **p ≤ .01 *p ≤ .05 +r ≥ .29; ++r ≥ .30 ≤ .49

Based on the data in Table 6.11, specific relationships between the PCRI variables and the JES variables could be derived. The positive relationships observed between the career preference variables (stability/expertise, managerial and variety/creativity) and fit suggest that the participants who preferred an organisational setting in which they experienced stability, were in charge and could be creative, seemed to feel a stronger sense of belonging towards the organisation and community. A further positive relationship was observed between the managerial career preference and links, which suggests that the participants who were in a managerial position in the organisation may have formed tight links in the organisation and community, which would ensure that they were embedded in their career. The positive relationship between career preference (managerial) and sacrifice suggests that individuals in a managerial position might find it easier to break associations with the organisation (i.e. what people would have to give up if they were to leave their current position or change occupation).

Similarly, the positive relationship observed between the career value variable (growth/development) and fit suggests that individuals who develop in a job or career may feel a stronger sense of belonging towards the organistion. This means that when an individual's job or occupation meshes with or complements other areas of his or her life as well, it enhances his or her job embeddedness in an organisation (Holtom & O'Neil, 2004).

The positive relationships observed between the career enabler variables (practical/creative skills and self/other skills), fit, links and sacrifice suggest that the participants who develop specific skills may feel a better fit in the organisation, form better connections with the organisation and would be willing to do anything for the organisation. The greater the fit, the number of links and the degree of sacrifice, the greater the forces towards job embeddedness will be (Holtom & O'Neil, 2004).

The positive relationships observed between the career driver variables (career directedness), fit, links and sacrifice suggest that participants who know where they are going in their career path form better fits, links and sacrifices with the organisation. The relationship between career directedness and job embeddedness (fit, links and sacrifice) may enhance an individual's job

embeddedness, and he or she will remain with the specific organisation. The findings of this study correspond with the those of Mitchell *et al.* (2001a).

The positive relationships observed between the career harmoniser variables (self-esteem, behavioural adaptability, emotional literacy and social connectivity) and fit suggest that participants with a highly developed self-esteem, who can adapt their behaviours, know how to control their emotions and can connect well with others socially may experience stronger feelings of belonging in an organisation. Furthermore, the positive relationships between the career harmoniser variable (self-esteem), links and sacrifice suggest that individuals with a positive highly developed self-esteem may form better links with the organisation and community and experience a higher sense of sacrificing what is important to him or her. An individual with strong links and high levels of sacrifice will choose to remain with the organisation, and in turn this will have a positive effect on the retention of talented staff (Mitchell *et al.,* 2001a).

6.2.1.3 *Reporting of the Pearson product moment correlation coefficients (PCRI & OCS)*

Table 6.12 indicates the Pearson product moment correlations obtained for the PCRI and OCS.

- The results indicated a significant positive relationship between the career preference variable, managerial (r = .11; small effect; p ≤ .05), and affective commitment.
- There was a significant positive relationship between the career preference variable, managerial (r = .11; small effect; p ≤ .05), and normative commitment.
- None of the career values variables showed a significant relationship with continuance commitment, while none of the career values variables showed a significant relationship with commitment.
- The results indicated a significant positive relationship between the career enabler variable, practical/creative skills (r = .11; small effect; p ≤ .05), and affective commitment.
- None of the career enabler variables showed a significant relationship with continuance and normative commitment.

- The results indicated a significant negative relationship between the career driver variable, career venturing (r = -.11; small effect; $p \leq .05$), and continuance commitment.
- A significant negative relationship was evident between the career driver variable, career purpose (r = -.10; small effect; $p \leq .05$) and normative commitment. None of the career driver variables showed a significant positive relationships with affective commitment.
- The results indicated a significant positive relationship between the career harmoniser variable, self-esteem (r = .10; small effect; $p \leq .05$), and affective commitment.
- None of the the career harmoniser variables showed a significant relationship with continuance and normative commitment.

Table 6.12

Pearson Product-Moment Correlations: PCRI and OCS (n = 355)

PCRI Scale		Affective Commitment	Continuance Commitment	Normative Commitment
Career Preference	r	.07	.01	.01
Stability/Expertise	r	-.02	-.06	-.03
Managerial	r	.11* +	.06	.11* +
Variety/Creativity	r	.01	-.03	-.05
Independence/Autonomy	r	.09	.05	-.02
Career Values	r	-.02	-.02	.09
Growth/Development	r	-.03	-.02	-.05
Authority/Influence	r	-.01	.05	-.09
Career Enablers		.10	-.08	-.02
Practical/Creative skills	r	.11* +	-.05	-.00
Self/Other skills	r	.07	-.09	-.03
Career Drivers	r	.05	-.11* +	-.07
Career Purpose	r	.00	-.06	-.10* +
Career Directedness	r	.04	-.09	-.02
Career Venturing	r	.08	-.11* +	-.05
Career Harmonisers	r	.04	-.06	-.01
Self-esteem	r	.10* +	-.05	.02
Behavioural adaptability	r	.01	-.07	.01
Emotional literacy	r	.04	-.02	-.00
Social connectivity	r	-.05	-.06	-.06

***$p \leq .001$ **$p \leq .01$ *$p \leq .05$ +$r \geq .29$; ++$r \geq .30 \leq .49$

Based on the data in Table 6.12, the specific relationships between the PCRI sub-scales and the OCS scales can be derived. The positive relationship observed between the career preference variable (managerial), affective and normative commitment, suggests that the participants who valued managerial career preference, which includes freedom and autonomy, appeared to feel emotionally attached to the organisation. Long-term goals or objectives can be set by the participant regarding his or her career, based on his or her career preference (Coetzee, 2008). This would indicate that an individual's planning of his or her career may be affected by his or her career preference. This relationship further suggests that an individual in a mangerial position may think twice about the costs involved when faced with a decision to leave the organisation. This implies that an individual in a managerial position may be more normatively committed to an organisation.

The positive relationship observed between the career enabler variable (practical/creative skills) and affective commitment suggests that participants who contribute practical and creative skills would be more likely to be emotionally attached to the organisation. No significant relationship was evident between the career enabler variables, continuance and normative commitment.

The negative relationship observed between the career driver variable (career purpose) and normative commitment suggests that individuals who know where they are going in their career would probably remain with the organisation because they experience a feeling of obligation and a sense of duty towards the organisation. The negative relationship observed between the career driver variable (career venturing) and continuance commitment suggests that participants who like to seek better opportunities may be more likely to leave the organisation because they do not see any risks involved in leaving for a better opportunity. Continuance commitment can be regarded as an influential connection to an organisation, where the individual's connection to the organisation is based on the measurement of economic profits gained (Beck & Wilson, 2000).

The positive relationship observed between the career harmoniser variable (self-esteem) and affective commitment suggests that participants with highly developed self-esteem may feel a

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stonger emotional connection towards the organisation. No significant relationship was evident between the career harmoniser variables, continuance and normative commitment.

6.2.1.5 Reporting of the Pearson product moment correlation coefficients (PCRI & CAI)

Table 6.13 indicates the Pearson product moment correlations obtained for the PCRI and CAI.

- The results indicate that there was a significant positive relationship between four of the career preference variables, namely stability/expertise ($r = .39$; medium effect; $p \leq .05$), managerial ($r = .30$; medium effect; $p \leq .05$), variety/creativity ($r = .43$; medium effect; $p \leq .05$) and freedom/autonomy ($r = .26$; small effect; $p \leq .05$), and concern.

- A significant positive relationship was evident between four of the career preference variables, namely stability/expertise ($r = .32$; medium effect; $p \leq .05$), managerial ($r = .25$; small effect; $p \leq .05$), variety/creativity ($r = .35$; medium effect; $p \leq .05$) and freedom/autonomy ($r = .26$; small effect; $p \leq .05$), and control.

- A significant positive relationship was evident between four of the career preference variables, namely stability/expertise ($r = .30$; mediumeffect; $p \leq .05$), managerial ($r = .25$; small effect; $p \leq .05$), variety/creativity ($r = .40$; medium effect; $p \leq .05$) and freedom/autonomy ($r = .29$; small effect; $p \leq .05$), and curiosity.

- A significant positive relationship was also evident between four of the career preference variables, stability/expertise ($r = .32$; medium effect; $p \leq .05$), managerial ($r = .24$; small effect; $p \leq .05$), variety/creativity ($r = .37$; medium effect; $p \leq .05$) and freedom/autonomy ($r = .28$; small effect; $p \leq .05$), and cooperation.

- A significant positive relationship was evident between four of the career preference variables, namely stability/expertise ($r = .34$; medium effect; $p \leq .05$), managerial ($r = .22$; small effect; $p \leq .05$), variety/creativity ($r = .44$; medium effect; $p \leq .05$) and freedom/autonomy ($r = .30$; medium effect; $p \leq .05$), and confidence.

- The results indicate that there was a significant positive relationship between two of the career value variables, namely growth/development ($r = .40$; medium effect; $p \leq .05$) and authority/influence ($r = .33$; medium effect; $p \leq .05$), and concern.

- A significant positive relationship was evident between two of the career value variables, namely growth/development (r = .35; medium effect; p ≤ .05) and authority/influence (r = .30; medium effect; p ≤ .05), and control.

- A significant positive relationship was evident between two of the career value variables, namely growth/development (r = .35; medium effect; p ≤ .05) and authority/influence (r = .29; small effect; p ≤ .05), and curiosity. There was also a significant positive relationship between two of the career value variables, namely growth/development (r = .37; medium effect; p ≤ .05) and authority/influence (r = .27; small effect; p ≤ .05), and cooperation.

- A significant positive relationship was evident between two of the career value variables, namely growth/development (r = .36; medium effect; p ≤ .05) and authority/influence (r = .33; medium effect; p ≤ .05), and confidence.

- The results indicate that there was a significant positive relationship between two of the career enabler variables, namely practical/creative skills (r = .40; medium effect; p ≤ .05) and self/other skills (r = .61; large effect; p ≤ .05), and concern.

- A significant positive relationship was evident between two of the career enabler variables, namely practical/creative skills (r = .36; medium effect; p ≤ .05) and self/other skills (r = .56; large effect; p ≤ .05), and control.

- A significant positive relationship was evident between two of the career enabler variables, namely practical/creative skills (r = .39; medium effect; p ≤ .05) and self/other skills (r = .55; large effect; p ≤ .05), and curiosity.

- A significant positive relationship was evident between two of the career enabler variables, namely practical/creative skills (r = .37; medium effect; p ≤ .05), self/other skills (r = .50; large effect; p ≤ .05), and cooperation.

- A significant positive relationship was evident between two of the career enabler variables, namely practical/creative skills (r = .46; medium effect; p ≤ .05) and self/other skills (r = .62; large effect; p ≤ .05), and confidence.

- The results indicate that there was a significant positive relationship between three of the career driver variables, namely career purpose (r = .54; large effect; p ≤ .05), career directedness (r = .55; large effect; p ≤ .05) and career venturing (r = .44; medium effect; p ≤ .05), and concern.

- A significant positive relationship was evident between three of the career driver variables, namely career purpose ($r = .48$; medium effect; $p \leq .05$), career directedness ($r = .45$; medium effect; $p \leq .05$) and career venturing ($r = .39$; medium effect; $p \leq .05$), and control.

- A significant positive relationship was evident between three of the career driver variables, namely career purpose ($r = .45$; medium effect; $p \leq .05$), career directedness ($r = .48$; medium effect; $p \leq .05$) and career venturing ($r = .43$; medium effect; $p \leq .05$), and curiosity.

- A significant positive relationship was evident between three of the career driver variables, namely career purpose ($r = .37$; medium effect; $p \leq .05$), career directedness ($r = .39$; medium effect; $p \leq .05$) and career venturing ($r = .30$; medium effect; $p \leq .05$), and cooperation.

- A significant positive relationship was evident between three of the career driver variables, namely career purpose ($r = .51$; large effect; $p \leq .05$), career directedness ($r = .51$; large effect; $p \leq .05$) and career venturing ($r = .36$; medium effect; $p \leq .05$), and confidence.

- The results indicate that there was a significant positive relationship between four of the career harmoniser variables, namely self-esteem ($r = .48$; medium effect; $p \leq .05$), behavioural adaptability ($r = .57$; large effect; $p \leq .05$), emotional literacy ($r = .41$; medium effect; $p \leq .05$) and social connectivity ($r = .50$; large effect; $p \leq .05$), and concern.

- A significant positive relationship was evident between four of the career harmoniser variables, namely self-esteem ($r = .47$; medium effect; $p \leq .05$), behavioural adaptability ($r = .61$; large effect; $p \leq .05$), emotional literacy ($r = .36$; medium effect; $p \leq .05$) and social connectivity ($r = .48$; medium effect; $p \leq .05$), and control.

- A significant positive relationship was evident between four of the career harmoniser variables, namely self-esteem ($r = .45$; medium effect; $p \leq .05$), behavioural adaptability ($r = .58$; large effect; $p \leq .05$), emotional literacy ($r = .39$; medium effect; $p \leq .05$) and social connectivity ($r = .46$; medium effect; $p \leq .05$), and curiosity.

- A significant positive relationship was evident between four of the career harmoniser variables, namely self-esteem ($r = .39$; medium effect; $p \leq .05$), behavioural adaptability ($r = .55$; large effect; $p \leq .05$), emotional literacy ($r = .33$; medium effect; $p \leq .05$) and social connectivity ($r = .52$; large effect; $p \leq .05$), and cooperation.

- A significant positive relationship was evident between four of the career harmoniser variables, namely self-esteem ($r = .48$; medium effect; $p \leq .05$), behavioural adaptability ($r = .58$; large effect; $p \leq .05$), emotional literacy ($r = .36$; medium effect; $p \leq .05$) and social connectivity ($r = .50$; large effect; $p \leq .05$), and confidence.

Table 6.13

Pearson Product-Moment Correlations: PCRI and CAI (n = 355)

PCRI scale		Concern	Control	Curiosity	Cooperation	Confidence
Career preference		.44**	.39**	.40**	.39**	.42**
		++	++	++	++	++
Stability/expertise	r	.39**	.32**	.30**	.32**	.34**
		++	++	++	++	++
Managerial	r	.30**	.27**	.25**	.24**	.22**
		++	+	+	+	+
Variety/creativity	r	.43**	.35**	.40**	.37**	.44**
		++	++	++	++	++
Freedom/autonomy	r	.26**	.26**	.29**	.28**	.30**
		+	+	+	+	++
Career values	r	.42**	.38**	.37**	.36**	.40**
		++	++	++	++	++
Growth/development	r	.40**	.35**	.35**	.37**	.36**
		++	++	++	++	++
Authority/influence	r	.33**	.30**	.29**	.27**	.33**
		++	++	+	+	++
Career enablers		.57**	.53**	.54**	.49**	.61**
		+++	+++	+++	++	+++
Practical/creative skills	r	.40**	.36**	.39**	.37**	.46**
		++	++	++	++	++
Self/other skills	r	.61**	.56**	.55**	.50**	.62**
		+++	+++	+++	+++	+++
Career drivers	r	.62**	.53**	.55**	.43**	.56**
		+++	+++	+++	++	+++
Career purpose	r	.54**	.48**	.45**	.37**	.51**
		+++	++	++	++	+++
Career directedness	r	.55**	.45**	.48**	.39**	.51**
		+++	++	++	++	+++
Career venturing	r	.44**	.39**	.43**	.30**	.36**
		++	++	++	++	++
Career harmonisers	r	.62**	.61**	.59**	.56**	.61**
		+++	+++	+++	+++	+++
Self-esteem	r	.48**	.47**	.45**	.39**	.48**
		++	++	++	++	++
Behavioural Adaptability	r	.57**	.61**	.58**	.55**	.58**
		+++	+++	+++	+++	+++
Emotional literacy	r	.41**	.36**	.39**	.33**	.36**
		++	++	++	++	++
Social Connectivity	r	.50**	.48**	.46**	.52**	.50**
		+++	++	++	+++	+++

*** p ≤ .001 **p ≤ .01 *p ≤ .05 +r ≥ .10; ++r ≥ .30; +++r ≥ .50

Based on the data in Table 6.13, the specific relationships between the PCRI sub-scales and the CAI scales can be derived. The positive relationships observed between the career preference variables (stability/expertise, managerial, variety/creativity and freedom/autonomy) and all the CAI variables (concern, control, curiosity, cooperation and confidence) suggest that individuals who prefer a work environment that provides stability, variety, freedom and responsibility may experience strong feelings of career adaptability in their career or occupation. In the ever-changing society, employees require the psychological resources and self-detemination capabilities to manage new career-related situations, which may include job loss and finding re-employment (Savickas, 1997, 2002, 2005).

The positive relationships between the career value variables (growth/development and authority/influence) and all the CAI variables (concern, control, curiosity, cooperation and confidence) suggest that individuals who strive towards growth, development, authority and influence in their careers or occupations may be capable of facing, tracking or acknowledging changing career roles and handling career shifts effectively. This finding corresponds with those of Savickas (1997, 2002, 2005).

The positive relationships observed between the career enabler variables (practical/creative skills and self/other skills) and all the CAI variables (concern, control, curiosity, cooperation and confidence) suggest that individuals who need specific skills in order to perform or function in their career or occupation can adjust to changes in their career, which means they are fully career adaptable. Career adaptability is explained as readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments promoted by change in work and working conditions (Duffy, 2010; Savickas, 1997).

The positive relationships observed between the career driver variables (career purpose, career directedness and career venturing) and all the CAI variables (concern, control, curiosity, cooperation and confidence) suggest that individuals who have career purpose and direction and seek better opportunities may experience feelings of self-efficacy or the apparent capability

to enable them to successfully perform the activities necessary to accomplish the career goals they set.

The positive relationships observed between the career harmoniser variables (self-esteem, behavioural adaptability, emotional literacy and social connectivity) and all the CAI variables (concern, control, curiosity, cooperation and confidence) suggest that individualswith well-developed self-esteem are able to adapt their behaviour, express their emotions and form strong connections with others at a social level, may be fully career adaptable in the context of their career or occupation.

Hence if an individual's psychological career resources are properly developed, he or she will be more inclined to be career adaptable in his or her career or occupation. Such an individual may have a tendency to consider life in a time perspective anchored to hope and optimism, be curious about possible selves and social opportunities which will increase his or her active exploration behaviours. A career adaptable individual may stand by his or her own aspirations and objectives, even in the face of obstacles and barriers and he or she may be committed to life projects instead of particular job means. This means that career indecision should not necessarily be removed because it actually generates new possibilities and experimentations that allow individuals to be active, even in uncertain situations (Savickas, 2005).

6.2.1.7 Reporting of the Pearson product moment correlation coefficients (PCRI & PVS-II)

Table 6.14 indicates the Pearson product moment correlations obtained for the PCRI and PVS-II.

- The results indicate that there was a significant negative relationship between two of the career preference variables, namely stability/expertise (r = -.11; small effect; $p \leq .05$) and variety/creativity (r = -.18; small effect; $p \leq .05$), and commitment.
- A significant negative relationship was evident between two of the career preference variables, namely stability/expertise (r = -.11; small effect; $p \leq .05$) and variety/creativity (r = -.15; small effect; $p \leq .05$), and control.

- A significant positive relationship was evident between two of the career preference variables, namely managerial (r = .24; small effect; $p \leq$ .05) and freedom/autonomy (r = .11; small effect; $p \leq$ .05), and challenge.

- The results indicate that there was a significant negative relationship between one of the career value variables, namely growth/development (r = -.13; small effect; $p \leq$ .05), and commitment.

- A significant negative relationship was evident between one of the career value variables, namely growth/development (r = -.13; small effect; $p \leq$ .05), and control.

- A significant positive relationship was evident between one of the career value variables, namely authority/influence (r = .12; small effect; $p \leq$ .05), and challenge.

- The results indicate that there was a significant negative relationship between one of the career enabler variables, namely self/other skills (r = -.21; small effect; $p \leq$ .05), and commitment.

- A significant negative relationship was evident between two of the career enabler variables, namely practical/creatice skills (r = -.11; small effect; $p \leq$ .05) and self/other skills (r = -.13; small effect; $p \leq$ .05), and control.

- None of the career enabler variables showed a significant relationship on challenge.

- The results indicate that there was a significant negative relationship between two of the career driver variables, namely career purpose (r = -.19; small effect; $p \leq$ .05) and career directnedness (r = -.18; small effect; $p \leq$ .05), and commitment.

- A significant negative relationship was evident between two of the career driver variables, namely career purpose (r = -.12; small effect; $p \leq$ .05) and career directedness (r = -.17; small effect; $p \leq$ .05), and control. None of the career driver variables showed a significant relationship on challenge.

- The results indicate that there was a significant negative relationship between four of the career harmoniser variables, namely self-esteem (r = -.13; small effect; $p \leq$ .05), behavioural adaptability (r = -.22; small effect; p $\leq$ .05), emotional literacy (r = -.15; small effect; $p \leq$ .05) and social connectivity (r = -.23; small effect; $p \leq$ .05), and commitment.

- A significant negative relationship was evident between three of the career harmoniser variables, namely behavioural adaptability (r = -.22; small effect; $p \leq$ .05), emotional literacy (r = -.15; small effect; $p \leq$ .05) and social connectivity (r = -.21; small effect; $p \leq$ .05), and control.

- None of the career driver variables showed a significant relationship on challenge.

Table 6.14

Pearson Product-Moment Correlations: PCRI and PVS-II (n = 355)

PCRI Scale		Commitment	Control	Challenge
Career Preference	r	-.04	-.03	.13* ++
Stability/Expertise	r	-.11* +	-.11* +	.07
Managerial	r	.04	.09	.24** +
Variety/Creativity	r	-.18** +	-.15** +	-.04
Freedom/Autonomy	r	.07	.04	.11* +
Career Values	r	-.11* +	-.11* +	.10
Growth/Development	r	-.13* +	-.13* +	.04
Authority/Influence	r	-.06	-.06	.12* +
Career Enablers	r	-.17** +	-.45** ++	-.01
Practical/Creative skills	r	-.09	-.11* +	-.02
Self/Other skills	r	-.21** +	-.13** +	-.01
Career Drivers	r	-.18** +	-.12* +	.02
Career Purpose	r	-.19** +	-.12* +	.05
Career Directedness	r	-.18** +	-.17** +	-.02
Career Venturing	r	-.07	-.00	.03
Career Harmonisers	r	-.23** +	-.20** +	-.04
Self-esteem	r	-.13* +	-.07	.08
Behavioural Adaptability	r	-.22** +	-.22** +	-.09
Emotional literacy	r	-.15** +	-.15** +	-.02
Social Connectivity	r	-.23** +	-.21** +	-.08

***$p \le .001$ **$p \le .01$ *$p \le .05$ +$r \ge .10$; ++$r \ge .30$; +++$r \ge .50$

Based on the data provided in Table 6.14, the specific relationships between the PCRI subscales and the PVS-II scales can be derived. The negative relationship between the career preference variables (stability/expertise and variety/creativity) and commitment suggests that individuals who favour a career that is stable and provides variety and creativity are less committed to feeling involved in the activities of their lives. The negative relationship between the career preference variables (stability/expertise and variety/creativity) and control suggest if an individual enjoys a stable career that provides room for creativity and variety, this may have a negative impact on his or her desire to continue to have an influence on the outcomes around him or her. The positive relationship between the career preference variables (managerial and freedom/autonomy) and challenge suggest that individuals who find themselves in a managerial position in the organisation, which allows them to experience freedom and autonomy, may be high in challenge. An individual high in challenge is motivated to become a catalyst in his or her environment and practise responding to the unexpected. Challenge demonstrates an expectation that life is unpredictable, that changes will encourage personal development and that potentially stressful situations are evaluated as thrilling and inspiring instead of intimidating (Maddi, 2006).

The negative relationships between the career value variable (growth/development), commitment and control suggest that individuals who grow and develop in their career or occupation may have a negative effect on their ability to involve themselves fully in the many situations of life, including work, family, interpersonal relationships and social institutions. Commitment engenders feelings of excitement along with a strong sense of community and motivation to remain engaged during difficult times (Kobassa, 1982, 1985). The positive relationship between the career value variable (authority/influence) and challenge suggests that individuals who strive towards a career that provides authority and influence may ensure that these are suitable to more thoroughly explore their surroundings in an ongoing search for new and interesting experiences. As a result, they know where to turn for resources to help them cope with stress. Highly challenged individuals are characterised by cognitive flexibility and tolerance for ambiguity. This allows them to more easily integrate unexpected or otherwise stressful events (Kobassa, 1982; Maddi, 1999).

The negative relationship between the career enabler variable (practical/creative skills) and control suggests that individuals who need practical and creative skills in order to function optimally in their career or occupation may be less motivated to engage in effortful coping because it predisposes the individual to view stressors as changeable. Hardy individuals feel that attempting to control or change a demanding or undesirable situation (instead of fatalistically accepting the outcome) falls within their scope of personal responsibility (Maddi, 2002). The negative relationship between the career enabler variable (self/other skills), commitment and control suggests that individuals who need self or other skills in order to perform their job may be less committed and less likely to be able to reflect on how to turn situations to their advantage instead of taking things at face value.

The negative relationship between the career driver variables (career purpose and career directedness), commitment and control suggest that individuals with a strong sense of career purpose and direction may be less likely to view potentially stressful situations as meaningful and interesting (commitment) and see stressors as changeable (control).

The negative relationship between the career harmoniser variable (self-esteem) and commitment suggests that individuals with a highly developed self-esteem may be less likely to become involved in stressful events and convert them into something interesting and meaningful. The negative relationship between the career harmoniser vaiables (behavioural adaptability, emotional literacy and social connection), commitment and control suggest that individuals who are able to adapt their behaviour, express their emotions and form strong connections with others at a social level may be less likely to believe that they can influence the course of events. Commitment refers to those individuals who are committed to and feel deeply involved in the activities of their lives, where control reflects on an individual's desire to continue to have an influence on the outcomes around him or her, no matter how difficult the situation becomes (Maddi, 2006).

6.2.1.9 Reporting of the Pearson product moment correlation coefficients (CAI & JES)

Table 6.15 resports the Pearson product moment correlations obtained for the CAI and JES.

- The results indicate that there was a significant positive relationship between concern ($r = .24$; small effect; $p \leq .05$) and fit.
- A significant positive relationship was evident between concern ($r = .12$; small effect; $p \leq .05$) and links.
- A significant positive relationship was evident between concern ($r = .11$; small effect; $p \leq .05$) and sacrifice.
- The results indicate that there was a significant positive relationship between control ($r = .24$; small effect; $p \leq .05$) and fit.
- A significant positive relationship was evident between control ($r = .14$; small effect; $p \leq .05$) and links.
- A significant positive relationship was evident between control ($r = .13$; small effect; $p \leq .05$) and sacrifice.
- The results indicate that there was a significant positive relationship between curiosity ($r = .22$; small effect; $p \leq .05$) and fit.
- A significant positive relationship was evident between curiosity ($r = .12$; small effect; $p \leq .05$) and links.
- A significant positive relationship was evident between curiosity ($r = .12$; small effect; $p \leq .05$) and sacrifice.
- The results indicate that there was a significant positive relationship between cooperation ($r = .20$; small effect; $p \leq .05$) and fit.
- No significant relationships were found between cooperation, links and sacrifice.
- The results indicate that there was a significant positive relationship between confidence ($r = .24$; small effect; $p \leq .05$) and fit.
- A significant positive relationship was evident between confidence ($r = .10$; small effect; $p \leq .05$) and links.
- A significant positive relationship was evident between confidence ($r = .18$; small effect; $p \leq .05$) and sacrifice.

Table 6.15

Pearson Product-Moment Correlations: CAI and JES (n = 355)

Career Adaptability		Fit	Links	Sacrifice
Concern	r	.24**	.12*	.11*
		+	+	+
Control	r	.24**	.14*	.13*
		+	+	+
Curiosity	r	.22**	.12*	.12*
		+	+	+
Cooperation	r	.20**	.05	.06
		+		
Confidence	r	.24**	.10*	.18*
		+	+	+

***p ≤ .001 **p ≤ .01 *p ≤ .05 +r ≥ .10; ++r ≥ .30; +++r ≥ .50

6.2.1.10 Interpretation of the Pearson product moment correlation coefficients (CAI & JES)

Based on the data provide in Table 6.15, the specific relationships between the CAI sub-scales and the JES scales can be derived. The positive associations observed between the CAI variables and fit suggest that individuals who show concern, control, curiosity, cooperation and confidence in their career or occupation may experience a stronger feeling of belonging in an organisation, which in turn may ensure that the they remain with a specific organisation.

The positive relationship between the CAI variables and links suggests that individuals who show concern, control, curiosity and confidence in their careers or occupation may form stronger links or connections with the organisation and the community.

The positive relationship between the CAI variables and sacrifice suggest that individuals with a strong sense of concern, control, curiosity and confidence can probably break the links formed with the organisation and community with ease. An individual's turnover intentions are closely related to the notion of job and occupational embeddedness (Coetzee & Schreuder, 2010).

6.2.1.11 Reporting of the Pearson product moment correlation coefficients (CAI & OCS)

Table 6.16 indicates the Pearson product moment correlations obtained for the CAI and OCS.

- The results indicate that there was a significant negative relationship between concern (r = -.10; small effect; $p \le .05$) and continuance commtiment.
- No other significant relationships were evident between the career adaptability variables and the organisational commitment variables.

Table 6.16

Pearson Product-Moment Correlations: CAI and OCS (n = 355)

Career Adaptability		Affective Commitment	Continuance Commitment	Normative Commitment
Concern	r	-.00	-.10* +	-.10
Control	r	-.03	-.09	.01
Curiosity	r	.01	-.06	.06
Cooperation	r	.01	-.06	.01
Confidence	r	.02	-.06	-.03

***$p \le .001$ **$p \le .01$ *$p \le .05$ +$r \ge .10$; ++$r \ge .30$; +++$r \ge .50$

6.2.1.12 Interpretation of the Pearson product moment correlation coefficients (CAI & OCS)

Based on the data provided in Table 6.16, the specific relationships between the CAI scales and the OCS scales can be derived. The negative relationship observed between the CAI variable concern and continuance commitment suggest that individuals who are highly concerned in their career or occupation may be less likely to remain with the organisation. The reason for this could be that the individual is concerned about the costs involved when making a decision to leave the organisation. Meyer and Allen (1991) indicated that individuals whose most important connection to the organisation is based on continuance commitment stay because they need to.

Table 6.17 indicates the Pearson product moment correlations obtained for the CAI and PVS-II.

- The results indicate that there was a significant negative relationship between concern (r = -.19; small effect; $p \leq$ .05) and commitment.

- A significant negative relationship was evident between concern (r = -.14; small effect; $p \leq$ .05) and control.

- No significant relationship was found between concern and challenge.

- The results indicate that there was a significant negative relationship between control (r = -.28; small effect; $p \leq$ .05) and commitment.

- A significant negative relationship was evident between control (r = -.18; small effect; $p \leq$ .05) and hardi-control.

- No significant relationship was found between control and challenge.

- The results indicate that there was a significant negative relationship between curiosity (r = -.15; small effect; $p \leq$ .05) and commitment.

- A significant negative relationship was evident between curiosity (r = -.12; small effect; $p \leq$ .05) and control.

- No significant relationship was found between curiosity and challenge.

- The results indicate that there was a significant negative relationship between cooperation (r = -.13; small effect; $p \leq$ .05) and commitment.

- A significant negative relationship was evident between cooperation (r = -.11; small effect; $p \leq$ .05) and control.

- No significant relationship was found between cooperation and challenge.

- The results indicate that there was a significant negative relationship between confidence (r = -.24; small effect; $p \leq$ .05) and commitment.

- A significant negative relationship was evident between confidence (r = -.24; small effect; $p \leq$ .05) and control.

- No significant relationship was found between confidence and challenge.

Table 6.17

Pearson Product-Moment Correlations: CAI and PVS-II (n = 355)

Career Adaptability		Commitment	Control	Challenge
Concern	r	-.19**	-.14**	.03
		+	+	
Control	r	-.28**	-.18**	.02
		+	+	
Curiosity	r	-.15*	-.12*	.06
		+	+	
Cooperation	r	-.13*	-.11*	.02
		+	+	
Confidence	r	-.24**	-.24**	-.03
		+	+	

***$p \leq .001$ **$p \leq .01$ *$p \leq .05$ +$r \geq .10$; ++$r \geq .30$; +++$r \geq .50$

6.2.1.14   Interpretation of the Pearson-product moment correlation coefficients (CAI & PVS-II)

Based on the data provided in Table 6.17, the specific relationships between the CAI scales and the PVS-II scales can be derived. The negative relationships observed between the CAI variables and the PVS-II scales (commitment and control) suggest that the individuals who show high concern, control, curiosity, cooperation and confidence in their careers or occupations may be less likely to view stressful events as meaningful or interesting. Adaptability can be regarded as an individual's broad ability to adjust to changes or barriers in his or her career (Rottinghaus *et al.*, 2005; Savickas, 1997). The findings also suggest that individuals who are fully career adaptable may be less likely to control stressful events in their careers or lives.

6.2.1.15   Reporting of the Pearson product moment correlation coefficients (PVS-II & JES)

Table 6.18 provides the Pearson product moment correlations obtained for the PVS-II and JES.

- The results indicate that there was a significant negative relationship between commitment ($r = -.16$; small effect; $p \leq .05$) and fit.
- No significant relationships were found between commitment, links and sacrifice.

- The results indicate that there was a significant negative relationship between control (r = -.11; small effect; $p \leq .05$) and fit.
- No significant relationships were found between commitment, links and sacrifice.
- No significant relationships were found between the hardiness variables and the job embeddedness variables.

Table 6.18

Pearson Product-Moment Correlations: PVS-II and JES (n = 355)

Hardiness		Fit	Links	Sacrifice
Commitment	r	-.16** +	-.02	.01
Control	r	-.11* +	-.01	.02
Challenge	r	.02	.09	.10

***$p \leq .001$ **$p \leq .01$ *$p \leq .05$ +$r \geq .10$; ++$r \geq .30$; +++$r \geq .50$

6.2.1.16 Interpretation of the Pearson product moment correlation coefficients (PVS-II & JES)

Based on the data provided in Table 6.18, the specific relationships between the PVS-II scales and the JES scales can be derived. The negative associations observed between the PVS-II variables (commitment and control) and the fit variable suggest that individuals who view potentially stressful situations as meaningful and interesting and see stressors as changeable may be less likely to feel a strong sense of belonging towards the organisation and community. The fit refers to the extent to which an individual's job and occupation interconnects with or complements other areas of his or her life (Coetzee & Schreuder, 2010). No significant relationships were found between the CAI variables, links and sacrifice.

6.2.1.17 Reporting of the Pearson product moment correlation coefficients (PVS-II & OCS)

Table 6.19 indicates the Pearson product moment correlations obtained for the PVS-II and OCS.

- The results indicate that there was a significant positive relationship between commitment (r = .20; small effect; $p \leq .05$) and affective commitment.

- A significant positive relationship was evident between commitment (r = .22; small effect; $p \leq$ .05) and continuance commitment.
- A significant positive relationship was evident between commitment (r = .11; small effect; $p \leq$ .05) and normative commitment.
- The results indicate that there was a significant positive relationship between control (r = .15; small effect; $p \leq$ .05) and affective commitment.
- A significant positive relationship was evident between control (r = .25; small effect; $p \leq$ .05) and continuance commitment.
- A significant positive relationship was evident between control (r = .14; small effect; $p \leq$ .05) and normative commitment.
- The results indicate that there was a significant positive relationship between challenge (r = .17; small effect; $p \leq$ .05) and affective commitment.
- A significant positive relationship was evident between challenge (r = .18; small effect; $p \leq$ .05) and continuance commitment.
- No significant positive relationship was found between challenge and normative commitment.

Table 6.19

Pearson Product-Moment Correlations: PVS-II and OCS (n = 355)

Hardiness		Affective Commitment	Continuance Commitment	Normative Commitment
Commitment	r	.20**	.22**	.11*
		+	+	+
Control	r	.15**	.25**	.14**
		+	+	+
Challenge	r	.17**	.18**	.08
		+	+	

***$p \leq$ .001 **$p \leq$ .01 *$p \leq$ .05 +$r \geq$ .10; ++$r \geq$ .30; +++$r \geq$ .50

6.2.1.18 Interpretation of the Pearson product moment correlation coefficients (PVS-II & OCS)

Based on the data indicated in Table 6.19, the specific relationships between the PVS-II scales and the OCS scales can be derived. The positive relationships observed between the PVS-II variables (commitment, control and challenge) and affective commitment suggest that individuals who view stressful situations as meaningful and interesting see stressors as

changeable and change as a normal aspect of life instead of as a threat, view change as an opportunity for growth and have strong feelings of emotional connection with the organisation. A hardy individual will thus probably remain with his or her current organisation, which in turn will have a positive effect of the retention of talented staff in that organisation.

The positive relationship between the PVS-II variables (commitment, control and challenge) and continuance commitment suggests that hardy individuals may remain with their current organisations because of the high costs involved if they decide to leave the organisation. Individuals remain with a specific organisation because of the money they add as a result of the time spent in the organisation, not because they want to (Meyer & Allen, 1991).

The positive relationship between the PVS-II variables (commtiment and control) and normative commitment suggest that individuals who view stressful situations as meaningful and interesting and regard stressors as changeable are more likely to be normatively committed to the organisation. The reason for this could be that the individual may feel a sense of responsibility to continue employment with a specific organisation. The internalised normative idea of responsibility and commitment allows individuals to appreciate continued employment in a specific organisation (Meyer & Allen, 1990).

6.2.1.19 *Reporting of the Pearson product moment correlation coefficients (JES & OCS)*

Table 6.20 indicates the Pearson product moment correlations obtained for the JES and OCS.

- The results indicate that there was a significant positive relationship between fit (r = .26; small effect; $p \leq .05$) and affective commitment.
- A significant positive relationship was evident between fit (r = .16; small effect; $p \leq .05$) and continuance commitment.
- A significant positive relationship was evident between fit (r = .33; medium effect; $p \leq .05$) and normative commitment.
- The results indicate that there was a significant positive relationship between links (r = .36; medium effect; $p \leq .05$) and affective commitment.

- A significant positive relationship was evident between links (r = .26; small effect; $p \le$ .05) and continuance commitment.

- A significant positive relationship was evident between links (r = .51; large effect; $p \le$ .05) and normative commitment.

- The results indicate that there was a significant positive relationship between sacrifice (r = .40; medium effect; $p \le$ .05) and affective commitment.

- A significant positive relationship was evident between sacrifice (r = .27; small effect; $p \le$ .05) and continuance commitment.

- A significant positive relationship was evident between sacrifice (r = .49; medium effect; $p \le$ .05) and normative commitment.

Table 6.20
Pearson Product-Moment Correlations: JES and OCS (n = 355)

Job Embeddedness		Affective Commitment	Continuance Commitment	Normative Commitment
Fit	r	.26**	.16**	.33**
		+	+	++
Links	r	.36**	.26**	.51**
		++	+	+++
Sacrifice	r	.40**	.27**	.49**
		++	+	++

***$p \le$ .001 **$p \le$ .01 *$p \le$ .05 +$r \ge$ .10; ++$r \ge$ .30; +++$r \ge$ .50

6.2.1.20 Interpretation of the Pearson product moment correlation coefficients (JES & OCS)

Based on the data provided in Table 6.20, the specific relationship between the JES scales and the OCS scales can be derived. The positive relationships between all the JES variables (fit, links and scarifice) and affective commitment suggest that individuals who are fully job embedded may feel a strong sense of emotional connection towards the organisation. This means that the individual will remain with his or her current organisation because he or she wants to (Meyer & Allen, 1991).

The positive relationships between all the JES variables (fit, links and scarifice) and continuance commitment suggest that individuals who are fully job embedded may not decide to leave their current organisation because of the costs involved in doing so. Meyer and Allen (1991)

indicated that individuals whose most important connection to the organisation is based on continuance commitment stay because they need to.

The positive relationships between all the JES variables (fit, links and sacrifice) and normative commitment suggest that individuals who are fully job embedded may remain with their current organisation because they feel a sense of responsibility towards it. Hence individuals who are fully job embedded may be far easier to retain because they will not decide to leave their current organisation. Meyer *et al.*'s (1993) study measures and focuses on feelings of responsibility to remain in an occupation and a sense of accountability to remain in the occupation and organisation.

The results of the Pearson's correlation analyses provided support for Ha1: There is a statistically significant positive relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment).

6.3 INFERENTIAL (MULTIVARIATE) STATISTICAL ANALYSES

Inferential statistics is concerned with using samples to infer something about populations. Firstly, canonical correlations were done to test H02 and Ha2, followed by standard multiple regression analyses to test H03 and Ha3. SEM was performed to test H04 and Ha4, while hierarchical moderated regression was performed to test H05 and Ha5. Lastly, T-tests, Mann-Whitney tests and Kruskal Wallis tests were performed to test H06 and Ha6.

6.3.1 Reporting of canonical correlation analysis

Canonical correlational analyses were performed to assess the overall relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) as the set of independent latent variables and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as the set of dependent latent variables. Canonical correlation analysis was deemed appropriate and useful because the statistical analyses involved examining relationships between two

composite sets of multiple variables. Canonical correlation analysis limits the probability of committing Type I errors (Hair *et al.,* 2010).

Wilks' lambda's chi-square test was performed to test for the significance of the overall canonical correlation between the independent and dependent variates/variables? of a canonical function. In order to counter the probability of a Type I error, it was decided to set the significance value for interpreting the results at a 95% confidence interval level (Fp ≤ .05). Effect sizes were used to decide on the practical significance of the findings. In line with Hair *et al.*'s (2010) guidelines, the cut-off criteria for factorial loadings (≥ .30) were used to interpret the relative importance of the canonical structure correlations or loadings in deriving the canonical variate constructs. The redundancy index was also considered for assessing the magnitude of the overall correlational relationships between the two variates of a canonical function and the practical significance of the predictive ability of the canonical relationship (Hair *et al.*, 2010). The squared canonical correlation (Rc^2) values of ≤ .12 (small practical effect), ≥ .13 ≤ .25 (medium practical effect) and ≥ .26 (large practical effect) (Fp ≤ .05) (Cohen, 1992) were also considered in the interpretation of the magnitude or practical significance of the results.

Table 6.21 shows that the model from the canonical correlation analysis has six canonical functions (dimensions) of which the canonical correlation of only the first function is statistically significant: Rc = .453 (Rc^2 = .21; moderate practical effect; F(p) = 1.56 (.00). The canonical function explains the relationship between the two canonical variates, – that is, the variate for the set of composite dependent variables and variate for the set of composite independent variables. The four multivariate criteria and the *F* approximations for the model are also statistically significant.

Table 6.21

Canonical Correlation Analysis Relating Psychological Career Resources, Career Adaptability and Hardiness (Independent Variables) to Job Embeddedness and Organisational Commitment (Dependent Variables) (n = 355)

Measures of overall model fit for canonical correlation analysis				
Canonical function	Overall Canonical correlation (*Rc*)	Overall squared canonical correlations Rc^2	F Statistics	Probability (*p*)
1	.454	.21++	1.56	.0001**
2	.370	.13++	1.22	.06
3	.283	.08+	1.01	.46
4	.271	.07+	.94	.60
5	.224	.05+	.81	.79
6	.120	.04+	.75	.76
Multivariate Tests of Significance				
Statistics	Value	Approximate F-Statistic		Probability (*p*)
Wilks' lambda	.535	1.56		<.0001***
Pillai's trace	.583	1.54		<.0001***
Hotelling-Lawley trace	.675	1.58		<.0001***
Roy's Greatest Root	.259	3.72		<.0001***

***p ≤ .001 **p ≤ .01 *p ≤ .05
+ *Rc²* ≤.12 (small practical effect size) ++ *Rc²* ≥.13≤.25 (moderate practical effect size) + ++ *Rc²* ≥.26 (large practical effect size)

Owing to the instability and variability of canonical weights and multi-collinearity concerns (Hair *et al.*, 2010), only the individual canonical structure correlations (loadings) and their squared canonical structure loadings were considered in interpreting the relative importance and magnitude of importance (practical significance) in deriving the two canonical variate constructs: psychological career meta-competencies (independent canonical variate construct) and retention-related dispositions (dependent canonical variate construct). The canonical structure correlations (loadings) measure the strength of the canonical relationship between a canonical variate and its individual original variables in the set of variables (within set variable-to-variate correlation) (Hair *et al.*, 2010). Those variables that correlate highly (≥ .30) with its canonical function variate can be regarded as having more in common with it.

Regarding the independent canonical variate, Table 6.22 shows that the psychological career meta-competencies variate construct was most strongly influenced by the PCRI (psychological career resources) and CAI (career adaptability) variables. More specifically, the PCRI variables, career directedness (*Rc* = .59; *Rc²* = 35%), self/other skills (*Rc* = .56; *Rc²* = 31%) and behavioural adaptability (*Rc* = .52; *Rc²* = 27%), showed a practically large degree of association with the psychological career meta-competencies variate construct.   The PCRI career preference variables stability/expertise, the career value, and the career harmoniser variables, self-esteem and social connectivity showed a practically moderate degree of association with

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the psychological career meta-competencies variate construct ($Rc^2 \geq 13 \leq .25$). All the CAI (career adaptability) variables showed a practically large degree of association with the psychological career meta-competencies variate construct ($Rc^2 \geq 26$), except for cooperation ($Rc = .48$; $Rc^2 = 23\%$), which indicated a moderate degree of association with the psychological career meta-competencies. All the PVS-II (hardiness) commitment ($Rc = -.64$; $Rc^2 = 41\%$), control ($Rc = -.49$; $Rc^2 = 24\%$) and challenge ($Rc = -.31$; $Rc^2 = 10\%$) variables showed an inverse association of a practically moderate degree with the psychological career meta-competencies variate construct.

In terms of the dependent canonical variate construct (retention-related dispositions), Table 6.22 shows that the retention-related dispositions canonical variate construct was most strongly influenced by the JES fit variable ($Rc = .77$; $Rc^2 = 59\%$; very large practical effect), and to a lesser extent by the JES variables links ($Rc = .43$; $Rc^2 = 19\%$; moderate practical effect) and sacrifice ($Rc = .38$; $Rc^2 = 14\%$; small practical effect). The results furthermore indicate that the retention-related dispositions canonical variate construct was also strongly influenced by the OCS continuance variable ($Rc = -.49$; $Rc^2 = 24\%$), which reveals an inverse association of a practically moderate degree with the retention-related dispositions variate construct. The affective ($Rc = -.08$; $Rc^2 = 1\%$) and normative variables ($Rc = .07$; $Rc^2 = 1\%$) both indicated a small practical effect.

Table 6.22

Standardised Canonical Correlation Analyses Results for the First Canonical Function Variates (n = 355)

Variate/variables	Canonical coefficients (weights)	Canonical loading(*Rc*) (structure correlations) Rc (*Rc²*)	Canonical cross-loadings (squared multiple correlations)	Shared variance		Redundancy Index (percentage of overall variance of variables explained by the opposite canonical variate)
				Average canonical loading squared (percentage of overall variance of variables explained by their own canonical variate)	Overall Rc ² (canonical root) (percentage of overall variance in the dependent variate accounted for by the independent variate)	
Set of independent variables						
Career Preference (PCRI)						
Stability/Expertise	.23	.36 (.13)	.16			
Managerial	.13	.23 (.05)	.12			
Variety/Creativity	-.09	.32 (.10)	.14			
Independence/Autonomy	-.24	-.02 (.00)	-.01			
Career Values (PCRI)						
Growth/Development	-.09	.26 (.07)	.12			
Authority/Influence	-.30	.01 (.00)	.01			
Career Enablers (PCRI)						
Practical/Creative skills	.16	.35 (.12)	.16			
Self/Other skills	.32	.56 (.31)	.26			
Career Drivers (PCRI)						
Career Purpose	-.45	.25 (.06)	.12			
Career Directedness	.32	.59 (.35)	.27			
Career Venturing	.01	.32 (.10)	.14			
Career Harmonisers (PCRI)						
Self-esteem	.16	.42 (.18)	.19			
Behavioural adaptability	.03	.52 (.27)	.24			
Emotional literacy	.04	.31 (.10)	.14			
Social connectivity	-.05	.42 (.18)	.19			
Career adaptability (CAI)						
Concern	.18	.60 (.36)	.27			
Control	.20	.60 (.36)	.27			
Curiosity	-.01	.53 (.28)	.24			
Cooperation	.12	.48 (.23)	.22			
Confidence	-.09	.53 (.28)	.24			
Hardiness (PVS-II)						
Commitment	-.50	-.64 (.41)	-.29			
Control	.01	-.49 (.24)	-.22			
Challenge	-.00	-.31 (.10)	-.14			
Independent variate (psychological career meta-competencies)				.19++	.21++	.04+
Set of dependent variables						
Job embeddedness (JES)						
Fit	.87	.77 (.59)	.35			
Links (organisation)	-.10	.43 (.19)	.20			
Sacrifice	.10	.38 (.14)	.17			

Organisational commitment						
Affective commitment	-.12	-.08 (.01)	-.04			
Continuance commitment	-.65	-.49 (.24)	-.22			
Normative commitment	.15	.07 (.01)	.03			
Dependent variate (Retention-related dispositions)				.20+++	.21++	.04+

+ *Rc²* ≤.12 (small practical effect size)   ++ *Rc²* ≥.13≤.25 (moderate practical effect size)   + ++ *Rc²* ≥.26 (large practical effect size)

The overall squared canonical correlation (Rc^2) explains the proportion of variance shared by the canonical variables in each canonical variate set. As observed for the individual cross-loadings, the psychological career meta-competencies canonical variate construct explained 21% (Rc^2 = .21; moderate practical effect) of the variance in the retention-related dispositions canonical variate construct.

In terms of practical significance, the magnitude of the relationship between the two canonical variate constructs is measured by the redundancy index. Ideally, the higher the redundancy, the higher the percentage of variance that will be accounted for by the independent variate in the dependent set of original variables, and vice versa. Table 6.22 shows that the psychological career meta-competencies canonical variate construct was able to predict only 4% (small practical effect) of the variance in the individual original retention factor variables. The retention-related dispositions canonical variate construct was able to predict only 4% (very small practical effect) of the variance in the individual original PCRI, CAI and PVS-II variables. Neither of the two canonical variate constructs was thus found to be a good overall predictor of the opposite canonical variate construct. By contrast, each canonical variate was a stronger predictor of its own construct variables. The psychological career meta-competencies canonical variate construct explained 19% (moderate practical effect) of the variance in the individual original PCRI, CAI and PVS-II variables, while the retention-related dispositions canonical variate construct explained 20% (moderate practical effect) of the variance in the individual original JES and OCS variables.

The canonical cross-loadings in Table 6.22 show that a very low percentage of the variance for each of the individual variables was explained by the first canonical function independent and dependent variates (indicating a low shared variance between the individual variables). The JES fit variable exhibited the highest correlation with the psychological career meta-competencies canonical variate construct, which explained 21% of the variance in the JES fit variable. Overall, it appears from the cross-loadings (although small in practical effect size) that the psychological career meta-competencies self/other skills, and career adaptability competencies of concern, control and confidence contributed the most in explaining the variance in the job embeddedness fit variable of the retention-related dispositions canonical construct.

Figure 6.1 is a graphical depiction of the canonical relationships between the independent variables and the dependent variables as discussed in the previous section.
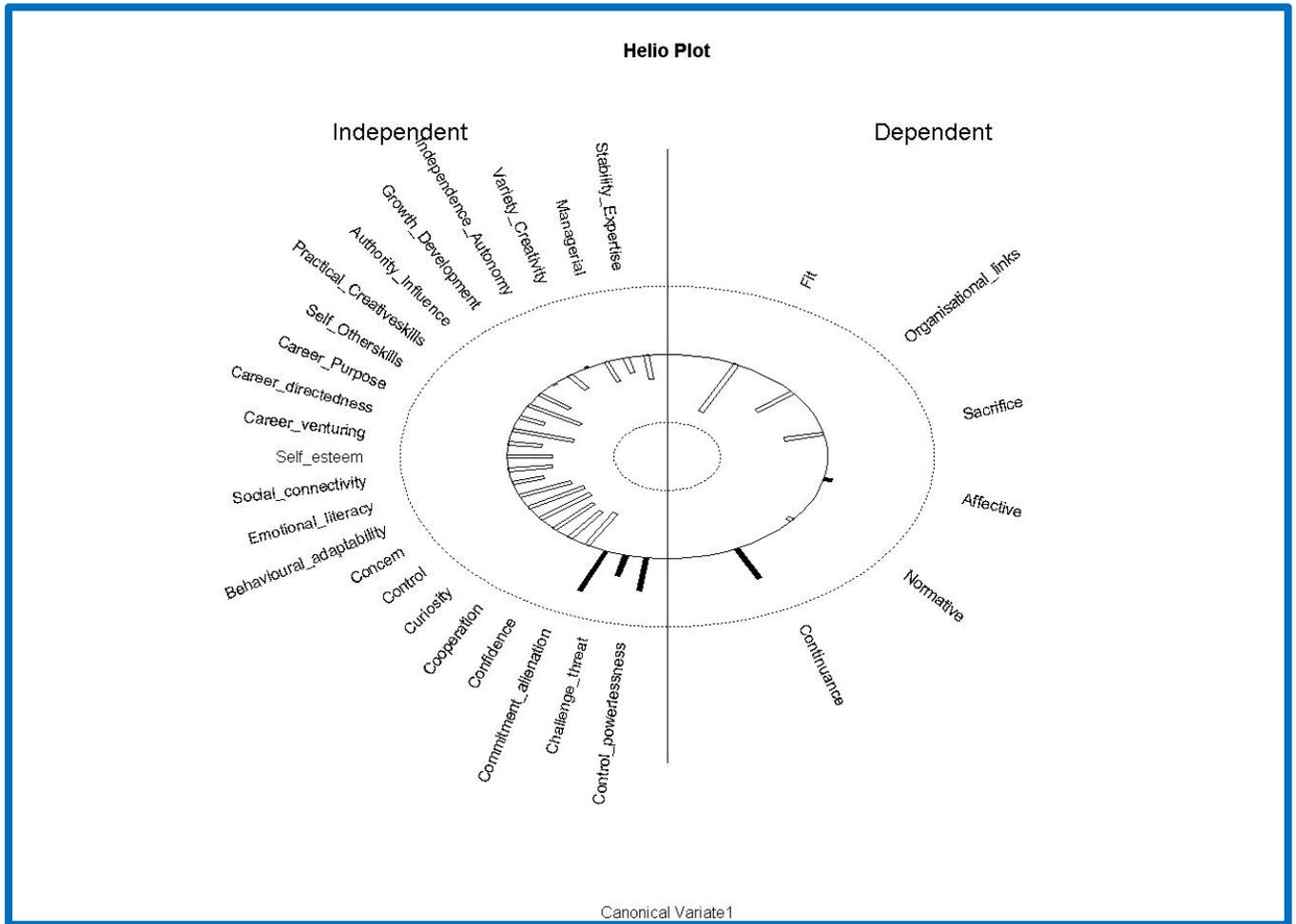
Figure 6.1. Canonical correlation helio plot illustrating the overall relationship between the psychological career meta-competencies canonical construct and the retention-related dispositions canonical construct variates

The results of the canonical correlation analyses provided support for Ha2: The psychological career meta-competencies construct variate (psychological career resources, career adaptability and hardiness) as a composite set of independent latent variables is significantly and positively related to the retention-related dispositions construct variate (job embeddedness and organisational commitment) as a composite set of dependent latent variables.

6.3.2 Standard multiple regression analyses

Multiple regression analysis was performed to assess the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) that provide the best explanation of the proportion of the total variance in the

scores of the retention-related dispositions variables (job embeddedness and organisational commitment).

6.3.2.1   Reporting of multiple regression analyses (PCRI & JES)

Table 6.23 summarises the results of the multiple regression analyses performed on the PCRI and JES. Three models are suggested by the regression analysis and are significant ($p \leq$ .001). Table 6.23 indicates that the regression of the PCRI variables regressed upon the JES fit variable produced a statistically significant model (F(134.55; 41.28) = 3.26; $p \leq$ .001), accounting for (R^2 = .09) 9% (small practical effect) of the variance in the fit variable. The PCRI career purpose variable shows an inverse relationship with the JES fit variable (β = -.19), while the self/other skills (β = .19) and career directedness (β = -.17) variables show a positive relationship with the JES fit variable.

The PCRI variables regressed upon the JES links variable produced a statistically significant model (F(103.09; 39.29) = 2.62; $p \leq$ .001), accounting for (R^2 = .06) 6% (small practical effect) of the variance in the JES links variable.

The PCRI variables regressed upon the JES sacrifice variable produced a statistically significant model (F(286.96; 111.96) = 2.56; $p \leq$ .001), accounting for (R^2 = .06) 6% (small practical effect) of the variance in the sacrifice variable. The PCRI self/other variable shows a positive relationship with the JES sacrifice variable (β = -.21). Furthermore, the results indicated that career purpose negatively predicted fit (β = -.19), links (β = -.19) and sacrifice (β = -.17). In this regard, the multiple regression results provided supportive evidence for Ha3.

In terms of the collinearity statistics, the variance inflation factor (VIF) values were lower than the cut-off of > 4.0 for multicollinearity concerns (Field, 2005). These values imply that multicollinearity could be ruled out in interpreting the results.

Table 6.23

Multiple Regression Analyses: PCRI & JES (n = 355)

	Variable	Unstandardised coefficient		Standardised coefficient						Collinearity statistics	
		B	SE B	ß	t	p	F	Ad R²	R	T	VIF
1	Constant (Fit)	2.55	3.44		5.98	.00 ***	3.26	.09 +	.35		
	Self/Other Skills	.35	.15	.19	2.27	.02 **				.36	2.81
	Career Purpose	-.48	.19	-.19	-2.42	.02 **				.41	2.47
	Career Directedness	.38	.16	.17	2.47	.01 **				.52	1.92
2	Constant (Links)	23.68	3.35		7.07	.00 ***	2.62	.06 +	.32		
	Managerial	.27	.12	.15	2.23	.03 **				.56	1.80
	Self/Other Skills	.34	.15	.19	2.25	.03 **				.36	2.81
	Career Purpose	-.45	.19	-.19	-2.31	.02 **				.41	2.47
	Career Directedness	.39	.15	.18	2.55	.01 **				.52	1.92
	Self Esteem	.29	.11	.19	2.67	.01 **				.51	1.95
3	Constant (Sacrifice)	38.18	5.66		6.75	.00 ***	2.56	.06 +	.32		
	Managerial	.40	.21	.13	1.95	.05 *				.56	1.80
	Self/Other Skills	.62	.25	.21	2.47	.01 **				.36	2.81
	Career Purpose	-.67	.33	-.17	-2.04	.04 **				.41	2.47
	Career Directedness	.57	.26	.16	2.23	.03 **				.52	1.92
	Career Venturing	-.54	.27	-.14	-1.99	.05 *				.58	1.72
	Self Esteem	.37	.18	.15	2.03	.04 **				.51	1.95

***$p \leq .001$ **$p \leq .01$ *$p \leq .05$
+$R^2 \leq .12$ (small practical effect size)   ++ $R^2 \geq .13 \leq .25$ (medium practical effect size) +++$R^2 \geq .26$ (large practical effect size)

6.3.2.2 Interpretation of the multiple regression analyses between psychological career resources and job embeddedness

The results shown in Table 6.23 suggest that an individual's psychological career resources, specifically his or her self and others skills, are significant in terms of predicting or explaining his or her overall job embeddedness in an organisation. An individual with well-developed self/other skills and self-esteem may therefore experience connections between himself or herself and other individuals, groups and organisations, may perceive compatibility with his or her job, organisation and community, and lastly, may take into account the cost of what he or she would have to give up if he or she should leave the job. An individual who seems to be career directed will probably think twice before leaving the organisation. Overall, the participants in the current research who had a strong career purpose, seemed less embedded in their job, meaning that they showed low levels of sacrifice towards the organisation. These results support the findings of Mitchell *et al.* (2001a) who found that the use of personal development plans and the establishment of mentoring systems can continue to provide opportunities for employees to fit and link with their jobs throughout their career.

6.3.2.3 Reporting of the multiple regression analyses (PCRI & OCS)

Table 6.24 summarises the results of the multiple regression analyses performed on the PCRI and OCS. Three models were produced by the regression analysis and seemed to be significant ($p \leq .001$). Table 6.24 shows that the regression of the PCRI variables regressed upon the affective commitment variable produced a statistically significant model ($F(88.20; 51.45) = 1.71; p \leq .001$), accounting for ($R^2 = .03$) 3% (small practical effect) of the variance in the affective commitment variable. The PCRI managerial variable ($\beta = .15$) and the self-esteem variable ($\beta = .15; p \leq .00$) indicated a positive relationship with the affective commitment variable. The PCRI variables regressed upon the OCS continuance commtiment variable produced a statistically significant model ($F(122.79; 97.33) = 1.26; p \leq .001$), accounting for ($R^2 = .01$) 1% (small practical effect) of the variance in the continuance commitment variable. The PCRI managerial variable ($\beta = .15$) showed a positive relationship with the OCS continuance commitment variable.

The PCRI variables regressed upon the normative commitment variable produced a statistically significant model ($F(9.29; 55.52) = 1.63; p \leq .001$), accounting for ($R^2 = .03$) 3%

(small practical effect) of the variance in the normative commitment variable. The PCRI managerial variable ($ß$ = .24) showed a positive relationship with the OCS normative commitment variable ($ß$ = -.15). Furthermore, the results indicated that social connectivity predicted affective commitment ($ß$ = -.15) negatively. The results indicated that stability/expertise ($ß$ = -.15) and career venturing ($ß$ = -.13) predicted continuance commitment negatively. The results indicated that authority/influence predicted normative commitment ($ß$ = -.15) negatively. In this regard, the multiple regression results provided supportive evidence for Ha3.

Regarding the collinearity statistics, the variance inflation factor (VIF) values were lower than the cut-off of > 4.0 for multicollinearity concerns. These values imply that multicollinearity could be ruled out in interpreting the results.

Table 6.24

Multiple Regression Analyses: PCRI and OCS (n = 355)

	Variable	Unstandardised coefficient		Standardised coefficient						Collinearity statistics	
		B	SE B	ß	t	p	F	Ad R²	R	T	VIF
1	Constant (Affective)	32.26	3.84		8.41	.00 ***	1.71	.03 +	.27		
	Managerial	.31	.14	.15	2.19	.03 **				.56	1.80
	Self Esteem	.25	.13	.15	2.01	.05 *				.51	1.95
	Social Connectivity	-.34	.17	-.15	-1.98	.05 *				.49	2.10
2	Constant (Continuance)	43.12	5.28		8.16	.00 ***	1.26	.01 +	.23		
	Stability/Expertise	-.46	.24	-.15	-1.91	.05 *				.46	2.16
	Managerial	.40	.19	.15	2.04	.04 **				.56	1.80
	Career Venturing	-.49	.25	-.13	-1.94	.05 *				.58	1.72
3	Constant (Normative)	3.38	3.99		7.61	.00 ***	1.63	.03 +	.26		
	Managerial	.51	.15	.24	3.46	.00 ***				.56	1.80
	Authority/Influence	-.43	.20	-.15	-2.15	.03 **				.59	1.70

***p ≤ .001   **p ≤ .01   *p ≤ .05
+R² ≤ .12 (small practical effect size)   ++ R² ≥ .13 ≤ .25 (medium practical effect size) +++R² ≥ .26 (large practical effect size)

6.3.2.4 Interpretation of the multiple regression analyses between psychological career resources and organisational commitment

The results indicated in Table 6.24 suggest that individuals' psychological career resources, specifically their managerial preference and self-esteem, are significant in terms of predicting or explaining their overall organisational commitment towards the organisation. Participants who have a strong preference for a managerial position and a well-developed self-esteem will therefore experience strong feelings of emotional attachment towards the organisation. These results support the findings of Ferreira *et al.* (2010) and Meyer and Allen (1997), which indicated that having the authority to influence the goals of the organisation seems to increase individuals' sense of responsibility to continue their employment with the

organisation. It appears that the feelings of responsibility engendered by having authority and influence over others tend to foster the sense of accountability to stay in the occupation and organisation, and include an enhanced awareness of the costs associated with actually leaving the organisation.

6.3.2.5 Reporting of the multiple regression analyses (CAI & JES)

The results indicated that none of the CAI variables (concern, control, curiosity, cooperation and confidence) predicted the job embeddedness of an individual. The fact that career adaptability does not predict job embeddedness means that an individual's level of career adaptability will have no influence whatsoever on his or her fit, links or sacrifice in respect of the organisation. In this regard, the multiple regression results provided supportive evidence for H03.

6.3.2.6 Reporting of the multiple regression analyses (CAI & OCS)

Table 6.25 summarises the results of the multiple regression analyses performed on the CAI and OCS. One model is suggested by the regression analysis and is significant ($p \leq .001$). Table 6.25 indicates that the regression of the PCRI variables regressed upon the normative commitment variable produced a statistically significant model (F(76.96; 56.71) = 1.36; $p \leq$ .001), accounting for ($R^2 = .01$) 1% (small practical effect) of the variance in the normative commitment variable. The CAI curiosity variable ($ß = .24$) showed a positive relationship with the OCS normative commitment variable. The results indicate that none of the other CAI variables predicted significant influences on affective and continuance commitment. In this regard, the multiple regression results provide supportive evidence for Ha3.

In terms of the collinearity statistics, the variance inflation factor (VIF) values were lower than the cut-off of > 4.0 for multicollinearity concerns. These values imply that multicollinearity could be ruled out in interpreting the results.

Table 6.25

Multiple Regression Analyses: CAI & OCS (n = 355)

	Variable	Unstandardised coefficient		Standardised coefficient							Collinearity statistics	
		B	SE B	ß	t	p	F	Ad R^2	R	T	VIF
1	Constant (Normative)	25.04	2.86		8.75	.00 ***	1.36	.01 +	.14		
	Curiosity	.25	.11	.24	2.38	.02 ***				.29	3.49

***$p \le .001$ **$p \le .01$ *$p \le .05$

+$R^2 \le .12$ (small practical effect size)   ++ $R^2 \ge .13 \le .25$ (medium practical effect size)+++$R^2 \ge .26$ (large practical effect size)

6.3.2.7   Interpretation of the multiple regression analyses between career adaptability and organisational commitment

The results provided in Table 6.25 suggest that an individual's career adaptability, specifically his or her curiosity, is significant in terms of predicting or explaining his or her normative organisational commitment towards the organisation. Individuals who show high levels of curiosity in their careers may experience strong feelings of normative commitment towards the organisation. These results support the findings of Ito and Brotheridge (2005), London and Smither (1999), Mitchell *et al.* (2001b) and Meyer and Allen (1990) who found that career adaptable individuals are likely to engage in self-development activities that will enable them to take advantage of opportunities in their job or career. By providing sufficient growth opportunities in the individual's career, he or she will feel more committed towards the organisation.

6.3.2.8   Reporting of multiple regression analyses (PVS-II & JES)

Table 6.26 summarises the results of the multiple regression analyses performed on the PVS-II and JES. Three models are suggested by the regression analysis and are significant ($p \le .001$). Table 6.26 shows that the regression of the PVS-II variables regressed upon the fit variable produced a statistically significant model ($F(233.51; 43.62) = 5.35$; $p \le .001$), accounting for ($R^2 = .04$) 4% (small practical effect) of the variance in the fit variable. The PVS-II commitment ($ß = -.23$) indicated an inverse relationship with the JES fit variable.

The PVS-II variables regressed upon the links variable produced a statistically significant model ($F(74.58; 41.72) = 1.79$; $p \le .001$), accounting for ($R^2 = .01$) 1% (small practical effect)

of the variance in the links variable. The PVS-II challenge variable (ß = .15) indicated a positive relationship with theJES links variable.

The PVS-II variables regressed upon the sacrifice variable produced a statistically significant model (F(169.74; 118.95) = 1.43; $p \leq$ .001), accounting for (R^2 = .00) 0% (small practical effect) of the variance in the sacrifice variable. The PVS-II challenge variable (ß = .14) indicated a positive relationship with the JES sacrifice variable. Furthermore, the results indicated that PVS-II commitment predicted fit (ß = -.23) negatively. In this regard, the multiple regression results provided supportive evidence for Ha3.

In terms of the collinearity statistics, the variance inflation factor (VIF) values were lower than the cut-off of > 4.0 for multicollinearity concerns. These values imply that multicollinearity could be ruled out in interpreting the results.

Table 6.26

Multiple Regression Analyses: PVS-II and JES (n =355)

	Variable	Unstandardised coefficient		Standardised coefficient						Collinearity statistics	
		B	SE B	ß	t	p	F	Ad R^2	R	T	VIF
1	Constant (Fit)	3.82	2.62		11.8	.00 ***	5.35	.04 +	.21		
	Commitment	-.24	.09	-.23	-2.70	.01 **				.39	2.57
	Challenge	.20	.08	.17	2.61	.01 **				.62	1.60
2	Constant (Links)	2.52	2.56		8.00	.00 ***	1.79	.01 +	.12		
	Challenge	.18	.08	.15	2.30	.02 **				.62	1.60
3	Constant (Sacrifice)	32.15	4.33		7.43	.00 ***	1.43	.00 +	.11		
	Challenge	.26	.13	.14	2.04	.04 **				.62	1.60

***$p \leq$ .001   **$p \leq$ .01   *$p \leq$ .05
+$R^2 \leq$ .12 (small practical effect size)   ++ $R^2 \geq$ .13 $\leq$ .25 (medium practical effect size) +++$R^2 \geq$ .26 (large practical effect size)

The results in Table 6.26 suggest that an individual's hardiness, specifically his or herr commitment and challenge are significant in terms of predicting or explaining his or her JES fit towards the organisation.   Individuals who display high levels of commitment and challenge in their careers may experience connections between himself or herself and other individuals, groups and organisations, will feel compatible with his or job, organisation and community, and lastly, will take into account the cost of what he or she has to give up should he or she leave the job. These results support the findings of Mallol *et al.* (2007), Mitchell *et al.* (2001a), which indicated that individuals who are more embedded may be less absent, work harder, perform better and engage in more organisational citizenship behaviours than individuals who are less embedded.

6.3.2.10   Reporting of multiple regression analyses (PVS-II & OCS)

Table 6.27 summarisesthe results of the multiple regression analyses performed on the PVS-II and OCS.   Three models are suggested by the regression analysis and are significant ($p ≤ .001$).   Table 6.27 indicates that the regression of the PVS-II variables regressed upon the affective commitment variable produced a statistically significant model (F(264.965; 51.198) = 5.18; $p ≤ .001$), accounting for ($R^2 = .03$) 3% (small practical effect) of the variance in the fit variable. The PVS-II commitment variable ($ß = .16$) showed a positive relationship with the OCS affective commitment variable.

The PVS-II variables regressed upon the continuance commitment variable produced a statistically significant model (F(822.05; 92.21) = 8.92; $p ≤ .001$), accounting for ($R^2 = .06$) 6% (small practical effect) of the variance in the continuance commitment variable. The PVS-II challenge variable ($ß = .19$) indicated a positive relationship with the OCS continuance commitment variable.

The PVS-II variables regressed upon the normative commitment variable produced a statistically significant model (F(148.50; 56.21) = 2.64; $p ≤ .001$), accounting for ($R^2 = .01$) 1% (small practical effect) of the variance in the normative commitment variable. The PVS-II challenge variable ($ß = .13$) indicated a positive relationship with the OCS normative

commitment variable. In this regard, the multiple regression results provided supportive evidence for Ha3.

In terms of the collinearity statistics, the variance inflation factor (VIF) values were lower than the cut-off of > 4.0 for multicollinearity concerns. These values imply that multicollinearity could be ruled out in interpreting the results.

Table 6.27

Multiple Regression Analyses: PVS-II and OCS (n = 355)

Variable	Unstandardised coefficient		Standardised coefficient							Collinearity statistics	
	B	SE B	ß	t	p	F	*Ad R²*	R	T	VIF
1 Constant (Affective)	23.28	2.84		8.20	.00 ***	5.18	.03 +	.21		
Commitment	.18	.09	.16	1.20	.05 *				.39	2.57
2 Constant (Continuance)	19.25	3.82		5.04	.00 ***	8.92	.06 +	.27		
Challenge	.32	.11	.19	2.85	.01 **				.62	1.61
3 Constant (Normative)	16.93	2.98		5.68	.00 ***	2.64	.01 +	.15		
Challenge	.17	.09	.13	1.91	.05 *				.62	1.61

***p ≤ .001   **p ≤ .01 *p ≤ .05
+R² ≤ .12 (small practical effect size)   ++ R² ≥ .13 ≤ .25 (medium practical effect size) +++R² ≥ .26 (large practical effect size)

6.3.2.11   Interpretation of multiple regression analyses between hardiness and organisational commitment

The results in Table 6.27 suggest that an individual's hardiness, specifically his or her commitment, is significant in terms of predicting or explaining his or her affective organisational commitment towards the organisation. The results further suggest that an individual's hardiness, specifically his or her challenge is significant in terms of predicting or explaining his or her continuance and normative organisational commitment towards the organisatin. These findings concur with those of with Maddi *et al.* (2009) and Sezgin (2009), who indicate that individuals high in hardiness are more likely to experience organisational commitment because they may have strong feelings of commitment owing to the congruence between individual and organisational values.

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Moreover, the findings also suggest that individuals who thrive on challenge are motivated to become catalysts in their environment and may be more likely to remain with their current organisation because they regard the costs of leaving the organisation as too high. These findings concur with the those of Kobassa (1982) and Maddi (1999), which indicated that highly challenged individuals are characterised by cognitive flexibility and tolerance for ambiguity. This allows these individuals to integrate unexpected or otherwise stressful events more easily.

With due consideration of the fact that the participants were predominantly in the entry and establishment phases of their careers, the findings seem to agree qwith those of Super (1990), namely that these stages represent the period during which the life structure of young adults becomes a more stable period as they begin to settle down, become committed to contributing towards an occupation, a company or a person and start to establish socially supportive networks (Greenhaus, Callanan, & Godshalk, 2010). The contention that young adults' need for developing expertise to change stressful or challenges into opportunities instead of venturing out towards new and different organisational contexts seems to be higher during these particular life stages, could explain the participants' strong sense of affective, continuance and normative commitment (Coetzee, 2008).

In conclusion, the standard multiple regression results provided supportive evidence for Ha3: The psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) positively and significantly predict the retention-related dispositions construct variables (job embeddedness and organisational commitment).

6.3.3 Structural equation modelling (SEM)

On the grounds of the signifcant relationships indicated between the independent and dependent canonical construct variates, three structural equation models were investigated.

6.3.3.1 Reporting of the Structural Equation Modelling (SEM) analyses

Using the results of the canonical correlation analyses as the baseline measurement model, three models were tested. The initial baseline model (as shown in Table 6.28) had only a marginal fit to the data because of the low CFI fit statistics (CFI ≤ .90), with a chi-square of 12188.97 (7122 df); CMIN/df = 1.71; p = .000; NFI = .54; RFI = .52; IFI = .74; TLI = .73; CFI = .74 and RMSEA = .05.

Based on the outcome of Model 1, it was decided to test a second model only on the canonical correlation variate constructs and not the items. Although the second model showed a 94% improvement in the data fit (NFI = 94), the fit was still marginal: chi-square = 155.37 (60 df); CMIN/df = 2.59; p = .000; RFI = .91; TLI = .94; CFI = .96 and RMSEA = .07.

Based on the outcome of Model 2, it was decided to investigate a third model, by excluding links and continuance commitment. The third model showed a 96% improvement in the model (NFI = .96). The model had a very good fit to the data: chi-square = 91.24 (41 df); CMIN/df = 2.23; p = .000; RFI = .95; TLI = .97; CFI = .98; RMSEA = .06 and SRMR = .03.

Figure 6.2 specifies the standardised path coefficient estimates between the psychological career meta-competencies construct variate and its variables and the standardised path coefficients estimates between the retention-related dispositions construct and its variable job embedded-fit. The standardised path coefficient estimates between the psychological career meta-competencies construct and the retention-related dispositions construct are also specified. All standardised path coefficient estimates were significant at *p* ≤ .001.

The model fit (shown in figure 6.2) revealed that the model explains 10% of the variance in the retention-related disposition construct job-embedded fit. In terms of relative importance, the psychological career meta-competencies construct is mostly explained by the psychological career resources variables (self/other skills, behavioural adaptability and career directedness), and the career adaptability variables (curiosity, concern, control, confidence and cooperation). The psychological career resources variables in the model explain 98% of the variance in the psychological career meta-competencies construct while the career adaptability variables explain 74% of the variance. The hardiness variables (commitment and control) showed an inverse relationship with, and contributed the least in explaining the variance (8%) in the psychological career meta-competencies construct.

Table 6.28

Structural Equation Modelling Results: Fit Statistics

Model	CMIN	*df*	CMIN/*df*	*p*	NFI	RFI	IFI	TLI	CFI	RMSEA	ΔCMIN	SRMR
1	12188.97	7122	1.71	.00	.54	.52	.74	.73	.74	.05		
2	155.37	60	2.59	.00	.94	.91	.96	.94	.96	.07	12033.60	
3	91.24	41	2.23	.00	.96	.95	.98	.97	.98	.06	64.13	.029

*Note: * p < .01.* Model 1 is the hypothesised five-factor model in which psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment each load onto their respective latent factors. Model 2 is a two-factor model in which psychological career resources, career adaptability and hardiness load onto one factor and job embeddedness and organizational commitment onto another factor. Model 3 is a two-factor model in which psychological career resources, career adaptability and hardiness load onto one factor (psychological career meta-competencies) and job embeddedness onto a second factor (retention-related disposition job-embedded fit). CMIN(χ^2) = chi-square; df = degrees of freedom; *p* = significance level; NFI = Bentler-Bonett normed fit index; RFI = relative fit index; TLI = non-normed fit index; CFI = comparative fit index; RMSEA = root-mean-square error of approximation. SRMR = standardised root-mean-square residual.
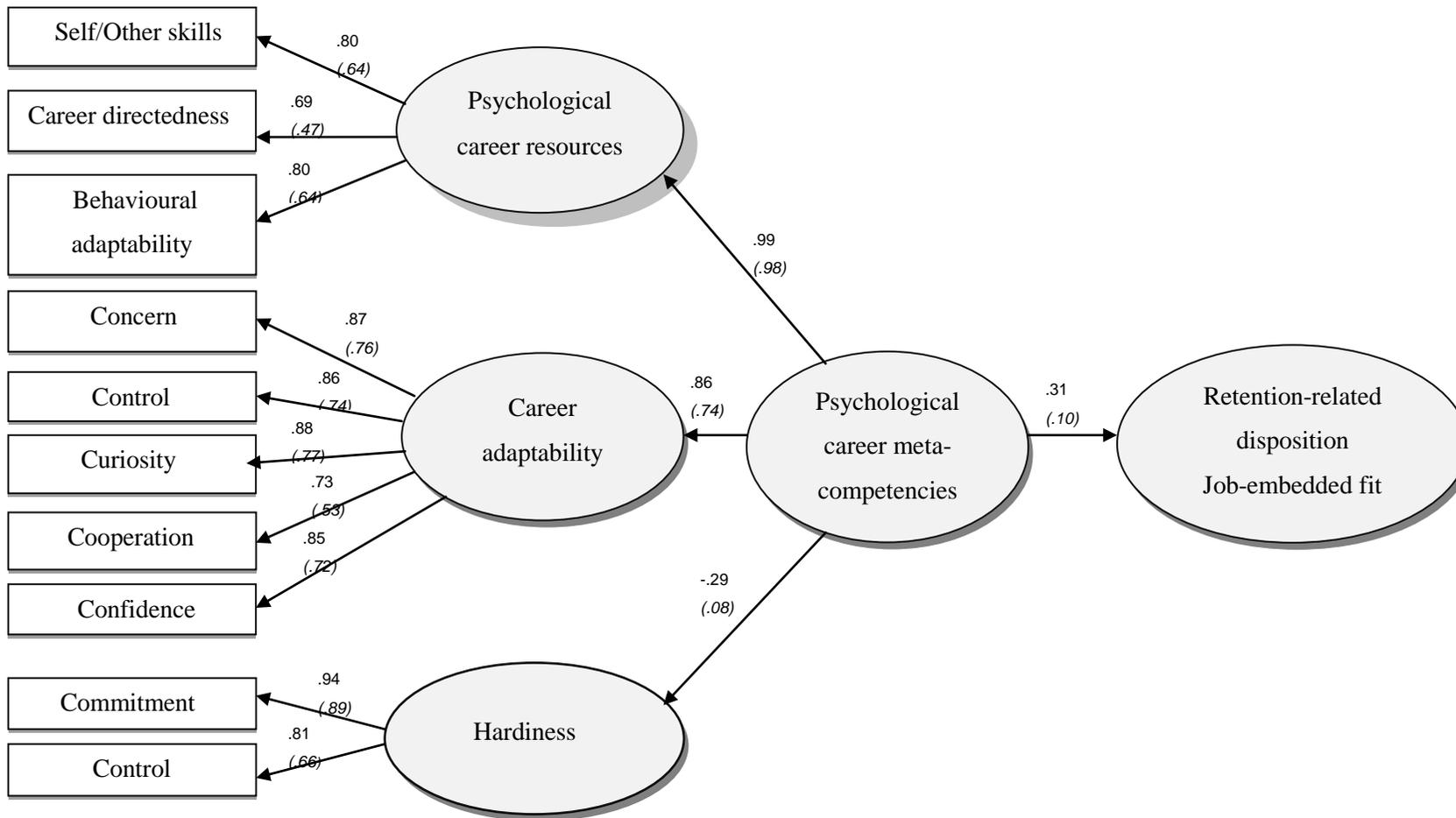
Figure 6.2. Final structural model (3) linking the psychological career meta-competencies construct variables to the retention-related dispositions construct variable job-embedded fit. *Note:* All standardised path coefficient estimates *** p ≤ .001. Squared multiple correlations (R^2) shown in brackets.

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Model 3 indicated a good fit between the theoretically hypothesised psychological career profile for staff retention and the empirically derived structural model.

The highest coefficients (and thus strongest relationship) were evident between the psychological career resources and career adaptability variables and the psychological career meta-competencies construct. In addition, a negative (inverse) relationship was observed between hardiness and the psychological career meta-competencies construct. These results imply that should an individual show high levels of psychological career resources (self/other skills, career directedness and behavioural adaptability), career adaptability (concern, control, curiosity, cooperation and confidence) and low levels of hardiness (commitment and control), he or she will have a stronger fit towards the organisation. These personal career meta-competencies support individuals' self-regulation strategies relative to the social and developmental tasks of adapting to a social environment and successfully achieving the goal of person-environment integration (Savickas & Porfeli, 2012). When an individual has a strong sense of embeddedness, specifically fit, in the organisation, he or she will probably remain there because he or she has a sense of belonging towards it. A strong sense of fit with the organisation may in turn have a positive effect on the retention of talented staff in the organisation.

The empirically manifested structural model can therefore be utilised in a retention context to identify career development interventions that may help to retain talented staff.

Model 3 was accepted as the best model fit (good). The results provide supportive evidence for Ha4: The theoretically hypothesised psychological career profile model has a good fit with the empirically manifested structural model.

6.3.4 Hierarchical moderated regression analysis

On the basis of the structural equation model, hierarchical moderated regression analyses were performed to determine which biographical variables (age, gender, race, marital status, job level and employment status) significantly moderated the relationship between the canonical variate construct (psychological career meta-competencies) as the independent or predictor variable and the canonical variate construct (retention-related dispositions) as the dependent or criterion latent variable. Mean-centred predictor data were used for this purpose. This procedure allowed the researcher to determine which of these demograpic variables significantly moderated the relationship between the

independent and the dependent canonical variate constructs. All main effect relationships revealed a significant effect on the canonical criterion or dependent variable. In terms of the demograhic variables, only gender and marital status showed a significant interaction effect as a moderator of the relationship between the two canonical variate constructs.

6.3.4.1 Reporting of moderated regression analyses (Gender)

As indicated in Table 6.29, in terms of the main effects, only the psychological career meta-competencies construct acted as a significant predictor of the retention-related dispositions construct in models 1 (β = .23; $p \leq$ .00) and 2 (β = .20; $p \leq$ .03). In terms of the interaction effects in model 2, gender was found to have a significant moderating effect on the relationship between the psychological career meta-competencies construct and the retention-related dispositions construct (β = .20; $p \leq$ .03). In model 2, the f^2 statistics (f^2 = .01) reported in Table 6.29 suggest the interaction effect of gender as being small in magnitude (Cohen *et al.*, 2003).

Table 6.29

Moderated Regression Analyses Examining the Effects of the Psychological Career Meta-competencies Construct and Gender on the Retention-related Disposition Job-embedded Fit Construct (n = 355)

	Variable	Unstandardised coefficient		Standardised coefficient							
		B	SE B	ß	t	*p*	F	ΔF	*R²*	*ΔR²*	*f²*
	(Constant)	3.90	.65		47.56	.00					
1	CPCC	.04	.01	.23	4.42	.00	1.86	1.86	.06	.06	
	Gender	.65	.77	.04	.84	.40					
	(Constant)	3.65	.66		46.69	.00					
2	CPCC	.04	.02	.20	2.14	.03	8.84	4.57	.06	.01	
	Gender	.85	.76	.06	1.10	.27					
N Gender_CPCC		.04	.02	.20	2.14	.03					.01

***$p \leq$ .001   **$p \leq$ .01 *$p \leq$ .05

A slope test was conducted to examine the nature of the significant interactions. As indicated in Table 6.29, gender significantly and positively moderated the relationship between psychological career meta-competencies (as predictor variable) and the retention-related disposition fit (as criterion variable).

As shown in Figure 6.3, the relationship between the participants' psychological career meta-competencies (independent/predictor variable) and their retention-related disposition job-embedded fit

(dependent/criterion variable) is significantly weaker in terms of the males and significantly stronger in terms of the females.
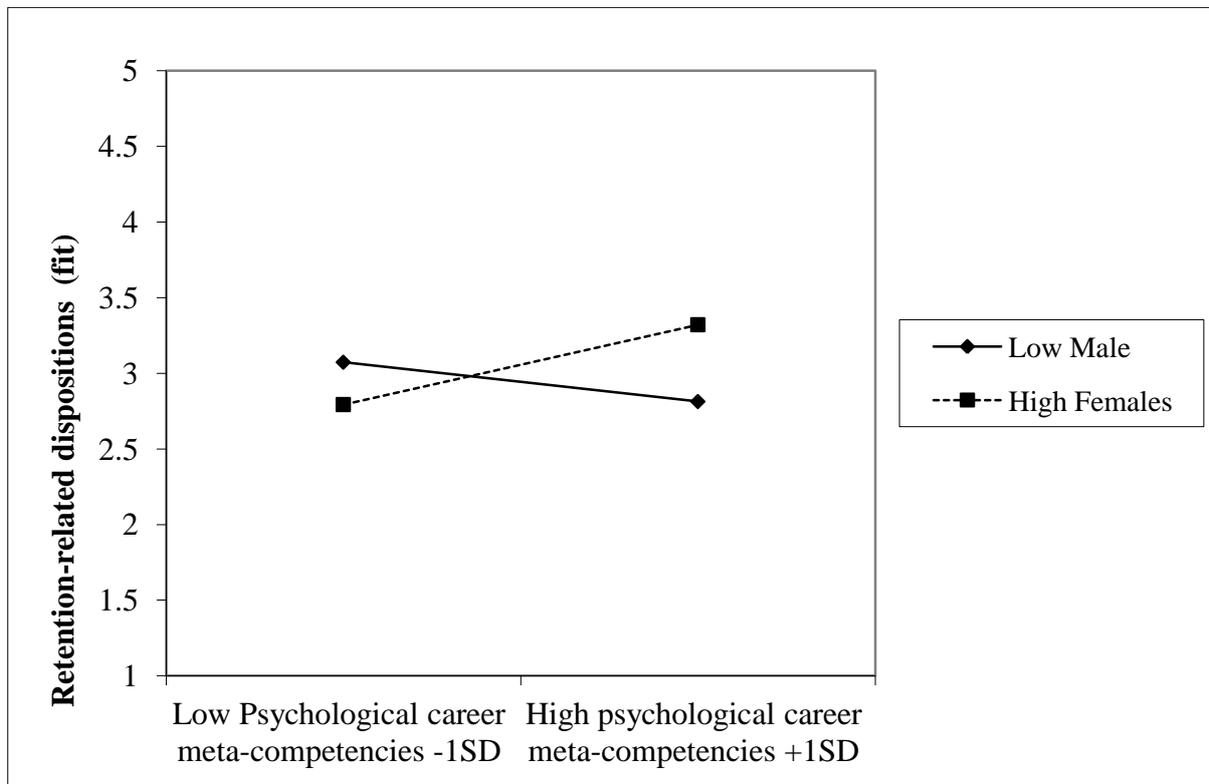
Figure 6.3. Interaction between the psychological career meta-competencies construct and the retention-related dispositions construct job-embedded fit (gender)

6.3.4.2   Interpretation of moderated regression analysis (Gender)

Gender significantly moderated the relationship between the psychological meta-career competencies and retention-related dispositions. Thefemale participants' psychological career meta-competencies (self/other skills, career directedness, behavioural adaptability, career adaptability and hardiness [control and commitment]), may in turn have had a more positive influence on their retention-related disposition job-embedded fit in the organisation, compared with their male counterparts in the study.

This means that being female could influence the strength of an individual's career enablers, especially their self-management and interpersonal skills. Being female may impact on an individual's career drivers, especially the clarity they have about their career goals and the drive or motivation they have in achieving their career goals. An individual's behavioural adaptability may also be influenced by being female in terms of her courage to deal with things and situations she may fear, and having

the courage to handle misfortunes and failures and the ability to laugh at her own mistakes. These personal career meta-competencies seem to strengthen her job-embedded fit.

Being female plays a fairly strong role in the career adaptability of the participants, which may have an influence on an individual's concern (planning and expectancies for the future); control (taking responsibility for her own actions and learning to make better decisions); curiosity (exploring her surroundings, looking for growth opportunities and becoming curious about new opportunities); cooperation (becoming less self-centred, getting along with others, being part of a team and learning to be a good listener); and confidence (performing tasks efficiently, learning from mistakes, a sense of pride and having self-confidence) in her career. These personal career meta-competencies also seem to strengthen her job-embedded fit.

Being female also had an influence on the relationship between a participant's hardi-commitment, hardi-control and job-embedded fit in an organisation. Hardi-commitment, which means feeling excited about one's work and learning something new and the value of work, may be experienced differently by males and females. Hardi-control, which includes an individual's ability to know when she needs help with a specific task and controlling the feeling of helplessness may also have been influenced by being a female participant.

The results provide some supportive evidence for Ha5: The biographical variables (gender, age, race and marital status) significantly and positively moderated the relationship between the independent (psychological career competencies) and the dependent (retention-related factors) canonical latent variates.

6.3.4.3   *Reporting of moderated regression analyses (Marital status = single)*

As indicated in Table 6.30, in terms of the main effects, only the psychological career meta-competencies construct was a significant predictor of the retention-related dispositions construct in models 1 (β = .23; $p \leq$ .00) and 2 (β = .15; $p \leq$ .03). In terms of the interaction effects in model 2, marital status (single) was found to have a significant and positive moderating effect on the relationship between the psychological career meta-competencies construct and the retention-related disposition job-embedded fit construct (β = .15; $p \leq$ .03). In model 2, the f^2 statistics (f^2 = .01*)* reported in Table 6.31 suggest the interaction effect of gender as being small in magnitude (Cohen *et al.*, 2003).

Table 6.30

Moderated Regression Analyses Examining the Effects of the Psychological Career Meta-competencies Construct and Marital Status (Single) on the Retention-related Disposition Job-embedded Fit Construct (n = 355)

	Variable	Unstandardised coefficient		Standardised coefficient							
		B	SE B	ß	t	p	F	FΔ	R^2	$R^2Δ$	f^2
	(Constant)	32.53	.51		63.83	.00					
1	CPCC	.04	.01	.23	4.51	.00	15.60	15.60	.08	.08	
	Marital status (Single)	-2.14	.69	-.16	-3.11	.00					
	(Constant)	32.57	.51		64.13	.00					
2	CPCC	.04	.02	.15	2.00	.04	11.84	3.99	.09	.01	
	Marital status (Single)	-2.15	.69	-.16	-3.13	.00					
	NMarital Status1_CPCC	.04	.02	.15	2.00	.04					.01

***$p \leq .001$ **$p \leq .01$ *$p \leq .05$

As shown in Figure 6.4, the relationship between the participants' psychological career meta-competencies (independent/predictor variable) and their retention-related disposition job-embedded fit (dependent/criterion variable) is significantly weaker in terms of the married and significantly stronger in terms of the single participants.
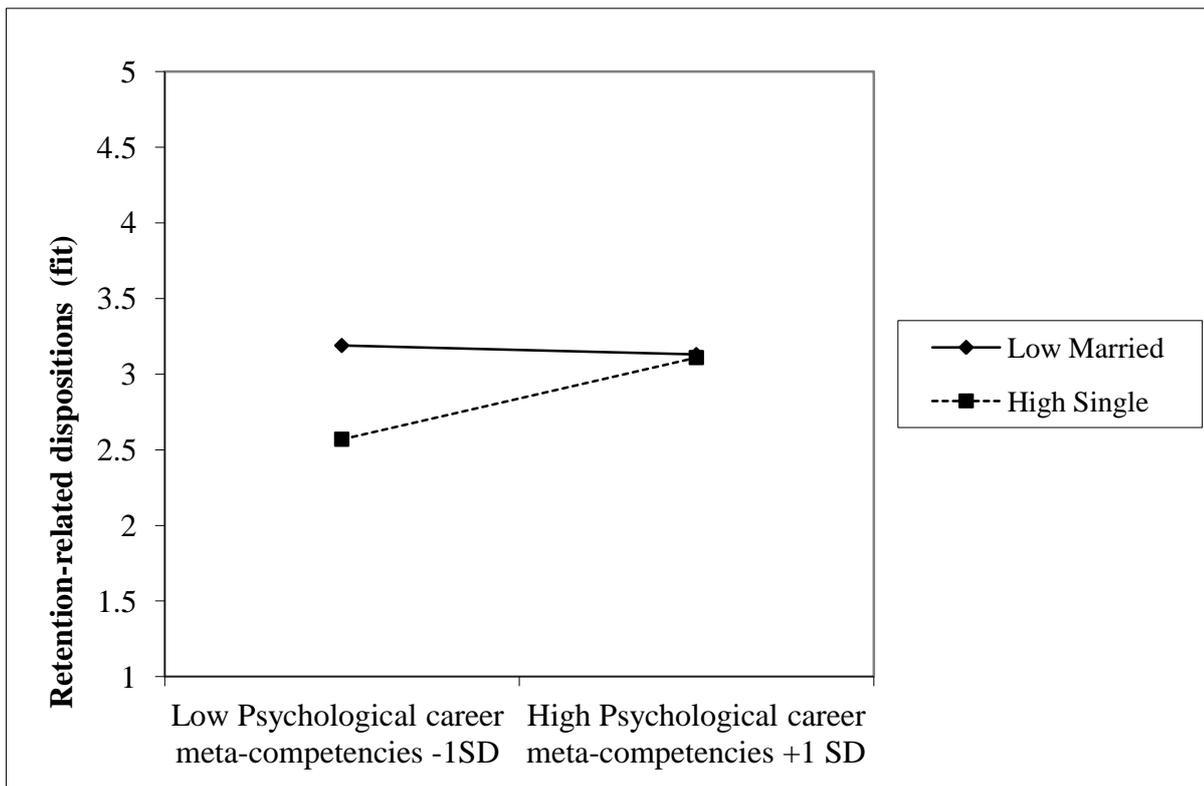
Figure 6.4. Interaction between the psychological career meta-competencies construct and the retention-related disposition job-embedded fit construct (Marital status)

6.3.4.4 Interpretation of moderated regression analysis (marital status = single)

Marital status, specifically being single, significantly moderates the relationship between psychological career competencies and the retention-related disposition job-embedded fit. Being single may influence an individual's self/other skills, career directedness, behavioural adaptability, career adaptability and hardiness (control and commitment), which in turn may influence retention-related factors such as fit in the organisation.

The results indicated that being single could mean that an individual may have the ability to discipline himself or herself to remain composed and get the most out of himself or herself and make the most of his or her good qualities to be successful in whatever he or she tackles. These abilities specifically focus on individuals' career enablers, which include self/other skills. Furthermore, being single may influence individuals' career directedness (career drivers), which indicates that single individuals may have a clearer idea about what they would like to become in their career, know where and how to find the help and support they needed to achieve their career goals and, and it may be easier for them to make up their minds about how and where to find new job opportunities. Being single may also influence individuals' behavioural adaptability (career harmonisers), which indicates that single

individuals may have more energy, more courage to handle their misfortunes and failures, be able to laugh more easily at their own mistakes and adapt to new things and situations in their lives.

The fact that individuals are single could influence their career adaptability as a whole. Career adaptability includes the concern, control, curiosity, cooperation and confidence of an individual. Single individuals may be more likely to plan the important things before tackling them,, think about what their future will be like, realise that today's choices shape their future and make plans to achieve their goals. Single individuals may also be more prone to make decisions on their own, think before they act, take responsibility for their actions, stick up for their beliefs and do what is right for them. Such individuals (single) may be more inclined to look for opportunities to grow as a person, investigate options before making a decision, observe different ways of doing things and probe deeply into questions. Single individuals may also be better team players, compromising with other people, beinggood listeners and contributing towards their community. Lastly, in terms of single individuals' career adaptability, they may be able to learn from their mistakes more easily, be more dependable, feel more pride in a job well done, have more self-confidence and learn new skills without too much effort.

Marital status, specifically being single, may also impact on an individual's hardi-commitment, which indicates that he or she may often wake up eager to take up life where he or she left off the day before, find it difficult to imaging getting excited about working and really look forward to their work. In the same sense, a an individual's hardi-control will also be influenced by not being married. Single people may feel that when they marry and have children they will lose all their freedom and believe that most of what happens in life is simply meant to happen.

The results provide supportive effidence for Ha5: The biographical variables (gender and marital status) significantly and positively moderate the relationship between the independent (psychological career meta-competencies) and the dependent (retention-related dispositions) canonical latent variate.

6.3.5 Tests for significant mean differences

The aim of this section is to address research aim 6, namely to empirically investigate whether significant differences exist between the groups of biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.

6.3.5.1 Reporting differences in mean scores for gender groups (PCRI, CAI, PVS-II, JES & OCS)

The research results of the Mann-Whitney U test, t-test and mean scores investigating the relationship between the psychological career meta-competencies (PCRI, CAI, PVS-II) and the retention-related dispositions (JES) and the demographic variable of gender are providedin Tables 6.31 and 6.32.

Table 6.31

Mann Whitney U Test for Gender: Psychological Career Meta-Competencies (PCRI, CAI and PVS-II) and Retention-Related Dispositions (JES) (n = 355)

		Mean scores for males and females							
	Females			Males					
	N	Mean	SD	N	Mean	SD	Mann Whitney U	z	Sig
Psychological career meta-competencies									
PCRI									
Self/other Skills	252	24.78	3.68	103	23.66	3.81	10669.50	-2.641	0.01**
PVS-II									
Commitment	252	27.58	6.39	103	29.20	6.50	11309.00	-1.904	0.05*

***p ≤ .001 **p ≤ .01 *p ≤ .05

The Mann Whitney U results and mean scores in Table 6.31 indicate that the female participants obtained a significantly higher mean score than their male counterparts on the PCRI self/other skills (*M* = 24.78; *SD* = 3.68). No significant differences were observed between males and females with regard to career directedness and behavioural adaptability. The males obtained significantly higher mean scores than their female counterparts on the PVS-II variable commitment (*M* = 29.20; *SD* = 6.50). No significant differences were evident between males and females with regard to hardi-commitment. In addition, no significant differences were observed between the various gender groups regarding their retention-related dispositions (job embeddedness-fit).

Table 6.32

Independent T-Test Results for Gender: CAI (n = 355)

Mean scores for males and females										
	Females			**Males**						
	N	**Mean**	**SD**	**N**	**Mean**	**SD**	**F**	**t**	**df**	**Sig**
Psychological career meta-competencies										
CAI										
Concern	252	42.62	6.63	103	40.81	7.06	1.139	-2.29	353	.02**
Control	252	44.99	6.75	103	43.29	7.24	.469	-2.12	353	.04*
Curiosity	252	42.06	6.85	103	40.07	7.45	1.484	-2.43	353	.02**
Cooperation	252	41.29	7.08	103	38.07	7.02	.075	-3.90	535	.00***
Confidence	252	44.45	6.70	103	42.32	7.11	.920	-2.67	353	.01**

***$p \leq .001$ **$p \leq .01$ *$p \leq .05$

The t-test results and mean scores provided in Table 3.32 indicate that the female participants obtained significantly higher mean scores in the CAI on the variables concern (*M* = 42.62; *SD* = 6.63), control (*M* = 44.99; *SD* = 6.75), curiosity (*M* = 42.06; *SD* = 6.85), cooperation (*M* = 41.29; *SD* = 7.08) and confidence (*M* = 44.45; *SD* = 6.70). No significant differences were evident between the gender groups regarding their psychological career meta-competencies (hardi-control). Furthermore, no significant differences were observed between the males and females with regard to the retention-related disposition job-embedded fit.

6.3.5.2 Interpretation of significant differences in mean scores for gender groups

The results indicated that the female participants experienced higher levels of self or other skills to enable them to do their jobs than their male counterparts. This indicates that the female participants may have been better able to make their emotions the centre of attention throughout the decision-making process of their career, and this would have had a motivational influence on adaptive behaviour by encouraging these individuals to consider numerous affective components when making occupational choices (Coetzee, 2008).

The results also indicate that the males tended to show higher levels of hardi-commitment in their careers than the female participants. This could mean that males are more committed to and embedded in their careers than the females. These results support the findings of Mallol *et al.* (2007), Mitchell *et al.* (2001a), which indicated that individuals who are more embedded, may be less absent from work, work harder, perform better and engage in more organisational citizenship behaviours than individuals who are less embedded.

The results indicate that the female participants were far more career adaptable than the male participants. The females showed higher levels of concern, control, curiosity, cooperation and confidence in their jobs or careers. Individuals who show high levels of career adaptability in their careers may experience strong feelings of emotional attachment to the organisation. These results support the findings of Ito and Brotheridge (2005), London and Smither (1999), Mitchell *et al.* (2001a) and Meyer and Allen (1991) who found that career adaptable individuals are likely to engage in self-development activities that will enable them to take advantage of opportunities in their job or career.

6.3.5.3 *Reporting of differences in means scores for marital status (PCRI, CAI, PVS-II, JES & OCS)*

In order to determine whether the marital status of the participants differed significantly in their mean scores obtained on the psychological career meta-competencies (PCRI, CAI & PVS-II) and the retention-related dispositions (JES-fit), a Kruskal Wallis test was conducted.

Table 6.33

Kruskal-Wallis Test on Marital Status: Psychological Career Meta-Competencies (PCRI, CAI & PVS-II) and Retention-Related Dispositions (JES) (n = 355)

	Group	N	Means	SD	Chi-square	df	Sig.
Psychological career meta-competencies							
PCRI Scale							
Behavioural Adaptability	Single	194	27.40	4.97	9.59	3	.02**
	Married	134	28.77	4.89			
	Widowed	5	24.40	4.56			
	Separated/Divorced	22	28.82	4.79			
PVS-II Scale							
Commitment	Single	194	28.68	6.57	7.63	3	.05*
	Married	134	27.59	6.26			
	Widowed	5	23.60	4.22			
	Separated/Divorced	22	26.36	6.41			
Retention-related dispositions							
JES Scale							
Fit	Single	194	3.33	6.98	12.67	3	.01**
	Married	134	32.83	5.99			
	Widowed	5	35.20	4.71			
	Separated/Divorced	22	3.64	7.45			
	Separated/Divorced	22	22.77	7.51			

***$p \le .001$ **$p \le .01$ *$p \le .05$

Table 6.33 indicates that the marital status of the participants appeared to differ significantly in respect of their behavioural adaptability. The Kruskal-Wallis test indicated that the widowed participants showed significantly lower mean scores (M = 24.40; SD = 4.56) than the separated or divorced participants (M = 28.82; SD = 4.79) regarding their behavioural adaptability.

The results indicate that the marital status of the participants appeared to differ significantly with respect to their hardiness (commitment). The Kruskal-Wallis test indicated that the widowed participants showed significantly lower mean scores (M = 23.60; SD = 4.22) than the single participants (M = 28.68; SD = 6.57) as far as commitment was concerned.

The results indicate that the marital status of the participants appeared to differ significantly in respect of their job embeddedness (fit). The Kruskal-Wallis test indicated that the single participants showed significantly lower mean scores (M = 3.33; SD = 6.98) than the widowed participants (M = 35.20; SD = 4.71) regarding their organisational fit.

Table 6.34

ANOVA on Marital Status: Psychological Career Meta-Competencies (PCRI, CAI & PVS-II) and Retention-Related Dispositions (JES) (n = 355)

	Group	N	Means	Standard deviation	Sum of squares	df	Mean Square	F	Sig.
Psychological career meta-competencies									
CAI-Scale									
Curiosity	Single	194	41.41	7.09	418.980	3	139.660	2.832	.04*
	Married	134	42.22	6.81					
	Widowed	5	34.80	11.26					
	Separated/Divorced	22	39.14	6.70					
Cooperation	Single	194	39.95	7.70	505.795	3	168.598	3.311	.02**
	Married	134	41.43	6.50					
	Widowed	5	32.80	4.44					
	Separated/Divorced	22	39.14	5.99					

***p ≤ .001   **p ≤ .01   *p ≤ .05

Table 6.34 indicates that the marital status of the participants appeared to differ significantly in respect of their career adaptability, specifically curiosity and cooperation. The ANOVA indicated that the widowed participants showed significantly lower mean scores (M = 34.80; SD = 11.26) than the married participants (M = 42.22; SD = 6.81) regarding the curiosity variable of the CAI. The ANOVA indicated that the widowed participants (M = 32.80; SD = 4.44) showed a significant lower mean score than the married participants (M = 41.43; SD = 6.50) in respect of the cooperation variable of the CAI.

The results also indicated that the married participants appeared to be far more career adaptable (curiosity and cooperation) in their careers or jobs than the single participants. This could be because they displayed curiosity by exploring possible selves and future scenarios and had the capacity to stand by their own aspirations and objectives, even in the face of obstacles and barriers.

The results indicated that participants who were divorced or separated showed higher levels of behavioural adaptability. The reason for this could have been the emotional journey these individuals had experienced in their lives (Ferreira, 2010).

The results indicated that the single participants showed higher levels of hardiness, especially commitment towards the organisation or their careers. Futhermore, the results indicated that the widowed participants would be more likely to experience a strong fit with their careers or organisations. The reason for this could have been that that they feel alone and therefore relate to and confide far more in individuals in their organisation and community (Coetzee, 2008).

The results of the test for significant mean differences provide supportive evidence for Ha6: There are significant mean differences between subgroups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variables.

6.4   INTEGRATION AND DISCUSSION

This section integrates the research results and discusses the results in terms of each of the stated research aims.

6.4.1   Biographical profile of the sample and frequencies

The biographical profile obtained from the sample showed that it comprised predominantly single black females between the ages of 26 and 40, in full-time employment (career establishment phase). It therefore seems as if participants in this group could benefit from the psychological career profile in order to retain them as valuable staff members.

The findings furthermore suggested that the participants preferred working in organisations where they can grow and develop their skills and self-esteem and experience feelings of stability and career

purpose. However, the feelings of emotional literacy and independence/autonomy seemed to be slightly out of balance, which implies that the participants may have felt less confident in expressing their emotions appropriately in the work context. The reliability of the PCRI emotional literacy and independence/ autonomy competence was possibly low because the participants were predominantly between the ages of 26 and 40 years and found themselves in the establishment career stage, where they are settling down, choosing a permanent position, learning to relate to other individuals and developing a realistic self-concept (Coetzee, 2008). By being able to express emotions in the work context, communication can be improved. Ferreira (2010) also found that growth/development is important to individuals who find themselves in the establishment career stage.

The participants recognised control and confidence as the most important variable embedded in their career paths (Savickas, 2005). They seemed to prefer working in environments in which they could take control over certain situations, which in turn could also boost their confidence. A possible reason for this finding could be that the majority of the participants were full-time employees in middle or senior management positions, which require a great deal of responsibility, control and confidence. However, cooperation and concern seemed to be slightly less important, which implies that the participants were less favourable towards working in joint operationsin their careers. The participants probably preferred working alone (in isolation) throughout their careers, which could also be a result of their level of employment.

The participants recognised challenge as the main variable embedded in their career paths. Individuals who thrive on challenge are motivated to become catalysts in their environment, and these participants may be more likely to remain with their current organisation because they regard the cost of leaving the organisation as too high. These findings are in line with those of Kobassa (1982) and Maddi (1999), which indicated that highly challenged individuals are characterised by cognitive flexibility and tolerance for ambiguity. This allows these individuals to integrate unexpected or otherwise stressful events more easily.

However, commitment and control seemed to be slightly less important, which implies that the participants were less likely to involve themselves in a number of life situations, including work, family, interable to believe in the certainty, significance and the interest value of why they are and what they are doing. Considering that the participants were predominantly in the establishment phases of their careers, the findings seem to be in agreement with Super's (1990) view that this stage represents the period in which the life structure of young adults becomes a more stable period as they begin to settle down, become committed to contributing towards an occupation, a company or a person and starting to establish socially supportive networks (Greenhaus *et al.*, 2010).

The participants recognised fit as the most important variable embedded in their career paths. Put differently, fit includes the individual's compatibility with his or her work and community settings. The findings of this study correspond with those of Mitchell *et al.*, (2001a).

However, links and sacrifice seemed to be slightly less important, which implies that the participants placed more value on how they fit into a specific organisation than what their links or connections are with their family or community. These links are not necessarily in the workplace and may involve not only an employee, but also family members. According to Mitchell *et al.* (2001b), the higher the number of links between the individual and the work, the more he or she is bound to the job and the organisation. The participants also regarded sacrifice as less important. Sacrifice includes all the benefits an individual must give up if he or she were to leave the job. Put simply, it is the perceived loss of material or psychological benefits that are currently available or will be available in the future (Holtom & O'Neil, 2004).

The participants seemed to be more focused on the costs, consequences and risks of leaving the organisation. This could imply these individuals were staying with their current organisations because they felt the economic risks and costs would be too high if they were to decide to leave their current organisation. According to Spector (2008), continuance commitment is produced by the benefits accrued from working for the organisation and by the lack of available alternative jobs. However, the participants' feelings of normative commitment were slightly lower, which implies that they may not have experienced any obligation to continue working at a specific organisation (Ferreira, 2010; Ferreira *et al.*, 2010). These findings in the current study suggest that the participants also felt a less stronger sense of obligation towards their employer, either because of their own values not being met or because of favours received from the organisation.

6.4.2   Research aim 1

Research aim 1 was to assess the empirical interrelationships between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as manifested in a sample of respondents in the South African context.

The overall psychological career resources profile of the participants indicated that besides their independence/autonomy, authority/influence and career purpose, they seemed to have stability, managerial attributes, practical and self-developed skills, career directedness and a positive self-

esteem. It is clear from the relationship identified between the participants' growth and development and fit with the organisation, that those participants who develop in a job or career may feel a stronger sense of belonging to the organisation. This means that when the individual's job meshes with or complements other areas of his or her life as well, this enhances his or her embeddedness in an organisation (Holtom & O'Neil, 2004). Furthermore, the relationship between the participants' self-esteem, links and sacrifice suggested that the participants with a positive highly developed self-esteem could form better links with the organisation and community and experience a higher sense of sacrificing what is important to him or her. An individual with strong links and high levels of sacrifice will choose to remain with the organisation, which in turn will have a positive effect on the retention of talented staff (Mitchell *et al.*, 2001a).

The relationship between the participants' psychological career resources and organisational commitment indicated that they were far more focused on managerial matters, the development of practical and creative skills, career purpose, career venturing and their self-esteem. This focus on managerial issues could indicate that the participants felt more emotionally attached to the organisation. Long-term goals or objectives can be set by individuals for their careers, based on their career preference (Coetzee, 2008). This relationship could further suggest that an individual in a managerial position might think twice about the costs involved when faced with a decision to leave the organisation. It could futher be interpreted that individuals who know where they are going in their careers would probably remain with the organisation because they experience a feeling of obligation and a sense of duty towards it. These findings concur with those of Beck and Wilson (2000).

The overall career adaptability variable indicated a significant relationship with job embeddedness, with the exception of cooperation. The relationships between the career adaptability variables and fit suggest that the participants who showed concern, control, cusiosity, cooperation and confidence in their careers or work situation may experience a stronger feeling of belonging in an organisation, which in turn may ensure that they remain in their current organisation. Furthermore, the participants who showed concern, control, curiosity and confidence in their careers could form stronger links or connections with the organisation and their community. Participants with a strong sense of concern, control, cusiosity and confidence could probably break the links formed with the organisation and community more easily. An individual's turnover intentions are closely related to the notion of job and occupational embeddedness (Coetzee & Schreuder, 2010).

No relationship between the participants' career adaptability and organisational commitment was observed, except for the participants with a high sense of control in terms of their continuance commitment. These results suggest that participants who were highly concerned in their career or

work situation would probably be less likely to remain with their current organisation. A possible reason for this is that the individual is concerned about the costs involved when making a decision to leave the organisation. According to Meyer and Allen (1991), individuals whose principal connection to the organisation is based on continuance commitment stay because they need to.

The fact that there was no relationship between the participants' hardi-commitment and control and their fit in the organisation could suggest that the participants who view potentially stressful situations as meaningful and interesting and see stressors as changeable might be less likely to feel a sense of belonging towards the organisation and community. The fit refers to the extent to which an individual's job and occupation interconnect with or complement other areas of his or her life (Coetzee & Schreuder, 2010).

A relationship was evident between the participants' hardiness and organisational commitment. Those participants who viewed stressful situations as meaningful and interesting, stressors as changeable and change as a normal aspect of life instead of as a threat, and viewed change as an opportunity for growth, may have strong feelings of emotional connection with the organisation. Furthermore, hardy individuals may remain with their current organisations because of the high costs involved when deciding to leave. Individuals remain with a specific organisation because of the money they add as a result of the time spent in the organisation, not because they want to (Meyer & Allen, 1991).

6.4.3   Research aim 2

Research aim 2 was to conduct an empirical investigation into the overall statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) as the set of independent latent variables, and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as the set of dependent latent variables.

The findings indicated that the psychological career meta-competencies construct variables significantly and positively correlated with the retention-related dispositions construct variables, indicating that individuals with a psychological career resources profile, high career adaptability and hardiness would be likely to experience high levels of embeddedness, specifically fit, in an organisation. This is a significant observation because it could indicate that should an individual's psychological career resources, career adaptability and hardiness be enhanced, his or her retention-related disposition (job-embedded fit) would thus also increase.

6.4.4   Research aim 3

Research aim 3 was to empirically investigate whether the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) positively and significantly predict the retention-related dispositions construct variables (job embeddedness and organisational commitment).

In terms of the participants' psychological career resources and job embeddedness, it can be suggested that an individual's psychological career resources, specifically his or her self and other skills are important in explaining his or her overall job embeddedness.   A individual with well-developed self/other skills and self-esteem will therefore experience connections between himself or herself and other individuals, groups and organisations, he or she will feel compatible with his or her job, organisation and community, and lastly, will take into account the cost of what he or she would have to give up if he or she decides to leave the job.   These results support the findings of Mitchell *et al.* (2001b) who found that the use of personal develoment plans and the establishment of mentoring systems can continue to provide for employees to fit in and link with their jobs throughout their career.

The participants' psychological career resources, specifically their managerial preference and self-esteem, predicted their overall organisational commitment towards the organisation.   The participants with a strong preference for managerial positions and who had a well-developed self-esteem therefore seemed to experience strong feelings of emotional attachment to the organisation.   These results support the findings of Ferreira *et al.* (2010) and Meyer and Allen (1997), which indicated that having the authority to influence the goals of the organisation seems to increase individuals' sense of responsibility to continue their employment with the organisation.

Career adaptability did not predict job embeddedness at all.   Furthermore, the results suggested that the participants' career adaptability, specifically their curiosity, predicted or explained their overall organisational commitment to the organisation.   Those participants who showed high levels of curiosity in their careers may have experienced strong feelings of emotional attachment towards the organisation. These results support the findings of Ito and Brotheridge (2005), London and Smither (1999), Mitchell *et al.* (2001a) and Meyer and Allen (1991), who found that career adaptable individuals are likely to engage in self-development activities that will enable them to take advantage of opportunities in their job or career.   By providing sufficient growth opportunities in an individual's career, he or she will feel more committed towards the organisation.

In terms of the participants' hardiness, the results indicated that hardiness, particularly the participants' commitment and challenge, predicts or explains their overall job embeddedness. These results support the findings of Mallol *et al.* (2007) and Mitchell *et al.* (2001a) which indicated that individuals who are more embedded, may be less absent, work harder, perform better and engage in more organisational citizenship behaviours than individuals who are less embedded.

Individuals' hardiness, specifically their commitment and challenge, predict or explain their overall organisational commitment towards the organisation. These findings are in agreement with those of Maddi *et al.* (2009) and Sezgin (2009), who indicated that individuals high in hardiness are more likely to experience organisational commitment because they may have strong feelings of control and commitment owing to the congruence between individual and organisational values.

6.4.5 Research aim 4

Research aim 4 was to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

In terms of this aim, the structural equation model indicated that a theoretically conceptualised psychological career competencies model does have a moderately good fit with the empirically manifested structural model. Several goodness-of-fit models were tested and the best model fit revealed that psychological career resources (self/other skills, career directedness and behavioural adaptability), career adaptability (concern, control, cusiosity, cooperation and confidence) and hardiness (commitment and control) contributed most significantly to the psychological career competencies construct. The model further revealed that job embeddedness (fit) contributed significantly to the retention-related factors construct. Only self/other skills, career directedness and behavioural adaptability were included in the psychological career resources variable because all the other items did not reveal high item reliabilities with the general variable. In addition, organisational commitment was totally excluded from the retention-related factors construct because it did not yield high item reliabilty. A relationship was evident between psychological career meta-competencies and retention-related dispositions, thus confirming the results that emerged in the correlational canonical analysis. This model could therefore be utilised in a retention practice context to enhance an individual's psychological career meta-competencies and fit so as to retain talented employees.

It is interesting to note that cognitive, affective, conative and interpersonal psychological dimensions were found to be significant in a psychological career profile. These dimensions contributed most to the psychological career meta-competencies, suggesting that individuals should be developed at a

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cognitive, interpersonal, affective and conative level in order to increase their retention-related dispositions. Retention-related dispositions (fit) included in the model mostly related to the interpersonal psychological dimension, suggesting that individuals should be developed at an interpersonal level in order to increase their job embeddedness, especially their fit.

The following psychological career meta-competencies (as indicated in table 6.35) were therefore included in the proposed psychological career profile:

Table 6.35

Psychological Profile Constituting Psychological Career Meta-Competencies Construct Variables (Psychological Career Resources, Career Adaptability and Hardiness) and Retention-Related Disposition (Job-Embedded - Fit)

Psychological behavioural dimensions	Psychological career meta-competencies			Retention-related disposition
	Psychological career resources	Career adaptability	Hardiness	Job embeddedness
Cognitive		Concern Control		
Affective		Confidence	Commitment	
Conative	Career directedness Behavioural adaptability	Curiosity	Control	
Interpersonal	Self/other skills	Cooperation		Fit

6.4.6   Research aim 5

Research aim 5 was to assess whether the biographical variables (age, gender, race, marital status, job level and employment status) significantly moderate the relationship between the psychological career meta-competencies construct variate (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variate (job embeddedness and organisational commitment).

Gender seemed to significantly moderate the relationship between psychological career competencies and retention-related dispositions.   Being female may influence an individual's skills, career directedness, behavioural adaptability, career adaptability and hardiness (control and commitment), which in turn may influence retention-related dispositions, specifically fit, in the organisation.

Marital status, both single and married, seems to significantly moderate the relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related disposition construct variable (job-embedded fit). Being single or married may influence an individual's skills, career directedness, behavioural adaptability and hardiness (control and commitment), which in turn may have an influence on retention-related disposition job-embedded fit in an organisation.

6.4.7   Research aim 6

Research aim 6 was to empirically investigate whether significant differences exist between the groups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.

The results indicated that the female participants experienced higher levels of self or others skills than the males to enable them to do their jobs. The findings also suggested that participants who were married appeared to be far more career adaptable (curiosity and cooperation) in their careers or jobs than the single participants. This could be because they display curiosity by exploring possible selves and futurescenarios and have the capacity to stand by their own aspirations and objectives, even in the face of obstacles and barriers.

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The findings indicated that the single participants showed higher levels of hardiness, specifically commitment to the organisation or their careers. Futhermore, the results indicated that the widowed participants were more likely to experience strong fit with their careers or organisations. The reason for this could be that they feel alone and therefore relate to and confide more in individuals in their organisation and community.

According to the findings, race, age, job level and employment status did not reveal any significant differences in terms of the psychological career meta-competencies (psychological career resources, career adaptability and hardiness) and the retention-related dispositions (job embeddedness-fit).

To summarise: Based on the empirically tested psychological career profile, the following interventions should be considered in organisational retention practices:

At a **cognitive level**, interventions should assist individuals to enhance their career adaptability (concern and control). An awareness towards emotions should be fostered and individuals' ability to manage their own careers should be developed.

At an **affective level**, individuals should increase their career adaptability (confidence) and lower their hardiness (commitment) in order to retain talented and valuable staff in the organisation.

At **conative level**, individuals should increase their psychological career resources (career directedness and behavioural adaptability), career adaptability (curiosity) and lower their hardiness (control) in order to retain talented and valuable staff in the organisation.

At an **interpersonal level**, individuals' psychological career resources (self/other skills), career adaptability (cooperation) and job embeddedness (fit) should be enhanced in order to retain talented and valuable staff in the organisation.

In order to summarise all the findings, Figure 6.5 provides an overview of the psychological career profile that can be constructed to guide retention practices.
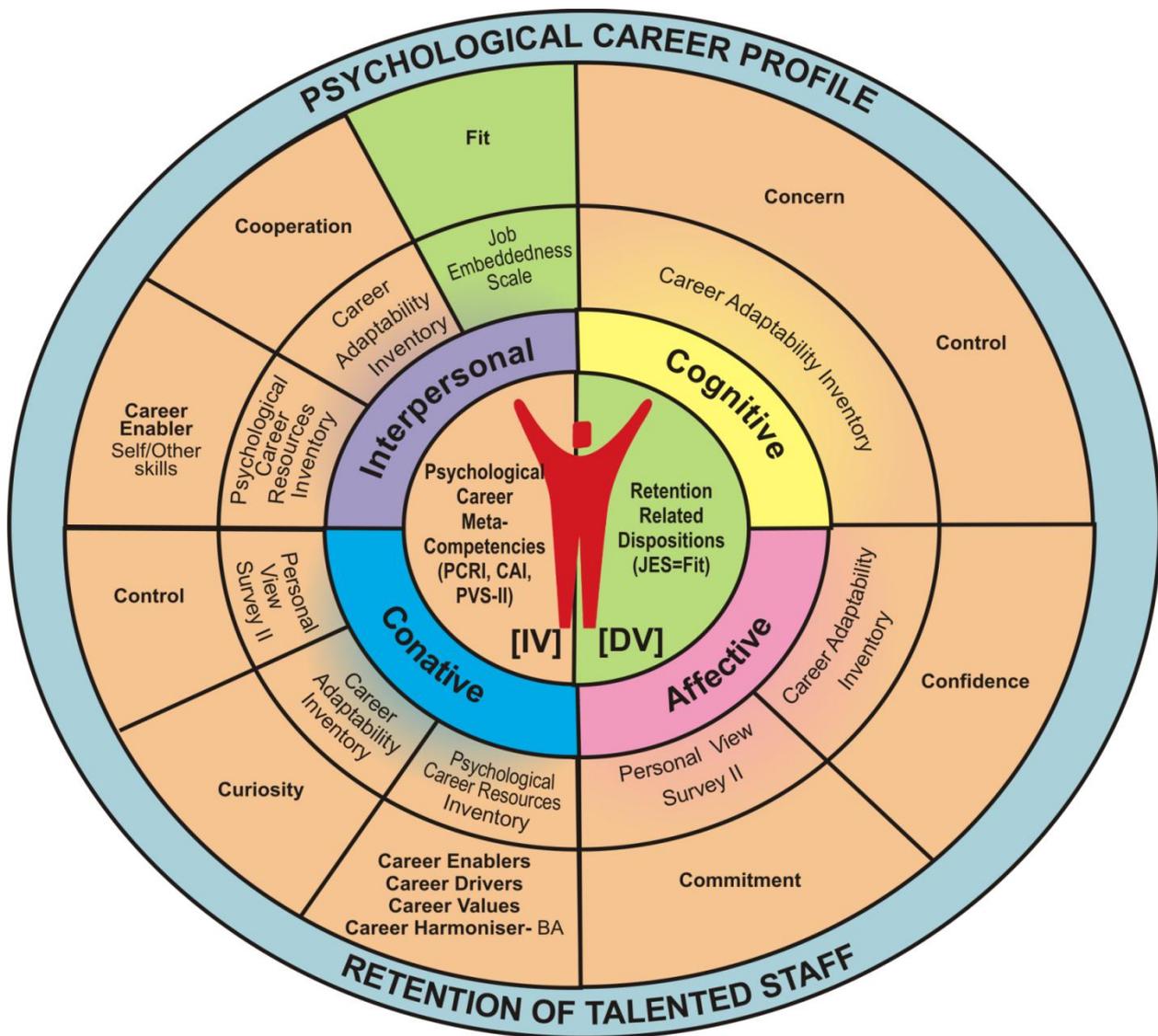
Figure 6.5. *Empirically manifested psychological career profile*

Table 6.36 summarise the key conclusions regarding the research hypotheses.

Table 6.36

Summary of the Research Hypotheses

Research hypotheses	Description	Supportive evidence
H01:	There is no statistically significant positive interrelationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment).	No
Ha1:	There is a statistically significant positive interrelationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment)	Yes
H02	The psychological career meta-competencies construct variates (psychological career resources, career adaptability and hardiness) as a composite set of independent latent variables are not significantly and positively related to the retention-related dispositions construct variates (job embeddedness and organisational commitment) as a composite set of dependent latent variables.	No
Ha2	The psychological career meta-competencies construct variates (psychological career resources, career adaptability and hardiness) as a composite set of independent latent variables are significantly and positively related to the retention-related dispositions construct variates (job embeddedness and organisational commitment) as a composite set of dependent latent variables.	Yes
H03	The psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) do not positively and significantly predict the retention-related dispositions construct variables (job embeddedness and organisational commitment).	No
Ha3	The psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) positively and significantly predict the retention-related dispositions	Yes

	construct variables (job embeddedness and organisational commitment).	
H04	The theoretically conceptualised psychological career profile model does not have a good fit with the empirically manifested structural model.	No
Ha4	The theoretically conceptualised psychological career profile model has a good fit with the empirically manifested structural model.	Yes
H05	The biographical variables (gender, race, age, marital status, job level and employment status) do not significantly and positively moderate the relationship between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.	No
Ha5	The biographical variables (gender, race, age, marital status, job level and employment status) significantly and positively moderate the relationship between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.	Yes
H06	There are no significant mean differences between sub-groups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.	No
Ha6	There are significant mean differences between sub-groups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.	Yes

This completes all the steps in the empirical investigation and the empirical research questions have been answered.

6.5 CHAPTER SUMMARY

In this chapter, the descriptive, correlational and inferential statistics of relevance to this research were reported and interpreted to enable the researcher to integrate the findings of the literature review with the empirical research findings. The results provided supportive evidence for the stated research hypotheses.

The following research aims were achieved:

Research aim 1: To assess the empirical inter-relationships between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as manifested in a sample of respondents in the South African context.

Research aim 2: To conduct an empirical investigation into the overall statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) as the set of independent latent variables and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as the set of dependent latent variables.

Research aim 3: To empirically investigate whether the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) positively and significantly predict the retention-related dispositions construct variables (job embeddedness and organisational commitment).

Research aim 4: Based on the statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment), to assess the fit between the elements of the empirically manifested structural model and the theoretically conceptualised model.

Research aim 5: To assess whether the biographical variables (age, gender, race, marital status, job level and employment status) moderate the relationship between the psychological career meta-competencies construct variates (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variates (job embeddedness and organisational commitment).

Research aim 6: To empirically investigate whether significant differences exist between the sub-groups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.

Chapter 7 deals with the final stage of the empirical study, namely to draw conclusions, discuss the limitations and make recommendations on the basis of the findings of the research study.

Chapter 7 addresses research aim 7, namely to make recommendations for the discipline of industrial and organisational psychology practices and specifically career development and counseling practices and for possible future research based on the findings of this research study.

CHAPTER 7: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter addresses empirical research aim 7, namely to make recommendations for the discipline of industrial and organisational psychology and human resource management talent retention practices and future research.The chapter highlights the limitations of the literature and empirical results of the study and makes recommendations for the practical application of the findings and for future research studies.

7.1 CONCLUSIONS

This section focus on the conclusions based on the literature and empirical studies in accordance with the aims of the research, as set out in chapter 1.

7.1.1 Conclusions relating to the literature review

The general aim of this research was to investigate the relationship dynamics between individuals' psychological career meta-competencies (psychological career resources, career adaptability and hardiness) and their retention-related dispositions (job embeddedness and organisational commitment), and to determine whether an overall psychological career profile can be constructed to inform staff retention practices in the multicultural South African organisational context. The general aims were achieved by addressing and achieving the specific aims of the research.

Conclusions were drawn in terms of each of the specific aims regarding the relationship dynamics between the psychological career meta-competencies constructs (psychological career resources, career adaptability and hardiness) and the retention-related dispositions constructs (job embeddedness and organisational commitment).

7.1.1.1 *The first Aim:* To conceptualise individual career behaviour and retention in the 21st century

The first aim, namely to conceptualise individual career behaviour and retention in the 21st century, was achieved in chapter 2.

The literature indicated that the outlook on careers has evolved over the years. According to Baruch (2004a), change has always existed, but the speed of it seems to be increasing. Business organisations experience an array of fast developments or changes in various areas such as the economy, technology and society in general. These developments or changes have wide implications for the management of employees' work, in particular, in the planning and management of their careers. The current generation fails to see the boundaries in many facets of life, and this could have implications for their careers as such, because careers are becoming multidirectional and boundaryless (Baruch, 2004).

On the basis of the literature review, the following conclusions can be drawn about boundaryless careers:

- Over the last two decades, two models have dominated thinking and research in the literature, namely the protean and the boundaryless career (Baruch, 2004; Briscoe *et al.*, 2006; Hall, 1996a; Mervis & Hall, 1996).
- Modern-day careers have been defined as boundaryless in the sense that they are becoming more entrenched in a further dynamic boundary-spanning knowledge economy, frequently concerning opportunities that go beyond any single employer (DeFillippi & Arthur, 1994; Zikic *et al.*, 2010).
- Conventional thinking suggests that organisations simply do not matter as much as they did in the past (Baruch, 2004).
- The boundaryless career (DeFillippi & Arthur, 1994) emerged from the boundaryless organisation (Ashkenas *et al.*, 1995).
- Careers have become transitional and flexible, and the dynamics of restructuring have blurred the tidy former routes to success (generating new perspectives on what success is).
- Linear career systems have become multidirectional (Baruch, 2006).

It is clear from the literature that the boundaryless career reflects a new approach to careers, in which the psychological contract between the employer and employee no longer automatically includes a promise of lifetime employment and stable career advancement (Arthur, 1994). The boundaryless career entails that employee have to engage in a range of career self-management activities to create options that allow them to realise their personal career goals and enhance their employability (De Vos & Soens, 2008). It can also be concluded that the responsibility for managing careers is changing increasingly from employers to adaptive and proactive employees (Raabe *et al.*, 2007), which indicates that employees act as career agents in their organisation and career. Such self-management behaviour can influence career success according to how well a career plan is implemented. If employees

manage their careers proactively as a result of the intervention, they are more likely to change their jobs more quickly. It is thus possible to include individuals who engage in such self-regulatory behaviours by expanding self-management principles from more specific behaviours to the self-control of more global, complex, goal-directed actions needed in career building. Career self-management thus involves those activities that allow individuals to make a realistic self-assessment of their own talents and capabilities in the light of organisational career opportunities as well as concrete action to realise these ambitions (De Vos *et al.*, 2009).

It is evident from the literature review that educated individuals become entrepreneurs of their own career, building a portable repertoire of competencies to maintain and enhance their market value (Hoekstra, 2011). They choose a job fitting their personal goals as far as market conditions allow. Organisations vary in committing to those persons they value most in the labour market and offer temporary and noncommitting contracts to the more easily replaceable majority. Individuals are responsible for managing their own careers and therefore for negotiating employment conditions and opportunities for further development (Sullivan, 1999). Since individuals are becoming increasingly responsible for managing their own careers (Briscoe & Hall, 2006), firms find themselves having to work harder to generate organisational commitment (Ng & Feldman, 2010).

(b) Conclusions relating to the retention challenges in the organisation

Retention can be described as initiatives taken by management to prevent employees from leaving the organisation, such as rewarding employees for performing their jobs effectively; ensuring harmonious working relations between employees and managers; and maintaining a safe and healthy work environment (Cascio, 2003). It can be concluded that managers are facing a constant challenge to grow and retain talent and to limit the impact of market-driven turnover on their talent group by dominating the fight for talent in local and global contexts (Mitchell *et al.*, 2001a). This problem is also prevalent in South African organisations (Kerr-Phillips & Thomas, 2009).

It is obvious from the literature that the work context is changing dramatically during the 21st century. Careers have thus also changed and moved away from what was known as the traditional to the boundaryless career. The developments in the career context are also influencing the skills and competencies required of individuals wishing to enter the world of work. A higher qualification or technical skills is no longer enough to secure a job. This study focused on psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment as psychological career factors influencing the retention of valuable employees in an organisation. To enable individuals to acquire the necessary psychological career competencies, they need to take

responsibility for up skilling themselves and managing their careers as effectively as possible. Individuals engage in career counseling and career development activities to identify their strengths and weaknesses and as a tool to foster these psychological career competencies and thus enhance their skills.

As indicated in the literature review, retention can be described as the initiatives taken by management to prevent employees from leaving the organisation, such as rewarding employees for performing their jobs effectively; ensuring harmonious working relations between employees and managers; and maintaining a safe and healthy work environment (Cascio, 2003). Redman and Wilkonson (2009) indicated in their research that organisations need to take cognisance of the changing priorities of job candidates and what attracts them to jobs and organisations.

According to Kerr-Phillips and Thomas (2009), South Africa is experiencing a universal skills crisis, particularly in relation to the retention of the country's top talented and knowledgeable employees. This deficiency results in the reduction or loss of intellectual and technical individuals, with negative impacts on the economic and social growth of the country (Du Preez, 2002).

The literature review revealed the key challenges for retention, which include the following: individual characteristics, workplace structures, environmental conditions, stress, job satisfaction, organisational commitment, remuneration, career opportunities, conflict with colleagues and supervisors, unmet career expectations, job enrichment and specialised skills.

It was possible to identify the key retention challenges in South Africa which include the following: organisational culture, business dynamics, diversity, a new demographic employee pool, ethnicity, language, education, opportunities, competitiveness, personal characteristics, self-centredness and exclusiveness.

The identified retention challenges may serve as a means to reveal the organisation's support of or commitment to their employees and, in turn, promote a mutual attachment by employees. Employees' organisational commitment is associated with their belief that the identified retention factors are justified by the aspiration to retain outstanding employees and to be fair in the treatment of employees (Döckel *et al.*, 2006).

The second aim, namely to conceptualise the psychological career meta-competencies constructs of psychological career resources, career adaptability and hardiness and how individuals' biographical characteristics influence the development of these competencies, was achieved in chapter 3.

(a)   Conclusions relating to the construct psychological career resources

The following conclusions can be drawn:

Resources are defined as those entities that are either centrally appreciated in their own right (e.g. self-esteem, close attachments, wellbeing and internal tranquility) or operate as a means to gain centrally appreciated ends (Hobfoll, 2002). Career meta-competencies comprise an assortment of psychological career resources which include attributes and abilities such as behavioural flexibility, self-knowledge, career orientation consciousness, sense of reason, self-esteem and affective literacy, which enable individuals to be independent learners and hands-on agents in the administration of their careers (Coetzee, 2008; Hall & Chandler, 2005). According to Coetzee (2008), becoming more alert to the meta-competencies may result in psychological career resources turning out to be a more significant determinant than career development preparation nowadays, which is part of the age of swiftly changing technology, globalisation, demographic employee changes and altering organisational structures.

From the literature is it clear that the concept of psychological career resources comprises career preferences, career values, career enablers, career drivers and career harmonisers. All of this combined form an individual's psychological career resources profile which will probably impact on how he or she administers his or her career. According to Coetzee (2008), if all of these resources are in balance and function at their optimal level, they are an indication of awareness and independent career behaviour that may guide and motivate the individual.

The career preferences of individuals steer their career moves, values or ideals on the basis of their enthusiasm for a particular career (Brousseau, 1990). This means that an individual's long-term career goals may be influenced by the way he or she prefers or values his or her career. An individual's preference can be influenced by his or her interests and what he or she likes or dislike. If this is true then an individual may be more driven towards his or her career goals. Coetzee (2008)

confirmed this statement by indicating that sense of purpose is based on an individual's self-belief and personal convictions, which he or she is able to accomplish through his or her career goals, which consist of being of service to others and delivering the best he or she possibly can.

When individuals seem to be satisfied in their careers, they need to be able to uphold the feeling of satisfaction, and this can be done by developing new skills to help them do the job to the best of their ability. Career enablers can be divided into two constructs as identified by Coetzee (2008), namely practical or creative skills and self or other skills which will enable an individual to do better in his or her job or career. This includes skills such as applying an existing theoretical construct in a practical and innovative manner in order to focus on novel ways of accomplishing goals and new heights.

Once the individual has developed the skills and knowledge to sustain the feeling of satisfaction, he or she needs to develop emotional intelligence in order to harmonise his or her career. Career harmonisers are embedded by individuals' emotional literacy and social connectivity (Coetzee, 2008). According to Emmerling and Cherniss (2003), individuals who are in a situation of being emotionally intelligent, may probably be in a better position to make use of their motivational characteristics of emotions. They may be capable of focusing on exact emotions throughout decisions about their career, and this will have a motivational influence on adaptive behaviour by encouraging individuals to consider numerous affective components when generating occupational choices.

(b)   Conclusions relating to the construct of career adaptability

The following conclusions can be drawn:

Savickas (2005) conceptualises adaptive individuals as beings who become concerned about their future as employees and then take action to increase their personal control over their vocational future. Adaptive individuals are proactive by displaying curiosity and exploring possible selves and future scenarios. They also seek to strengthen their confidence in pursuing their aspirations (Savickas, 2005).

In considering adaptability, the career construction theory (Savickas, 2005) highlights a set of specific attitudes, beliefs and competencies, which shape the actual problem-solving strategies and coping behaviour that individuals use to synthesise their vocational self-concepts with work roles. Accordingly, the aim of life design intervention is to increase career adaptability. For example, it seeks to increase the five "Cs" of career adaptability theory, namely concern, control, curiosity, confidence and commitment.

- *Concern* involves a tendency to consider life within a time perspective anchored in hope and optimism (becoming concerned about the vocational future).

- *Control* rests on the conviction that it is an advantage for people to be able not only to use self-regulation strategies to adjust to the needs of the different settings, but also to exert some sort of influence and control over the context (increasing personal control over one's vocational future).

- *Curiosity* about possible selves and social opportunities increases people's active exploration behaviours (they display curiosity by exploring possible selves and future scenarios).

- *Confidence* includes the capacity to stand by one's own aspirations and objectives, even in the face of obstacles and barriers (strengthening the confidence to pursue one's aspirations).

- *Commitment* to one's life projects instead of one's particular job means that career indecision should not necessarily be removed because it actually generates new possibilities and experimentations that allow individuals to be active, even in uncertain situations.

It can further be concluded from the literature review that age and self-efficiancy may influence the development of career adaptability. While research has demonstrated that age alone accounts for little variance in work performance in relatively stable work contexts (Ng & Feldman, 2008; Sturman, 2003; Waldman & Avolio, 1986), it is plausible that adaptation to change in work settings may become more difficult with age (Peeters & Emmerick, 2008). For example, there is evidence to suggest that age is negatively related to the ability and willingness to learn (Colquitt *et al.*, 2000; Kanfer & Ackerman, 2004; Kubeck *et al.*, 1996; Warr, 2001; Warr & Birdi, 1998; Yeatts, *et al.*, 2000). Self-efficacy, which is a person's belief that he or she can master new task demands, is a key determinant of adaptability (Bandura, 1997; Fay & Frese, 2001; Gist & Mitchell, 1992; Kozlowski *et al.*, 2001; Maurer, 2001). Griffin and Hesketh (2005) found evidence that adaptive self-efficacy is positively related to adaptive performance. Herold *et al.* (2007) demonstrated that change-related efficacy is positively associated with change commitment.

(c)   Conclusions relating to the construct of hardiness

On the basis of the literature study, the following conclusions can be drawn regarding the definition of hardiness. Hardiness explains a generalised style of functioning, characterised by a strong sense of commitment, control and challenge that serves to alleviate the negative effects of stress (Azeem, 2010; Delahaij *et al.*, 2010; Hystad *et al.*, 2010; Zhang, 2010). In their original work, Kobassa (1979), Kobassa *et al.* (1982) and Kobassa *et al.* (1983) defined hardiness as a collection of personality characteristics that functions as a flexible resource during the encounter with demanding life events.

The hardiness trait is described as a constellation of three attitudes: commitment, control and challenge (Kobassa, 1979a, 1979b). These attitudes reflect deeply held beliefs that influence the way people interpret stressful events. A hardy individual views potentially stressful situations as meaningful and interesting (commitment), sees stressors as changeable (control) and regards change as a normal aspect of life instead of as a threat, and as an opportunity for growth (challenge) (Funk, 1992). High levels of commitment enable individuals to believe in the truth, importance and interest value of who they are and what they are doing, and therefore the tendency to involve themselves fully in the many situations of life, including work, family, interpersonal relationships and social institutions (Kobassa, 1987, p. 6). Commitment engenders feelings of excitement along with a strong sense of community and motivation to remain engaged during difficult times (Kobassa, 1982, 1985).

It can further be concluded from the literature review that the organisation, family life, work and school, retirement and recreation can influence the development of hardiness. Many organisations and managers are seriously concerned about retaining their top talent. Workforce trends point to an future scarcity of extremely skilled employees who have the essential knowledge and capability to perform at high levels (Hausknecht *et al.*, 2009). Organisations that do not manage to retain high performers will be left with an understaffed and less qualified workforce that will ultimately hold back their capability to continue being competitive (Rappaport *et al.*, 2003).

7.1.1.3 *The third aim:* To conceptualise the retention-related dispositions constructs of job embeddedness and organisational commitment and how individuals' biographical characteristics influence the development of these dispositions.

The third aim, namely to conceptualise the retention-related dispositions constructs of job embeddedness and organisational commitment and how individuals' biographical characteristics influence the development of these dispositions, was achieved in chapter 4.

(a) *Conclusions relating to the construct of job embeddedness*

According to Mitchell *et al.* (2001, p. 1104), job embeddedness suggests that there are several strands that unite an employee and his or her family in a social, psychological and financial network that contains work and nonwork friends, groups, the community and the physical environment in which he or she lives. Job embeddedness represents a broad set of influences on an employee's decision to stay on the job. These influences include on-the-job factors such as bonds with co-workers, the fit between one's skills and the demands of the jobs, and organisation-sponsored community-service activities (Crossley *et al.*, 2007; Holtom *et al.*, 2006). They also includes off-the-job factors such as personal,

family and community commitments. The value of the construct of job embeddedness was also demonstrated by Mitchell *et al*.

In the work and the community environments, an individual can have three kinds of attachments: links, fit and sacrifice. Hence with the two factors (work and community) and the three kinds of attachments (links, fit and sacrifice), the job embeddedness model has six dimensions: work links, work fit, work sacrifice (organisational embeddedness) and community links, community fit and community sacrifice (community enbeddedness). An individual is embedded when he or she has multiple links to the people in the employing organisation and non-work community, when the workplace and the community environment are a good fit for the individual and when the individual feels he or she would have to sacrifice too much to leave the organisation and community (Mitchell *et al*., 2001).

The factors influencing the development of job embeddedness were identified and discussed as organisational staffing and compensation policies; the structure of pension and insurance benefits; intraorganisational networks; organisational socialisation practices; social capital; social support and group cohesiveness; relational demography (race differences); the amount of predictability of time demands; support in resolving work-life conflict; and family and friendship networks. An adaptable positive individual may feel a sense of purpose and be more embedded in his or her career and thus not decide to leave the organisation. Developing an individual's job embeddedness in the career context, could ensure that talented staff are retained in the organisation.

(b) Conclusions relating to the construct of organisational commitment

From the literature review it emerged that there are several different definitions of organisational commitment (Mathieu & Zajac, 1990; Colarelli & Bishop, 1990; Hall, 1976; Randall, 1987; Meyer & Allen, 1991; O'Reilly, 1989). Owing to the fact that this research study was based on Meyer and Allen's Organisational Commitment Survey, their definition was adopted for the purpose of this study. Meyer and Allen (1991) define organisational commitment as reflecting three extensive subject matters, which include affective, continuance and normative commitment. Commitment is therefore analysed as reflecting an affective point of reference towards the organisation, acknowledgement of the consequences relating to leaving the organisation and an ethical responsibility to remain with it (Meyer & Allen, 1991).

Meyer and Allen (1991) indicated that organisational commitment is the observation that commitment is a psychological condition that (1) differentiates the association with the organisation, and (2) has repercussions for the choice to maintain membership with the organisation.

Affective commitment refers to employees who are affectively committed to the organisation and would probably continue working for the organisation because they wish to (Meyer & Allen, 1991). This type of commitment also refer to individuals who are emotionally dedicated and usually remain with the organisation because they see their individual employment relationship as harmonious with the goals and values of the organisation for which they are currently working (Beck & Wilson, 2000).

From the literature, the second component of Meyer and Allen's (1991) model is an individual being fully aware of the consequences that go hand in hand with the decision to leave the organisation (Meyer & Allen, 1997). This definition is also underscored by a number of authors in the literature (Kanter, 1968; Beck & Wilson, 2000; Hrebiniak & Alutto, 1972). Hence it is clear from the literature review that Meyer and Allen (1997) regard commitment as a multidimensional concept.

The last component of their model was conceptualised as a sense of responsibility to continue employment with a specific organisation (Meyer & Allen, 1997). This definition is also supported by others (March & Mannari, 1977; Wiener, 1982; Suliman & Iles, 2000; McDonald & Makin, 2000; Kidd, 2006).

From the literature it can be concluded that the factors influencing the development of organisational commitment were identified as career stages, career success, the psychological contract, age, race and gender. If an individual show signs of adaptability and has a positive outlook on life and in the work context, he or she will probably be easier to retain in the organisation. The reason for this is that an adaptable positive individual may feel a sense of belonging and be far more committed to the organisation and thus be less inclined to leave it.

7.1.1.4 The fourth aim: To conceptualise the theoretical relationship between the psychological career meta-competencies constructs (psychological career resources, career adaptability, and hardiness) and the retention-related disposition constructs (job embeddedness and organisational commitment).

The fourth aim, namely to conceptualise the theoretical relationship between the psychological career meta-competencies constructs (psychological career resources, career adaptability, and hardiness) and the retention-related disposition constructs (job embeddedness and organisational commitment), was achieved in chapter 4.

(a) Conclusions relating to the theoretical relationship between psychological career resources and career adaptability

Individuals with a highly developed psychological career resources profile, which includes their conscious, career-related cognitions of their career preferences, values, skills, attitudes and behaviours that are understood and regarded by individuals as being helpful in realising their goals and achieving career success, may be far more adaptable in the work or career context. If an individual is more adaptable in the context of his or her career, it will be easier to retain him or her because he or she may make the most of new opportunities in the organisation and be able to adjust to change.

(b) Conclusions relating to the theoretical relationship between psychological career resources and hardiness

An individual with a well-developed psychological career resources profile may show stronger feelings of commitment and control in a difficult situation. Such an individual may also regard any challenge in his or her work or career environment as a positive experience. If an individual turns opportunities and challenges into positive experiences, he or she will be easier to retain in an organisation because of his or her feelings of happiness and success.

(c) Conclusions relating to the theoretical relationship between career adaptability and hardiness

An individual who plans his or her career, makes certain decisions on the basis of this planning, explores new opportunities and has the confidence to implement these decisions in order to perform the activities needed to accomplish his or her career objectives, is someone who is highly career adaptable. Such an individual may be committed to and in control of his or her work or career situation and he or she may in turn welcome challenges occurring in the workplace and deal with them as optimistically as possible. A highly adaptable individual with a positive outlook on life and in the work context, would probably be easier to retain in the organisation. This is because an adaptable positive individual may feel a sense of purpose and be far more committed to the organisation and thus decide not to leave it.

(d) *Conclusions relating to the theoretical relationship between psychological career resources and job embeddedness*

An individual with a well-developed psychological career resources profile may show stronger feelings of fit with the organisation and community, better ties with the people in the organisation and the community, and this will probably ensure that he or she remains with the organisation because of the sacrifices if he or she would have to make if deciding to leave it.

(e) *Conclusions relating to the theoretical relationship between psychological career resources and organisational commitment*

An individual with a well-developed psychological career resources profile may show stronger feelings of commitment towards the organisation. This means the individual may be more committed or connected to the organisation at an emotional (affective) level and will also not decide to leave because of the cost associated with this (continuance commitment). An individual with a well-developed psychological career resources profile may also feel a strong sense of responsibility towards the organisation (normative commitment), which in turn may influence his or her decision to leave.

(f) *Conclusions relating to the theoretical relationship between career adaptability and job embeddedness*

An individual who plans his or her career, makes certain decision based on this planning, explores new opportunities and has the confidence to implement these decisions in order to perform the activities needed to accomplish his or her career objectives, may be highly career adaptable. Such an individual may show stronger feelings of fit with the organisation and community, have better ties with the people in the organisation and the community and this may ensure that he or she remains with the organisation because of the sacrifices if he or she would have to make if deciding to leave.

(g) *Conclusions relating to the theoretical relationship between career adaptability and organisational commitment*

An individual who plans his or her career, makes certain decisions based on this planning, explores new opportunities and has the confidence to implement these decisions in order to perform the activities needed to accomplish his or her career objectives, may be highly career adaptable. This means the individual may be more committed or connected to the organisation at an emotional (affective) level. This

person will also not decide to leave the organisation owing to the cost associated with this (continuance commitment). An individual who is career adaptable may also feel a strong sense of responsibility towards the organisation (normative commitment), which in turn may influence his or her decision to leave it.

(h) Conclusions relating to the theoretical relationship between hardiness and job embeddedness

An individual who plans his or her career, makes certain decision based on this planning, explores new opportunities and has the confidence to implement these decisions in order to conduct the activities needed to accomplish his or her career objectives, may be highly career adaptable. Such an individual may show stronger feelings of fit with the organisation and community, better ties with the people in the organisation and community and this will ensure that he or she remains with the organisation owing to the sacrifices if he or she would have to make if when deciding to leave.

(i) Conclusions relating to the theoretical relationship between hardiness and organisational commitment

An individual who plans his or her career, makes certain decision based on this planning, explores new opportunities and has the confidence to implement these decisions in order to perform the activities needed to accomplish his or her career objectives, is someone who is highly career adaptable. This means that this person may be more committed or connected to the organisation at an emotional (affective) level. Such an individual may also not decide to leave the organisation owing to the cost associated with leaving (continuance commitment). An individual with a well-developed hardy personality may also feel a strong sense of responsibility towards the organisation (normative commitment), which in turn may influence his or her decision to leave.

(j) Conclusions relating to the theoretical relationship between job embeddedness and organisational commitment

An individual with strong feelings of fit towards the organisation and community, better ties with the people in the organisation and the community may remain with the organisation owing to the sacrifices if he or she would have to make should he or she decide to leave. This means the individual may be more committed or connected to the organisation at an emotional (affective) level and will also not decide to leave because of the cost associated with leaving (continuance commitment). An individual who is job

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embedded may also feel a strong sense of responsibility towards the organisation (normative commitment), which in turn will influence his or her decision to leave.

7.1.1.5 The fifth aim: Based on the theoretical relationship between the psychological career meta-competencies and retention-related dispositions constructs, to construct a theoretical integrated psychological career profile of the career agent that may be used to inform retention practices.

The fifth research aim, namely to construct a theoretical integrated psychological career profile of the career agent that may be used to inform retention practices, on the basis of the theoretical relationship between the psychological career meta-competencies and retention-related dispositions constructs, was achieved in chapter 4.

Based on the literature study, a theoretical psychological career profile outlining the psychological career meta-competencies and retention-related dispositions at a cognitive, affective, conative and interpersonal level, was developed to inform staff retention practices.

At a *cognitive level*, the retention of individuals may be influenced by their career preferences and career harmonisers (psychological career resources), concern and control (career adaptability), control, commitment and challenge (hardiness), sacrifice (job embeddedness) and normative commitment (organisational commitment) (Coetzee, 2008; Ferreira *et al.*, 2010; Savickas, 2002; Schreuder & Coetzee, 2011;).   Career development support practices and career counselling should focus on creating a work environment that provides stability, promotes managerial opportunities, enhances creativity, promotes independence and enhances positive self-esteem and social connectivity. Furthermore, it is vital for organisations to assist individuals with coping skills, commitment towards the organisation and how to deal with challenges in the workplace. Employees should also be assisted in the dealing with the sacrifice that needs to be made between work and family time. Organisations should receive assistance with these interventions in order to enhance individuals' organisational commitment and engage them in managing their own careers. Such interventions could help organisations retain talented staff.

At an *affective level*, individuals' retention may be influenced by their career harmonisers (psychological career resources), curiosity (career adaptability), commitment (hardiness) and affective commitment (organisational commitment) (Allen & Meyer, 1990; Brown *et al.*, 2003; Coetzee & Bergh, 2009; Ferreira *et al.*, 2010). Career development support practices and career counselling should help individuals gain personal insight. This may help individuals not only to improve their personal self-esteem, behavioural

adaptability, emotional intelligence, social connectivity, curiosity and commitment, but also to utilise their emotions appropriately in the work context. This will ensure that employees feel a sense of belonging (they fit into the organisation) to the organisation and show an emotional connection with it. Having a high personal self-esteem and ability to manage and utilise emotions in the career context, could help organisations retain talented staff.

At a *conative level*, individuals' retention may be influenced by their career values, career enablers and career drivers (psychological career resources), cooperation and confidence (career adaptability), control, commitment and challenge (hardiness), fit, links and sacrifice (job embeddedness) and continuance and normative commitment (organisational commitment) (Coetzee, 2008; Koen *et al.*, 2010; Maddi, 2002; Meyer & Allen, 1991; Mitchell & Lee, 2001; Savickas, 1997). Career development support practices and career counselling could help individuals foster their growth and development of different skills, provide opportunities for authority and influence and assist them to establish career purpose and direction. By helping individuals in this way, their cooperation, confidence, job embeddedness and commitment towards the organisation could increase. This in turn could help organisations retain talented staff.

At an *interpersonal level*, individuals' retention may be influenced by their career harmonisers (psychological career resources), cooperation (career adaptability), fit and links (job embeddedness) and affective, continuance and normative commitment (organisational commitment) (Coetzee, 2008; Ferreira *et al.*, 2010; Koen *et al.*, 2010; Maddi, 2002; Meyer & Allen, 1991; Mitchell & Lee, 2001; Savickas, 1997, 2001, 2002). Effective interaction and social connectivity with others may foster a feeling of security in the individual, which may have a positive effect on the retention of talented staff. Career development support practices and career counselling could help individuals enhance their self-esteem, behavioural adaptability, emotional literacy, cooperation and address concerns, which may have a positive effect on their commitment to the organisation. It is also essential for organisations to help individuals fit into the organisation and assist them in dealing with the connection between and sacrifices in the work situation and the community, which includes their family.

7.1.1.6 *The sixth aim:* To outline the implications of the psychological career profile for talent retention practices.

The sixth aim, namely to highlight the implications of the psychological career profile for talent retention practices, was achieved in chapters 2, 3 and 4.

One of the most disruptive and expensive problems facing organisations today is employee turnover (Lee & Mitchell, 1994; Steel, 2002). Although firms in most industries struggle at one time or another with recruiting and retaining a talented work force, retention is particularly critical in the healthcare industry (Tzeng, 2002). To keep pace with the ongoing changes in governmental regulations, reimbursements and general initiatives, the healthcare and other industries have seen an increase in mergers, consolidations, and re-engineering activities (Anderson & Pulich, 2000). Such activities are a few of the unexpected shocks employees may experience that can dramatically influence organisational retention (Mitchell *et al.*, 2001).

There is now considerable evidence of the benefits for organisations of having a strongly committed workforce (Meyer & Maltin, 2010; Morrow, 2011). At present, however, individuals seeking to gain personal career growth can do so across different organisations. If such opportunities are lacking in their current organisation, this makes organisational commitment less salient to these individuals (Weng *et al.*, 2010). The loss of such talent, however, is harmful to organisations - hence the need for them to prevent such talent loss by developing and ensuring a committed workforce.

Keeping employees committed to the organisation is a top priority for many contemporary organisations (Neininger *et al.*, 2010). Especially in times of crises and job cuts, committing top performers to the organisation becomes a challenge. Organisations that fail to accomplish this will have reduced resources for the capability of competing in the future (Neininger *et al.*, 2010; Rappaport *et al.*, 2003).

As indicated in the literature review, retention can be described as initiatives taken by management to prevent employees leaving the organisation, such as rewarding them for performing their jobs effectively; ensuring harmonious woking relations between employees and managers; and maintaining a safe and healthy work environment (Cascio, 2003). Redman and Wilkonson (2009) indicated in their research that organisations need to take cognisance of the changing priorities of job candidates and what attracts them to jobs and organisations.

According to Kerr-Phillips and Thomas (2009), South Africa is experiencing a universal skills crisis, particularly in the retention of the country's top talented and knowledgeable employees. This deficiency leads to the loss of intellectual and technical individuals, with negative impacts on the economic and social growth of the country (Du Preez, 2002).

In the literature review it was possible to identify the key challenges for retention, which include the following: individual characteristics, workplace structures, environmental conditions, stress, job

satisfaction, organisational commitment, remuneration, career opportunities, conflict with colleagues and supervisors, unmet career expectations, job enrichment and specialised skills.

It was also possible to identify the key retention challenged relating to South Africa. These retention challenges include organisational culture, business dynamics, diversity, a new demographic employee pool, ethnicity, language, education, opportunities, competitiveness, personal characteristics, self-centredness and exclusiveness.

The identified retention challenges may serve as a means to reveal the organisation's support of or commitment to their employees and in turn promote a mutual attachment by employees. Employees' organisational commitment is associated with their belief that the identified retention factors are motivated by the aspiration to retain good employees and to treat them fairly (Döckel *et al.*, 2006).

7.1.2 Conclusions relating to the empirical study

The empirical aim of the study was to conduct the following seven principal tasks:

(1) To assess the empirical interrelationships between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as manifested in a sample of respondents in the South African context. This was achieved by empirically testing research hypotheses H01 and Ha1.

(2) To conduct an empirical investigation into the overall statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) as the set of independent latent variables, and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as the set of dependent latent variables. This was achieved by empirically testing research hypotheses H02 and Ha2.

(3) To empirically investigate whether the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) positively and significantly predict the retention-related dispositions construct variables (job embeddedness and organisational commitment). This was achieved by empirically testing research hypotheses H03 and Ha3.

(4) Based on the overall statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment), to assess the fit between the elements of the empirically manifested structural model

and the theoretically hypothesised model. This was achieved by empirically testing research hypotheses H04 and Ha4.

(5) To assess whether the biographical variables (age, gender, race, marital status, job level and employment status) moderate the relationship between the psychological career meta-competencies construct variate (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variate (job embeddedness and organisational commitment). This was achieved by empirically testing research hypotheses H05 and Ha5.

(6) To empirically investigate whether significant differences exist between the subgroups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies latent construct variate and the dependent (retention-related dispositions) construct latent variate. This was achieved by empirically testing research hypotheses H06 and Ha6.

(7) To formulate recommendations for the discipline of industrial and organisational psychology and human resource management talent retention practices and future research. This task is addressed in this chapter.

The statistical results provided supportive evidence for Ha1, Ha2, Ha3, Ha4, Ha5 and Ha6. The findings for each of the research objectives and the hypotheses that merit discussion will be presented as conclusions.

7.1.2.1 *The first aim:* To assess the empirical inter-relationships between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as manifested in a sample of respondents in the South African context.

The first aim, namely to assess the empirical inter-relationships between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment), as manifested in a sample of respondents in the South African context, was achieved in chapter 6. Supportive evidence was provided for research hypothesis Ha1.

Owing to the fact that limited empirical studies have been conducted on the relationship between psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment relevant to this study (especially in the multicultural South African context), one should

guard against overinterpreting the current findings with reference to the practical implications without any further research.

(a) Conclusions relating to the empirical relationship between psychological career resources and job embeddedness

According to the empirical results, the following conclusions can be drawn:

- Individuals who prefer an organisational setting in which they can experience stability, be in charge and be creative seem to feel a stronger sense of belonging to the organisation and community.
- Individuals who find themselves in a managerial position in an organisation may form tight links in the organisation and community that will ensure that they are embedded in their careers.
- Individuals in a managerial position may find it easier to break associations with the organisation (i.e. what people would have to give up if they were to leave their current position or change their occupation).
- Individuals who develop in a job or career may feel a stronger sense of belonging to the organisation. This means that when the individual's job or occupation meshes with or complements other areas of his or her life as well, it enhances the his or her job embeddedness in an organisation.
- Individuals who develop specific skills may feel that they have a better fit in the organisation, form better connections with it and would be willing to do anything for it. The greater the fit, the number of links and the degree of sacrifice, the greater the forces towards job embeddedness will be.
- Individuals who know where they are going in their career path have a better fits and links with the organisation and make sacrifices for it. The relationship between career directedness, fit, links and sacrifice will enhance an individual's job embeddedness and this in turn will mean that he or she will remain with the specific organisation.
- Individuals with a highly developed self-esteem, who can adapt their behaviours, know how to control their emotions and can connect well with others socially may experience stronger feelings of belonging in organisation.
- Individuals with a positive highly developed self-esteem may form better links with the organisation and community and experience a higher sense of sacrificing what is important to them.
- An individual with strong links and high levels of sacrifice will choose to remain with the organisation and in turn this will have a positive effect on the retention of talented staff.

(b) *Conclusions relating to the empirical relationship between psychological career resources and organisational commitment*

On the basis of the empirical results the following conclusions can be drawn:

- Individuals who value the managerial career preference, which includes freedom and autonomy, appear to feel emotionally attached to the organisation. This would indicate that an individual's planning of his or her career may be affected by his or her career preference. This relationship further suggests that an individual in a mangerial position may think twice about the costs involved when faced with a decision to leave the organisation. This implies that an individual a managerial position may be more normatively committed to an organistion.

- Individuals who contribute practical and creative skills would be more likely to be emotionally attached to the organisation.

- Individuals who know where they are going in their career would probably remain with the organisation because they have a feeling of obligation and a sense of duty towards it.

- Individuals who like to seek better opportunities may be more likely to leave the organisation because they do not see any risks involved when leaving the organisation for another opportunity. Continuance commitment can be regarded as an influential connection to an organisation, where the individual's connection to the organisation is based on the measurement of economic profits gained.

- Individuals with a highly developed self-esteem may feel a stonger emotional connection to the organisation.

(c) *Conclusions relating to the empirical relationship between psychological career resources and career adaptability*

On the basis of the empirical results, the following conclusions can be drawn:

- Individuals who prefer a work environment that provides stability, variety, freedom and responsibility may have strong feelings of career adaptability in their career or occupation. In the continually changing society, employees require the psychological resources and self-detemining capabilities to manage new career-related situations, which could include job loss and finding re-employment.

- Individuals who strive for growth, development, authority and influence in their careers or occupations may be capable of facing, tracking or acknowledging changing career roles and handling career shifts effectively.

- Individuals who need specific skills in order to perform or function in their career or occupation can adjust to changes in their career, which means that they are fully career adaptable. Career adaptability is explained as the readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments promoted by change in work and working conditions.

- Individuals who have career purpose, direction and seek better opportunities may have feelings of self-efficacy or apparent capability to successfully perform the activities necessary to accomplish the career goals they have formulated.

- Individuals with well-developed self-esteem, who are able to adapt their behaviour, express their emotions and form strong connections with others at a social level, may be fully career adaptable in the context of their career or occupation.

- Hence if an individual's psychological career resources are properly developed, he or she will probably be career adaptable in his or her career or occupation. Such an individual may have a tendency to consider life in a time perspective anchored in hope and optimism and be curious about possible selves and social opportunities, which will increase his or her active exploration behaviours.

- A career adaptable individual may stand by his or her aspirations and objectives, even in the face of obstacles and barriers. Being committed to life projects instead of a particular job means that career indecision will not necessarily be removed because it actually generates new possibilities and experimentations that allow individuals to be active, even in uncertain situations.

(d) Conclusions relating to the empirical relationship between psychological career resources and hardiness

On the basis of the empirical results, the following conclusions can be drawn:

- Individuals who favour a career that is stable and provides variety and creativity are less committed to being deeply involved in the activities of their lives.
- If individuals enjoy a stable career that provides creativity and variety, this could have a negative impact on their desire to continue to have an influence on the outcomes happening around them.
- Individuals in managerial positions in an organisation, which allows them to experience freedom and autonomy, may be high in challenge.
- An individual high in challenge is motivated to become a catalyst in his or her environment and practise responding to the unexpected. Challenge demonstrates an expectation that life is unpredictable, that changes will encourage personal development and that potetially stressful situations are evaluated as thrilling and inspiring instead of intimidating.

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- Individuals who grow and develop in their career or occupation may be negatively predisposed to believing in the truth and fully involving themselves in the many situations of life, including work, family, interpersonal relationships and social institutions.

- Individuals who strive for a career that provides authority and influence may tend to explore their surroundings more fully in an ongoing quest for new and interesting experiences. They therefore know where to turn for resources to aid them in coping with stress.

- Highly challenged individuals are characterised by cognitive flexibility and tolerance for ambiguity. This allows them to more easily integrate unexpected or otherwise stressful events.

- Individuals who need practical and creative skills in order to function optimally in their career or occupation may be less motivated to engage in effortful coping because it predisposes them to view stressors as changeable. Hardy individuals feel that attempting to control or change a demanding or undesirable situation (instead of fatalistically accepting the outcome) falls within their scope of personal responsibility.

- Individuals who needs self or other skills in order to perform their job may be less committed and are less likely to to reflect on how to turn situations to their advantage instead of taking things at face value.

- Individuals with a strong sense of career purpose and direction may be less likely to view potentially stressful situations as meaningful and interesting (commitment) and sees stressors as changeable (control).

- Individuals with a highly developed self-esteem may be less likely to get involved in stressful events and convert them into something intersting and meaningful.

- Individuals who are able to adapt their behaviour, express their emotions and form strong connections with others at a social level may be less likely to believe that they can influence the course of an event.

- Committed individuals feel deeply involved in the activities of their lives, where control reflects on their desire to continue to influence the outcomes going on around him or her, no matter how difficult the situation.

(e) Conclusions relating to the empirical relationship between career adaptability and job embeddedness

On the basis of the empirical results, the following conclusions can be drawn:

- Individuals who show concern, control, curiosity, cooperation and confidence in their careers or occupation may experience a stonger feeling of belonging in an organisation, which in turn may ensure that the individual remains with a specific organisation.

- Individuals who show concern, control curiosity and confidence in their careers or occupation may form stronger links or connections with the organisation and with the community.
- Individuals with a strong sense of concern, control, curiosity and confidence will probably break the links forged with the organisation and community with ease.

(f) Conclusions relating to the empirical relationship between career adaptability and organisational commitment

On the basis of the empirical results, the following conclusions can be drawn:

- Individuals who are highly involved in their career or occupation may be less likely to remain with the organisation. The reason for this could be that the individual is concerned about the costs involved in leaving.
- Individuals whose most important connection to the organisation is based on continuance commitment stay because they need to.

(g) Conclusions relating to the empirical relationship between career adaptability and hardiness

On the basis of the empirical results, the following conclusions can be drawn:

- Individuals who show high concern, control, curiosity, cooperation and confidence in their careers or occupations may be less likely to view stressful events as meaningful or interesting.
- Adaptability can be regarded as an individual's broad ability to adjust to changes or barriers in his or her career.
- The findings also suggest that individuals who are fully career adaptable may be less likely to control stressful events in their careers or lives.

(h) Conclusions relating to the empirical relationship between hardiness and job embeddedness

On the basis of the empirical results, the following conclusions can be drawn:

- Individuals who view potentially stresful situations as meaningful and interesting and sees stressors as changeable, may be less likely to feel a strong sense of belonging in the organisation and community.

(i)   *Conclusions relating to the empirical relationship between hardiness and organisational commitment*

On the basis of the empirical results, the following conclusions can be drawn:

- Individuals who view stressful situations as meaningful and interesting, see stressors as changeable and change as a normal aspect of life instead of as a threat. They regard change as an opportunity for growth and may have strong feelings of emotional connection to the organisation.
- A hardy individual would probably remain with his or her current organisation, which in turn may have a positive effect on the retention of talented staff.
- Hardy individuals may remain with their current organisations because of the high costs involved in deciding to leave.
- Individuals remain with a specific organisation because of the money they add as a result of the time spent in the organisation, not because they want to.
- Individuals who view stressful situations as meaningful and interesting and stressors as changeable, are more likely to be normatively committed to the organisation.

(j)   *Conclusions relating to the empirical relationship between job embeddedness and organisational commitment*

On the basis of the empirical results, the following conclusions can be drawn:

- Individuals who are fully job embedded may feel a strong sense of emotional connection to the organisation. This means that the individual will remain with his or her current organisation because he or she wants to.
- Individuals who are fully job embedded may not decide to leave their current organisation because of the costs involved in leaving.
- Individuals who are fully job embedded may remain with their current organisation because of they feel a sense of responsibility towards it.
- Individuals who are fully job embedded may be much easier to retain because they will not decide to leave their current organisation.

7.1.2.2 The second aim: To conduct an empirical investigation into the overall statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) as the set of independent latent variables and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as the set of dependent latent variables.

The second aim, namely to conduct an empirical investigation into the overall statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) as the set of independent latent variables, and the retention-related dispositions construct variables (job embeddedness and organisational commitment) as the set of dependent latent variables, was achieved in chapter 6. Supportive evidence was provided for research hypothesis Ha2.

- Individuals' psychological career meta-competencies constitute their career preferences (stability/expertise, managerial, variety/creativity and independence/autonomy), career values (growth/development and authority/influence), career enablers (practical/creative skills and self/other skills), career drivers (career purpose, career directedness and career venturing), career harmonisers (self-esteem, behavioural adaptability, emotional literacy and social connectivity), career adaptability (concern, control, curiosity, cooperation and confidence) and hardiness (commitment, control and challenge).
- Individuals' retention-related dispositions constitute their job-embedded fit, links and sacrifice.
- Individuals' psychological career meta-competencies (career preference, career values, career enablers, career drivers, career harmonisers, career adaptability and hardiness) explain their retention-related dispositions (job embeddedness – fit, links and sacrifice).

7.1.2.3 The third aim: To empirically investigate whether the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) positively and significantly predict the retention-related dispositions construct variables (job embeddedness and organisational commitment).

The third aim, namely to empirically investigate whether the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) positively and

significantly predict the retention-related dispositions construct variables (job embeddedness and organisational commitment), was achieved in chapter 6. Supportive evidence was provided for research hypothesis Ha3.

(a) Conclusions relating to psychological career resources as a significant predictor of job embeddedness

On the basis of the empirical results, the following conclusion can be drawn:

- Individuals with well-developed self/other skills and self-esteem will probably experience stronger connections between themselves and other individuals, groups and organisations, feel that they are compatible with their job, organisation and community, and lastly, will take into account the cost of what they would have to give up if they were to leave their job.

(b) Conclusions relating to psychological career resources as a significant predictor of organisational commitment

On the basis of the empirical resultsm the following conclusions can be drawn:

- Individuals with a strong preference for a managerial position and who have well-developed self-esteem will experience strong feelings of emotional attachment to the organisation.
- The feelings of responsibility engendered by having authority and influence over others tend to increase a person's sense of accountability to stay in the occupation and organisation, and include an enhanced awareness of the costs associated with leaving the organisation.

(c) Conclusions relating to psychological career resources as a significant predictor of career adaptability

On the basis of the empirical results, the following conclusion can be drawn:

- Individuals with well-developed self/other skills and behavioural adaptability will probably be strongly concerned about their vocational future, prepare for it, and be curious by exploring possible selves and future scenarios, experience commitment and show confidence in pursuing their career aspirations.

On the basis of the empirical results, the following conclusion can be drawn:

• Individuals with managerial preferences who strive for independence in their job or career will probably experience strong feelings of commitment, control and challenge in their careers.

(e)   Conclusions relating to career adaptability as a significant predictor of job embeddedness

On the basis of the empirical results, the following conclusion can be drawn:

• The career adaptability variables (concern, control, curiosity, cooperation and confidence) do not significantly predict an individual's job embeddedness.

(f)   Conclusions relating to career adaptability as a significant predictor of organisational commitment

On the basis of the empirical results, the following conclusions can be drawn:

• Individuals who show high levels of curiosity in their careers may experience strong feelings of emotional attachment to the organisation.
• If an organisation provides sufficient growth opportunities for an the individual in his or her career, he or she will feel more committed to the organisation.

(g)   Conclusions relating to hardiness as a significant predictor of job embeddedness

On the basis of the empirical results, the following conclusion can be drawn:

• Individuals with high levels of commitment, control and challenge in their careers may experience strong connections between themselves and other individuals, groups and organisations, they will feel that that they are compatible with their job, the organisation and the community, and lastly, they will take into account the cost of what they have to give up if they leave their job.

On the basis of the empirical results, the following conclusions can be drawn:

- An individual's hardiness, specifically his or her commitment and challenge are significant in terms of predicting or explaining his or her overall organisational commitment to the organisation.
- Individuals who thrive on challenge are motivated to become catalysts in their environment and they are more likely to remain with their current organisation because they regard the costs of leaving as too high. This allows the individuals to integrate unexpected or otherwise stressful events more easily.

7.1.2.4 The fourth aim: Based on the overall statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment), to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

The fourth aim, namely to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model, on the basis of the overall statistical relationship between the psychological career meta-competencies construct variables (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variables (job embeddedness and organisational commitment), was achieved in chapter 6. Supportive evidence was provided for research hypothesis Ha4.

(a) Conclusions relating to the structural equation model

On the basis of empirical results, the following conclusions can be drawn:

- The psychological career meta-competencies (self/other skills, behavioural adaptability, career directedness, curiosity, concern, control, confidence, curiosity, hardy-commitment and hardy-control) significantly contributed to explaining the participants' sense of fit with their work group, job and organization

- Increasing individuals' psychological career meta-competencies (psychological career resources and career adaptability resources) may assist them in managing or negotiating their personal fit with the work group, job or organisation as an aspect of their careers.

- Individuals' behavioural adaptability (courage, confidence and willingness to deal with uncertainty and meeting daily challenges, and adapting to new things and situations), self-management and interpersonal skills, and clarity about their future career direction are important psychological career resources in explaining their sense of fit with the work group, job and organisation.

- Individuals' overall career adaptability, illustrated by their sense of personal control over their vocational future, their curiosity in exploring possible selves and future career scenarios, working well (cooperating) with others in their career pursuits, and confidence in pursuing their career aspirations, were also significantly related to their sense of fit with the job and organisation.

- Being highly motivated to engage in effortful coping (hardiness) in dealing with demanding or undesirable situations negatively influenced their sense of being embedded in their jobs. Should the participants perceive a low fit with the job or organisation, they might have the confidence and inner drive or motivation to attempt to deal responsibly with the undesirable situation. They might draw on their career adaptability resources or psychological career meta-competencies to deal positively with the perceived lack of fit.

- Organisational commitment is less important than individuals' job-embedded fit in terms of retaining them.

7.1.2.5 The fifth aim: To assess whether the biographical variables (age, gender, race, marital status, job level and employment status) significantly moderate the relationship between the psychological career meta-competencies construct variate (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variate (job embeddedness and organisational commitment).

The fifth aim, namely to assess whether the biographical variables (age, gender, race, marital status, job level and employment status) moderate the relationship between the psychological career meta-competencies construct variate (psychological career resources, career adaptability and hardiness) and the retention-related dispositions construct variate (job embeddedness and organisational commitment), was achieved in chapter 6. Supportive evidence was provided for research hypothesis Ha5.

On the basis of the empirical results, the following conclusions can be drawn:

- Gender significantly moderates the relationship between the psychological career meta-competencies and retention-related dispostion job-embedded fit.

- Individuals' gender may influence their skills, career directedness, behavioural adaptability, career adaptability and hardiness (control and commitment), which in turn may impact on their job-embedded fit.

- Gender may impact on individuals' career directedness, which may include the manner in which they prefer to give of their best in a particular job task, see themselves in their career and achieve their career goals.

- An individual's behavioural adapatability may also be influenced by gender in terms of his or her courage in dealing with things and situations that he or she may fear,, have the courage to handle misfortunes and failures and the abiity to laugh at his or her mistakes.

- Gender plays major role in the career adaptability of individuals, which could influence their concern (planning and expectancies for the future); control (taking responsibility for own actions and learning to make better decisions); curiosity (exploring surroundings, looking for growth opportunities and becoming curious about new opportunities); cooperation (becoming less self-centred, getting along with others, being part of a team and learning to be a good listener); and confidence (performing tasks efficiently, learning from their mistakes, a sense of pride and self-confidence) in their career.

- Gender may also influence the relationship between an individual's hardi-commitment, hardi-control and fit in an organisation.

- Hardi-commitment, which means the feeling of excitement towards work and learning something new and the value of work, may be experienced differently by males and females.

- Hardi-control, which includes an individual's ability to know when he or she need help with a specific task and controlling the feeling of helpless, may also be influenced by gender.

On the basis of the empirical results, the following conclusions can be drawn:

- Marital status, specifically being single, significantly moderates the relationship between psychological career competencies and retention-related factors.

- Being single may influence individuals' skills, career directedness, behavioural adaptability, career adaptability and hardiness (control and commitment), which in turn may have an impact on retention-related factors such as fit in the organisation.

- The fact they they are single, could mean that individuals have the ability to discipline themselves or keep their composure and get the most out of themselves.

- This could also mean making the most of their good qualities to achieve success in whatever they do. These abilities focus specifically on a person's career enablers, which include self/other skills.

- Being single may influence an individual's career directedness (career drivers), which means that that a single person may have a clearer idea of what he or she would like to become in his or her career, know where and how he or she could find the help and support needed to achieve his or her career goals. Also, it may be easier for a single person to make up his or her mind about how and where to find new job opportunities.

- Being single may also influence an indiviudal's behavioural adaptability (career harmonisers), which could indicate that a single person has more energy, more courage to handle misfortunes and failures, laugh more easily at his or her mistakes. It may also be easier for this person to adapt to new things and situations in his or her life.

- The fact that a person is single may influence his or her career adaptability as a whole. Career adaptability includes the concern, control, curiosity, cooperation and confidence of an individual.

- Being single may indicate that an individual is more likely to plan the important things before he or she starts them, think about what his or her future, realise that today's choices shape his or her future and plan to achieve his or her goals.

- Employees who re single may also be more prone to making decisions on their own, thinking before they act, taking responsibility for their actions, sticking up for their beliefs and doing what is right for themselves.

- Single participants may be more inclined to look for opportunities to grow as a person, investigate options before making a decision, observe different ways of doing things and probe deeply into questions.

- A single individual may also be a better team player, making compromises with others, being a good listener and contributing to the community.

- In terms of a single employee's career adaptability, he or she may be able to learn from his or her mistakes more easily, be more dependable, feel greater pride in a job well done, have more self-confidence and learn new skills without too much effort.

- Marital status, specifically being single, may also have impact on an individual's hardi-commitment, which indicates that such a person may often wake up eager to take up life where he or she left off the day before, find it easy to feel excited about the job and really look forward to his or her work.

- Employees' hardi-control will also be influenced by being single.

- Single people may feel that marriage and having children would mean losing all their freedom. They may also feel that what happens in life is simply fate..

7.1.2.6 *The sixth aim:* To empirically investigate whether significant differences exist between the sub-groups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates.

The sixth aim, namely to empirically investigate whether significant differences exist between the subgroups of the biographical variables that act as significant moderators between the independent psychological career meta-competencies construct and the dependent (retention-related dispositions) construct latent variates, was achieved in chapter 6. Supportive evidence was provided for research hypothesis Ha6.

(a)   Conclusions relating to the differences in terms of gender groups

On the basis of the empirical results, the following conclusions can be drawn:

- The female participants in this study experienced higher levels of growth and development, practical and creative skills and self or others skills to enable them to do their jobs better than male counterparts.
- The females also experienced a higher level of career purpose and career venturing, which means that they have a tendency to move from one career to the next much more easily than the male participants.
- The females experienced higher levels of self-esteem, could more easily connect with others in a social environment and seemed to be more emotionally in control of their feelings. The female participants could have been better able to make emotions the centre of attention throughout the decision-making process of their career, and this would have a motivational influence on adaptive behaviour by encouraging individuals to consider numerous affective components when making occupational choices.
- The fact that the female participants obtained a significantly higher mean score for self-esteem, could indicate that they had a more positive self-image than the male participants.
- The results also suggest that the female participants were far more open to new career opportunities by means of career venturing.

- The females seemed to be driven in their careers by feelings that strengththen individuals and encourage them to experiment with job and employment possibilities.

- The male participants tended to show higher levels of hardi-commitment in their careers than their female counterparts. This could mean that the males were more committed to and embedded in their careers.

- Individuals who are more embedded, may be less absent from work, work harder, perform better and engage in more organisational citizenship behaviours than individuals who are less embedded.

- The female participants appeared to be far more career adaptable than the male participants.

- The female participants showed higher levels of concern, control, curiosity, cooperation and confidence in their jobs or careers. Individuals with high levels of career adaptability in their careers may have strong feelings of emotional attachment to an organisation.

- The male participants showed higher levels of affective and normative commitment. This could indicate that males witha high level of affective commitment to an organisation would probably continue working for it because they want to.

- Individuals who are dedicated at an emotional level usually remain with the organisation because they see their individual employment relationship as harmonious with the goals and values of the organisation for which they are currently working.

(b)   Conclusions relating to the differences in terms of marital status groups

On the basis of the empirical results, the following conclusions can be drawn:

- The married participants showed stronger career preferences towards careers that provide stability or expertise and managerial positions than their single counterparts. A possible reason for this is that in the modern family, both parents need to work in order to survive in difficult economic times.

- The married participants appeared to be far more career adaptable (curiosity and cooperation) in their careers or jobs. This could be because they display curiosity by exploring possible selves and future scenarios and have the capacity to stand by their own aspirations and objectives, even in the face of obstacles and barriers.

- The participants who were divorced or separated showed higher levels of emotional literacy and behavioural adaptability. The reason for this could be the emotional journey that these individuals have experienced in their lives.

- The single participants showed higher levels of hardiness, specifically commitment towards the organisation or their careers.

- The results indicated that the widowed participants were more likely to experience strong fit and links with their careers or organisations. This could be because they feel alone and therefore relate to and confide more in individuals in their organisation and community.

- According to the results, marital status had no impact or showed no significant difference between hardiness (challenge), job embeddedness (sacrifice) and organisational commitment (affective, continuance and normative commitment).

7.1.3 Conclusions relating to the central hypothesis

The central hypothesis (chapter 1) stated that the overall relationship dynamics between an individual's psychological career meta-competencies (psychological career resources, career adaptability and hardiness) and retention-related dispositions (job embeddedness and organisational commitment) constitutes a psychological career profile that informs organisational retention practices. This hypothesis further assumes that individuals with a particular psychological career meta-competencies profile (psychological career resources, career adaptability and hardiness) will be more embedded in and committed to an organisation, which in turn will influence the retention of talented staff. Furthermore, individuals from different age, gender, race, marital status and employment status groups will have different levels of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment.

The literature review and empirical study provided evidence to support the central hypothesis.

7.1.4 Conclusions relating to contributions to the field of industrial and organisational psychology

The findings of the literature review and the empirical results should contribute to the field of industrial and organisational psychology and to career decision making and retention practices in particular. The literature review shed new light on how individuals' psychological career resources and career adaptability relate to their job embeddedness and organisational commitment. In particular, the literature review provided insight into the different concepts and theoretical models that foster psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment.

The empirical findings provide new information on the relationship dynamics between psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment. The new insights derived from the findings may to add a broader perspective on how individuals'

psychological career resources, career adaptability and hardiness explain their job embeddedness and organisational commitment. Furthermore, the findings could be used to help participants develop greater psychological career competencies, which may in turn will improve the career decision making and retention of talented staff. Based on these findings, organisations should gain a deeper understanding of the preferences and attitudes that individuals have towards remaining in an organisation, and these organisations should be able to can tailor their employee retention strategies accordingly.

The conclusions indicate that managers and industrial psychologists should be aware of the different concepts and theoretical models that influence the variables of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment when working in the field of career psychology, and should take cognisance of the strengths and weaknesses of the six measuring instruments used in this study.

Managers and industrial psychologists should be mindful of the psychometric properties of the different measuring instruments (PCRI, CAI, PVS-II, JES and OCS) prior to utilisation in organisational initiatives. The instruments should be supported by sufficient reliability and validity data for use in the South African context in particular. Integrity in selecting, administering and interpreting instruments and providing individual feedback is fundamental to ensuring career decision making and retention strategies that are fair and unbiased.

The primary focus of a manager and industrial psychologist fulfilling the role of career counsellor is to help individuals seeking career advice, by removing as much uncertainty in them as possible about their career choice and environment. This will enable these individuals to apply a career decision-making strategy that will meet their different career and stage developmental needs and prevent as much career indecisiveness as possible.

Although the findings have contributed new information on the relationship dynamics between psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment, as well as the differences between gender and marital status groups, the usefulness of the study is limited to the demographic restrictions for the sample population. This implies that the findings cannot be generalised to broader populations and occupational groups.

7.2 LIMITATIONS

Several limitations in the literature review and empirical study were identified, as highlighted below.

7.2.1   Limitations of the literature review

The following limitations were encountered in the literature review:

The exploratory research on psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment in the South African context was limited because of the following:

- Only five variables (psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment) were used in the study, and this could not give a holistic indication of career meta-competencies and dispositional attributes that may potentially impact on retention strategies.
- There is a dearth of research both in the South African context and abroad on the relationship between psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment.   Although a broad research base exists on psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment, few studies have focused specifically on the relationship of these constructs in terms of retention strategies.

7.2.2   Limitations of the empirical study

The findings of this study may be limited to the ability to generalise and make practical recommendations because of a number of factors which include both the size and characteristics of the sample, as well as the psychometric properties of the PCRI, CAI, PVS-II, JES and OCS. The following limitations of the empirical research should be taken into account:

- A larger sample would have been preferable, with the inclusion of populations with more balanced proportions of demographics, because the vast majority of respondents in the study were black females. Although this was representative of the demographics of the sample, it did impact on the generalisation of results to the broader, multicultural South African population.
- A sample of 355 does not appear to be large enough to conclusively establish whether there is a definite relationship between the variables of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment.

- A convenience sample was used, which reduced the sample size, and also further minimised the generalisation of the findings.
- The PCRI (Coetzee, 2008), CAI (Savickas, 2010), PVS-II (Maddi & Kobassa, 2001), JES (Mitchell *et al.*, 2001) and OCS (Allen & Meyer, 1997) were dependent on the respondents' self-awareness and personal perceptions which could have potentially affected the validity of the results.
- The CAI (Savickas, 2010) has limited reliability and validity data in the South African organisational context, which also limited the possibility of comparing the findings with other populations.

Despite the above-mentioned limitations, it can be concluded that the study shows promise for investigating the variables that influence job embeddedness and organisational commitment.

7.3 RECOMMENDATIONS

Based on the findings, conclusions and limitations of this study, recommendations for industrial and organisational psychology and further research in the field are highlighted below.

7.3.1 Recommendations for the field of industrial and organisational psychology

Although the findings seemed to be generally positive, it is still necessary to determine specific interventions and ways to strengthen employees' job embeddedness and organisational commitment to an organisation. An organisational environment that employees find encouraging and the support the organisation provides in their career development, could lead to proactive and affective career development and the management thereof. This could increase the levels of job embeddedness and organisational commitment.

Furthermore, if organisations invest in positive contracts with their employees, this could result in employees who are more embedded and committed, motivated and trustworthy towards the organisation. However, if these psychological contracts are neglected, employees could experience reduced levels of embeddedness and commitment and their intentions to leave the organisation could become stronger. It is recommended that organisations should have a sound commitment strategy in place which will enable employees to remain committed to the organisation

Based on the research findings and relationships that emerged, the following organisational interventions in terms of career decision making and retention strategies are recommended:

- Organisations that are endeavouring to retain valuable employees should attempt to provide incentive and career paths that are consistent with the employees' underlying self/other skills, behavioural adaptability, career adaptability and hardi-commitment and hardi-control.

- Organisations should ensure that the nature of work offered to employees is challenging and provides them with the level of skills and experience aligned with their own personal and professional growth needs.

- Organisations could develop a career development counselling framework that could be used to help employees sharpen their career decision-making competencies. This would help them to develop their career directedness and self-awareness by identifying the relationship between their own psychological career competencies (self/other skills, career directedness, behavioural adaptability, career adaptability, hardi-commitment and hard-control) and their fit and commitment to the organisation.

- Organisations could use the Psychological Career Resources Inventory (PCRI), Career Adaptability Inventory (CAI) and the Personal Views Survey II (PVS-II) in career counselling to help individuals identify the psychological career competencies that affect their career choices during individual career life stages.

- In order to create a working environment that encourages individuals to stay with their respective organisations, managers need to pay fair wages by reviewing the existing pay structures, provide challenging and meaningful work tasks and fostering positive co-worker relationships through social interactions and group dynamics.

- Organisations should consider reviewing their leadership succession plans by identifying talent in the 26 to 40 age group at supervisory level. These individuals are in the establishment stage of their careers and want to remain with their current organisations.

- Organisations should consider providing women with the work-life balance opportunities and benefits that meet their security and stability needs, so that they can remain productive in meeting the organisation's goals and objectives.

- Organisations should consider reviewing their communication policies and practices to ensure effective, open and transparent communication with employees (aged 26-40). Organisations could channel communication towards setting clearly defined goals, allowing employees to feel empowered to do work in their areas of expertise without close supervision, while ensuring that reward is based on fair pay, performance bonuses and promotional opportunities. This in turn will increase individuals' fit in the organisation.

- Ensuring perceived intra-organisational career mobility could be a key consideration in retention strategising because this would enable employees to experience organisations as supportive entities, willing to invest in their employees when career development opportunities are provided. It is therefore suggested that individuals' psychological career competencies should be developed or

enhanced as an essential career development support technique in order to retain embedded and committed employees.

- Employees' career development practices should be individualised, taking biographical factors (gender and marital status) into account.

- Employees may experience emotional attachment to the organisation when their abilities and values match those of the work environment and when their need for movement in the organisation is satisfied.

- Despite some employees experiencing a preference for moving between organisations, such employees may still be committed to the organisation if their psychological career competencies are met and their skills are matched to the job.

- Organisations should explore the extent to which advancement opportunities are provided. Factors such as the provision of training opportunities and opportunities for internal promotion could be considered in creating a perception that the organisation values intraorganisational career adaptability.

The following recommendations apply to industrial psychologists working in the field of careers and retention:

- The role of both the manager and industrial psychologist is that of a career counsellor. To successfully fulfil this role, one should gain a holistic image of an individual's self-concept and understand what motivates him or her in the workplace. This will enable the career counsellor to guide a successful career choice in order to strengthen the psychological contract and further commit to his or her employer.

Based on the research findings and relationships that emerged, the following individual interventions in terms of career development and career counselling strategies can be recommended:

- Individuals can engage in self-reflection when receiving feedback on their psychological career competencies at a cognitive, affective, conative and interpersonal level.

- Individuals can engage in career counselling therapy in order to enhance their psychological career competencies and job embeddedness at a cognitive, affective, conative and interpersonal level.

Table 7.1 provides details of the recommendations made at individual and organisational level.

Table 7.1

Summary of Recommendations

INDIVIDUAL LEVEL			
Cognitive	**CONCERN** **(Career adaptability)**	**CONTROL** **(Career Adaptability)**	**CONTROL** **(Hardiness)**
	• Focus on planning before starting a task • Think and plan and prepare for the future • Plan on how to achieve personal goals • Consider the consequences of decisions made • Be concerned about the future	• Think before acting • Make independent decisions • Strive to be persistent and patient • Stick up for your beliefs • Direct your own future • Try to make better decisions • Try to do what is best for the family	• Plan ahead • Take control of your future and career
Affective	**BEHAVIOURAL ADAPTABILITY** **(Psychological career resources)**	**CURIOSITY** **(Career adaptability)**	**COMMITMENT** **(Hardiness)**
	• Deal with situations affectively • Deal with misfortunes and mishaps effectively • Laugh about mistakes • Be adaptive to new situations in life	• Explore your surroundings • Search for opportunities to grow and develop • Plan the future • Investigate all possible options	• Be eager about life and your career • Be excited about work • Strive to attain your goals • Look forward to work • Try to learn something new about

		• before making decisions • Observe different ways of doing things • Search for information to assist with decision making • Consider all possible alternatives • Seek feedback in your job and career • Question yourself	yourself • Try to extract meaning from your career • Try to see the value of your work to society
	SELF/OTHER SKILLS **(Psychological career resources)**	**CONFIDENCE** **(Career adaptability)**	
Conative	• Strive to find new solutions • Use self-discipline to progress in your career • Make use of good qualities to achieve success	• Perform tasks efficiently • Learn from your mistakes • Be dependable • Strive to improve your self-confidence • Learn new skills • Work to the best of your ability • Solve problems • Challenge yourself	

	CAREER DIRECTEDNESS (Psychological career resources)	COOPERATION (Career adaptability)	FIT (Job embeddedness)
Interpersonal	• Give the best in any job and task you are responsible for • Be clear on where you would like to go in terms of your career • Know where to find help and support in the work and career environment	• Become less self-centred • Be friendly • Try to g*et al*ong with other colleagues and people • Cooperate in group projects • Be a part of a team • Be compromising • Be a good listener • Contribute to the community • Be sharing towards others	• Be a team player • Look for similarities between yourself and your colleagues • Feel as if you mean something to the organisation • Fit in with organisation's culture • Infuse your values with the organisation's values

ORGANISATIONAL LEVEL

- Incentives and career paths should be provided that are consistent with employees' underlying self/other skills, behavioural adaptability, career adaptability and hardi-commitment and hardi-control.

- Organisations should ensure that pay structures are not only competitive, but also that fair remuneration policies and procedures are consistent with both internal and external roles of similarity.

- Organisations should ensure that the nature of work offered to employees is challenging and provides employees with the level of skills and experience aligned with their personal and professional growth needs.

- Organisations should develop a career development counselling framework that can be used to help employees develop their career decision-making competencies. This would help them to in develop their career directedness and self-awareness by identifying the relationship between their own psychological career competencies (self/other skills, career directedness, behavioural adaptability, career adaptability, hardi-commitment and

- hardi-control) and their fit and commitment to the organisation.

- Organisations should use the Psychological Career Resources Inventory (PCRI), Career Adaptability Inventory (CAI) and the Personal Views Survey II (PVS-II) in career counselling to help individuals identify their psychological career competencies that affect their career choices during individual career life stages.

- Organisations should provide fair remuneration by reviewing the existing pay structures, providing challenging and meaningful work tasks and fostering positive co-worker relations through social interaction and group dynamics.

- Organisations should consider reviewing their leadership succession plans by identifying talent in the 26 to 40 age group at supervisory level. These individuals are in the establishment stage of their careers and want to remain with their current organisations.

- Organisation should consider providing women with the work-life balance opportunities and benefits that meet their security and stability needs, while remaining productive in meeting the organisation's goals and objectives.

- Organisations should consider reviewing their communication policies and practices to ensure effective, open and transparent communication with employees (aged 26-40). Organisations could channel communication towards setting clearly defined goals, allowing employees to feel empowered to achieve work in their areas of expertise without close supervision, while ensuring that reward is based on fair pay, performance bonuses and promotional opportunities.

- Perceived intra-organisational career mobility may be an important consideration in retention strategising because employees may experience organisations as supportive entities that are willing to invest in their employees when career development opportunities are provided. It is therefore suggested that the development or enhancement of individuals' psychological career competencies should be a key development support technique area in order to retain embedded and committed employees.

- Employees' career development practices should be individualised, taking biographical factors into consideration.

- Organisation should explore the extent to which provision for advancement opportunities is provided. Factors such as the provision of training opportunities and opportunities for internal promotion should be considered in creating a perception that the organisation values intraorganisational career adaptability.

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7.3.2 Recommendations for future research

Based on the conclusions and limitations, recommendations for further research in the field of industrial and organisational psychology are highlighted below.

To enhance external validity, future research efforts could focus on obtaining a larger and more representative sample. This study was limited by the choice of the sample. The sample could be expanded to a broader representation of demographic variables, indicating a balanced spread of representation of different psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment.

There is a need for more research on psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment, specifically in South Africa. Further studies would be valuable for career counselling purposes because they would help career counsellors provide guidance to individuals when making career choices, based on their ability to translate their career self-concept and motivators into occupations that would meet their personal needs (Coetzee & Roythorne-Jacobs, 2012).

This study provides only limited insights into various facets of psychological career resources, career adaptability and hardiness that are significantly associated with job embeddedness and organisational commitment. Further research into the relationship between psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment could be conducted by industrial and organisational psychologists, researchers and business leaders to promote the development of meaningful employee retention strategies in organisations.

Different career and life stages influence the relationship between an individual's psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment. It is recommended that future longitudinal studies should be conducted to test the consistency of the relationship between psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment during an individual's career and life span (early, middle and late adulthood). Such findings could help individuals to crystallise their psychological career competencies and improve their career decision making. Consistent findings, over a period of time, may assist industrial psychologists to interpret information and create a practical and reliable framework that would

help individuals with their career decision making and organisations with their retention strategies.

7.4   EVALUATION OF THE STUDY

The study investigated the existence of a relationship between psychological career resources, career adaptability and hardiness as a set of composite psychological career meta-competencies, and job embeddedness and organisational commitment, as a set of composite retention-related dispositions. The results suggest that there is a relationship between the variables of relevance to this study and that the aforementioned variables may provide insight into retention practices.

7.4.1   Value-added on a theoretical level

The literature review suggests the existence of a relationship between psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment. Skills shortages and increased career agency and mobility opportunities resulting from globalisation, and the changing nature of careers and work have compelled organisations to turn their focus to informed retention strategies. Globalisation and increased competition have resulted in individuals moving between organisations more easily than before. Job embeddedness and organisational commitment, as well as employee advancement opportunities, have been labelled as important in considering the retention of employees. Differences between biographical groups in terms of their attitudes towards the organisation have to be considered.

On a *theoretical level*, this study is useful because of the relationship identified between a set of psychological career meta-competencies, (psychological career resources, career adaptability, and hardiness), as a composite set of independent variables, and a set of retention-related dispositions (job embeddedness and organisational commitment), as a composite set of dependent variables. The literature review was used to construct a theoretical psychological career profile for staff retention purposes.

In terms of the psychological career meta-competencies, the hypothesised psychological career profile indicated an expression of self-concordant goals relating to employees' core self-evaluations and inner career needs, values and interests that could evoke higher levels of commitment (Coetzee & Esterhuizen, 2010). In terms of the retention-related dispositions, job

embeddedness and organisational commitment, a psychological career profile versus retention pointed to job roles that are closely aligned with career aspirations, which generally enhance employee career self-management, organisational citizenship behaviour and psychological attachment to the organisation. In addition, exploring how individuals' biographical characteristics influence the manifestation and development of these meta-competencies and dispositions, has proven useful in understanding retention in a multicultural context.

7.4.2 Value-added on an empirical level

On an *empirical level*, the research has contributed to constructing an empirically tested psychological career profile that may be used to inform retention practices. Significant relationships were found between the variables, identifying core career meta-competencies that influence the job embeddedness (fit) of an individual. This is potentially ground-breaking research because there is no existing study on the relationship dynamics between the psychological career meta-competencies (psychological career resources, career adaptability, and hardiness) and retention-related dispositions (job embeddedness and organisational commitment), especially in a staff retention context. Studies on the relationship between these constructs are rare, especially in the South African context (Ferreira & Coetzee, 2010; Ferreira *et al.*, 2010).

The study is original in its investigation of the inter- and overall relationships between the constructs of relevance to this research and empirically tested a psychological career profile for the retention of staff. In the light of the current organisational multicultural context, which is characterised by cultural and generational diversity, the results may be valuable in the retention of valuable and talented staff by identifying differences in terms of biographical information that address the needs of a diverse group of staff members.

7.4.3 Value-added on an practical level

On *a practical level*, if industrial psychologists and human resource practitioners could better understand the psychological career meta-competencies constructs of psychological career resources, career adaptability and hardiness, and the retention-related dispositions constructs of job embeddedness and organisational commitment in considering the psychological career profile of an individual, this could have a positive impact on the retention

of valuable talented employees. The positive outcomes of possible future research could include raising awareness of the fact that individuals in the workplace have different psychological career resources, career adaptability and hardiness. Every individual needs to be treated in a manner that is appropriate to him or her in order to promote job and career satisfaction, which will culminate in job embeddedness and organisational commitment. Another positive outcome was the realisation of the way in which employees' psychological career meta-competencies influence their level of embeddedness and commitment towards the employing organisation. This study also underscores the importance of mentoring and succession planning in career development and retention practices..

Where empirically tested practical significant relationships were found, the findings should prove useful for future researchers in exploring the possibility of overcoming the effects of low commitment and job embeddedness in attempts to retain talented employees. Furthermore, the research results will contribute to the body of knowledge relating to the psychological factors that influence staff retention in the South African organisational context.

In conclusion, the researcher hopes that the findings of the study will provide valuable insight into how the inter- and overall relationships between the constructs of relevance to the study have contributed to constructing and empirically testing a psychological career profile for retention purposes. Hopefully industrial and organisational psychologists and managers will be able to effectively utilise the new insights in enhancing retention strategies. Talent retention has become a prominent focus of many organisations because of the competitive nature of today's work environment. In addition, the multicultural South African context highlights the need to consider differences between biographical groups regarding the variables of relevance to this study. Recommendations were also made for future research, and this study should be seen as a step towards making a positive contribution to the field of industrial and organisational psychology in the South African context.

7.5 CHAPTER SUMMARY

This chapter discussed the conclusions of the study, in terms of both the theoretical and empirical objectives. Possible limitations of the study were explained with reference to both the theoretical and empirical studies. Recommendations were made for future research to explore the relationship between psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment. Finally, an integration of the

research was presented, emphasising the extent to which the results of the study results provided support for the relationship between the variables of psychological career resources, career adaptability, hardiness, job embeddedness and organisational commitment and how this contributed to constructing a psychological career profile for staff retention purposes..

Chapter 7 achieved the following research aim, namely to make recommendations for the discipline of industrial and organisational psychology and human resource management talent retention practices and future research.

This concludes the research project.

The next section presents the Research Article

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