Constructing a psychological retention profile for diverse generational groups in the higher educational environment

by

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submitted in accordance with the requirements for the degree of

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in the subject

Industrial and Organisational Psychology

at the

University of South Africa

Supervisor: Prof M Coetzee

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DECLARATION

I, Alida Jacoba Deas, student number 5573 7463, declare that this thesis entitled “Constructing a psychological retention profile for diverse generational groups in the higher educational environment” is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references. This thesis has not, in part or in whole, been previously submitted for any other degree or examination at this or any other university.

I also declare that the study has been carried out in strict accordance with the Policy for Research Ethics of the University of South Africa (Unisa). I took great care that the research was conducted with the highest integrity, taking into account Unisa’s Policy for Infringement and Plagiarism.

I further declare that ethical clearance to conduct the research was obtained from the Department of Industrial and Organisational Psychology, University of South Africa. Permission to conduct the research was also obtained from the participating organisation.

________________________
Alida Jacoba Deas

Date 12 June 2017
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ABSTRACT/SUMMARY

CONSTRUCTING A PSYCHOLOGICAL RETENTION PROFILE FOR DIVERSE GENERATIONAL GROUPS IN THE HIGHER EDUCATIONAL ENVIRONMENT

by

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DEPARTMENT : Industrial and Organisational Psychology
DEGREE : PhD (Industrial and Organisational Psychology)

This study focused on constructing a psychological retention profile by investigating the relationship between an individual’s psychological career-related attributes (psychological contract and psychosocial career preoccupations), biographical variables (generational cohorts, gender, race, marital status, job level and employment status) and retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment) in order to inform retention management practices for diverse groups of employees in the context of higher educational environment in South Africa. A quantitative survey was conducted on a purposively selected sample of academic and support staff (N = 579) at the University of South Africa. The canonical correlation analysis indicated employer obligations and state of the psychological contract as the strongest psychological career-related variables in predicting the retention factor variables of compensation, training and development opportunities, supervisor support, career opportunities and organisational commitment. The canonical correlation data were used to inform the structural equation modelling, which indicated a good fit between employer obligations and compensation and training and development opportunities and between the state of the psychological contract and supervisor support and career opportunities. Hierarchical moderated regression showed that psychosocial career preoccupations significantly moderated the relationship between the psychological contract and training and development opportunities as retention factor. Moderated mediation modelling found that the effect of positive perceptions of employer obligations on high levels of retention factors satisfaction through the state of the psychological contract increased when the scores on psychosocial career preoccupations were high. The results also indicated that the effect of positive perceptions of employer obligations on high levels of retention factors satisfaction through positive state of psychological contract increased when the age group of participants was lower (i.e. younger generations). Tests for significant mean differences revealed significant differences in terms of the biographical variables. On a theoretical level, the study
expanded the understanding of the individual and behavioural elements of the hypothesised psychological retention profile. On an empirical level, this study delivered an empirically tested psychological retention profile in terms of the behavioural elements. On a practical level, individual and organisational interventions in terms of the psychological retention profile were recommended.

**KEY TERMS**

Psychological contract, employee obligations, employer obligations, state of the psychological contract, psychosocial career preoccupations, retention, diversity, generational cohorts, baby boomers, generation X, generation Y.
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6.1.1.2 Research aim 2: To conceptualise the psychological career-related attributes of the psychological contract and psychosocial career preoccupations, and to establish how an individuals' biographical characteristics influence the development of these competencies

6.1.1.3 Research aim 3: To conceptualise the theoretical relationship between the psychological career-related attributes (psychological contract, psychosocial career preoccupations, and generational cohorts) and the retention factors constructs (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment)

6.1.1.4 Research aim 4: Based on the theoretical relationship between the psychological career-related attributes, to determine the theoretical elements that constitute an integral psychological retention profile for diverse groups of employees

6.1.1.5 Research aim 5: To outline the implications of the psychological retention profile for retention management practices

6.1.2 Conclusions relating to the empirical study

6.1.2.1 Research aim 1: To assess the statistical interrelationship between the psychological career-related construct variables (psychological contract and psychosocial career preoccupations), the biographical characteristics (generational cohorts, gender, race, marital status, job level, and employment status) variables and the retention factors constructs.

6.1.2.2 Research aim 2: To investigate empirically whether the psychological career-related construct variables (psychological contract and psychosocial career preoccupations) positively and significantly predict the retention factors construct variables.

6.1.2.3 Research aim 3: Based on the statistical relationship between the psychological career-related construct variables (psychological contract, psychosocial career preoccupations, and generational
cohorts) and the retention factors construct variables (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment), to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

6.1.2.4 Research aim 4: To assess the interaction effect between (1) individuals’ psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in predicting satisfaction with retention factors.

6.1.2.5 Research aim 5: To assess whether the effects of (a) employer obligations and (b) state of the psychological contract on retention factors satisfaction are moderated by (1) employees’ psychosocial career preoccupations such that stronger effects are associated with stronger career preoccupations, and (2) by generational cohorts such that stronger effects are evident for certain generational cohorts.

6.1.2.6 Research aim 6: To investigate empirically whether individuals from the various gender, race, marital status, job level and employment status sub-groups differ significantly regarding the psychological career-related construct (psychological contract, psychosocial career preoccupations, and generational cohorts) and retention factors variables.

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CHAPTER 1: SCIENTIFIC OVERVIEW OF THE RESEARCH

This research study focused on constructing a psychological retention profile for diverse generational groups in the higher educational environment. This chapter provides the background to and motivation for the study, which resulted in the formulation of the problem statement and the research questions. Thereafter, the aims of the research are discussed. In order to provide structure for the research process, the paradigm, research method and research design are formulated. The final aspect addressed is the manner in which the chapters are presented.

1.1 BACKGROUND AND MOTIVATION FOR THE RESEARCH

The context of this research was staff retention in the multi-cultural and diverse South African higher educational environment. The study examined the relationship between a set of psychological career-related attributes (psychological contract, psychosocial career preoccupations and generational cohorts) and a composite set of retention factors (including compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life policies and commitment). It was hoped that the findings of this research would potentially inform the development of a psychological retention profile that would provide useful information for human resource retention practices concerned with the retention of diverse groups of employees in South African higher educational institutions.

The world of work has changed society from one that is worker-intensive and industrial to one that is more knowledge-based (Döckel, Basson, & Coetzee, 2006; Mubarak, Wahab, & Khan, 2012; Stone & Deadrick, 2015). The higher educational environment is no exception as the last few decades have seen colleges and universities changing and reshaping the organisation in order to keep up with the demands of the new globalised environment (Echevarria, 2009; Erasmus, Grobler, & Van Niekerk, 2015). The university is now seen as a hub of research, information, change and excellence that is capable of obtaining, producing and transferring knowledge to the society (Mubarak et al., 2012, Takawira, Coetzee, & Schreuder, 2014). The higher educational environment can be considered as the greatest source of knowledge for any country (Khalid, Irshad, & Mahmood, 2012; Takawira et al., 2014) as these institutions serve as repositories of the most specialised and skilled intellectuals who are vital to the development of a country’s manpower requirements (Ng’ethe, Iravo, & Namusonge, 2012). Institutions in the higher educational environment are dependent on the
intellectual abilities of their academic staff as these individuals are fundamental to the functioning of any university (Bernard & Appolonius, 2014; Erasmus et al., 2015; Ng’ethe et al., 2012; Pienaar & Bester, 2008). Without high quality academic staff, no educational institution will be able to ensure sustainability and quality over the long term (Ng’ethe et al., 2012).

Retaining knowledgeable academics has become an ever-increasing challenge and the demand and competition for highly qualified academics has increased (Bushe, 2012; Erasmus et al., 2015). Higher educational institutions are vulnerable to losing their highly knowledgeable staff as a result of attractive offers from the private sector as well as recruitment from other higher educational institutions (Erasmus et al., 2015; Ngobeni & Bezuidenhout, 2011; Takawira et al., 2014). The Council on Higher Education (2009) observes that the retention of academic employees is crucial to the success of academic institutions. These institutions will be increasingly obliged to make the retention of employees a strategic priority since research indicates that a significant number of employees – between 5% and 18% – leave higher educational institutions (Pienaar & Bester, 2008). The success of these institutions therefore relies on their ability to retain academic staff of a high quality (Bernard & Appolonius, 2014; Erasmus et al., 2015; Hagedorn, 2000; Hailu, Mariam, Fekade, Derbew, & Mekasha, 2013; Takawira et al., 2014).

In recent years, the workplace has been transformed from an analogous setting to an environment infused with diversity in language, culture, race, ethnicity, age, gender, sexual orientation, and one that includes people with disabilities (Van der Walt & Du Plessis, 2010). Political, social and economic changes have led to increased diversity in the workplace across many parts of the world (Earl & Taylor, 2015; Uys, 2003). South Africa has not been excluded from these changes and it is therefore essential for organisations to manage diversity. Diversity management refers to those skills, competencies and policies necessary to enhance every employee’s contribution in reaching organisational goals (Donnelley, 2015; Uys, 2003) and includes efforts from organisations to actively recruit, retain and assist working relationships between employees from diverse backgrounds (Donnelley, 2015; Miller & Rowney, 1999; Uys, 2003).

Organisations where proper appreciation of diversity is absent will experience a decrease in productivity as well as the negative effects of high staff turnover, with the associated costs of replacing staff (Greer & Virick, 2008; Hsiao, Auld, & Ma, 2015; Van der Walt & Du Plessis, 2010). This is evident in South Africa as representation of the country’s diversity has been missing from most South African organisations (Dombai & Verwey, 1999; Human, 2005; Van
der Walt & Du Plessis, 2010), particularly on South African corporate boards (Gyapong, Monem, & Hu, 2016). In 2016, the population of South Africa was 55.6 million: comprising 81% black Africans, 9% coloureds, 2% Indians/Asians and 8% Whites (Statistics South Africa, 2016). This distribution of the population is underrepresented in the workplace, especially on corporate boards, which are still dominated by white males (Gyapong et al., 2016; Ntim, 2015). Retention of skilled and academic staff from the designated groups remains problematic for many higher educational institutions (Mkhwanazi & Baijath, 2003). The South African government has taken an enthusiastic interest through implementing legislation and regulations in an attempt to encourage the employment of under-represented groups in the workplace (Gyapong et al., 2016; Van der Walt & Du Plessis, 2010). Measures have included the Employment Equity Act no 55 of 1998 (EEA), which is aimed at rectifying any form of discrimination in the workplace, and the Broad Based Black Economic Empowerment Act no 53 of 2003 (BBBEE), aimed at mitigating years of systemic racism through increasing Black involvement in the South African economy (Gyapong et al., 2016).

Age diversity in South Africa is rarely discussed as a central point of diversity (Martins & Martins, 2014; Van der Walt & Du Plessis, 2010). South African universities are facing a potential crisis in that large numbers of scarce and highly knowledgeable academics are aging (Bezuidenhout & Cilliers, 2011; Teferra, 2016; Tettey, 2009). The reality is that universities are facing a new form of ‘brain drain’, together with the problem posed by the emigration of highly skilled academics (Bezuidenhout & Cilliers, 2011). One way of solving the problem is to retain these academics longer, beyond the normal age of retirement (Sussman & Yssaad, 2005). However, this would exacerbate the problem of an already age diverse workforce by increasing the pool of older employees. Together with this ageing phenomenon, the academic profession is also becoming increasingly younger at the lower level (Teferra, 2016). Figure 1.1 illustrates age diversity at the University of South Africa (2016):
Figure 1.1 suggests that the South African academic workforce is not only diverse in age, but also that academics from different generational groups are working together. The current era is characterised by several different generational groups functioning together in the workforce (Kleinhans, Chakradhar, Muller, & Waddill, 2015; Martins & Martins, 2014; Stanley, 2010). For the first time in history, four generations are working together and organisations have to manage the co-existence of age-diverse workers in a changing workplace (Kleinhans et al., 2015; Lowe, Levitt, & Wilson, 2008; McKay & Avery, 2015). The “generational” school of thought argues that values are engraved for life through defining historical events that occur as people grow into adulthood (Lowe et al., 2008; Martins & Martins, 2014). A generational cohort can be defined as a group of people, similar in age, who have experienced the same historical events within the same time period (Kleinhans, et al., 2015; Kowske, Rasch, & Wiley, 2010; Ryder, 1965). A generational cohort will share similar attitudes, emotions, beliefs, values and preferences towards their work and career (Arsenault, 2004; Shacklock & Brunetto, 2012). Generational cohorts, including their birth-year period and age range, are shown in Table 1.1 below (Crumpacker & Crumpacker, 2007; Martins & Martins, 2014). Although these generational categories may not be specific to the South African context, it has become part of the terminology of human resources literature (Bussin & van Rooy, 2014). Bussin and van Rooy (2014) furthermore argues that the use of the generational cohort theory in the South African context seems to be valuable as it shows a definite age model and comparable trends have also been found in the workplace.
Table 1.1
Generations in the Workplace

<table>
<thead>
<tr>
<th>Generational cohort</th>
<th>Birth-year period</th>
<th>Age Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veteran/Traditionalist</td>
<td>1929-1945</td>
<td>69-85</td>
</tr>
<tr>
<td>Baby Boomers</td>
<td>1946-1964</td>
<td>50-68</td>
</tr>
<tr>
<td>Generation X</td>
<td>1965-1979</td>
<td>35-49</td>
</tr>
<tr>
<td>Generation Y</td>
<td>1980-1999</td>
<td>15-34</td>
</tr>
</tbody>
</table>

Different generations value different things and therefore retention of different generations may be difficult. Workers who are older are considered to be more engaged in their work, to have higher levels of job satisfaction and to be more committed to their organisation (Galinsky, 2007; Shah & Gregar, 2013). Younger workers under the age of 30 are considered to be more cooperative, positive, vocal in the organisation, technologically reliant, valuing work/life balance, mature, robust, hands-on, open-minded, autonomous, self-assured and intelligent (Clendon & Walker, 2012; Dickerson, 2010; Dols, Landrum, & Wieck, 2010; Jamieson, 2009; Martins & Martins, 2014; Wallis, 2009). They are also more likely to leave their organisation than older employees (Martins & Martins, 2014; Van Dyk, 2011). Age is therefore an important aspect in turnover behaviour (Boxall, Mackey, & Rasmussen, 2003; Van Dyk, 2011). According to a study by Govaerts, Kyndt, Dochy, and Baert (2011), a positive relationship exists between age and retention in terms of intention to stay, whereas a negative relationship exists between age and retention in terms of intention to leave. In other words, older employees are more inclined to stay with an organisation while younger employees are more inclined to leave.

Finding the retention strategies that appeal to all generations presents various challenges for an organisation (Lowe et al., 2008). Every generation has its own set of values, perspectives on authority, attitudes towards work, communication style, and opinions of their leaders and of the environment in which they work (Altimier, 2006; Gursory, Maier, & Chi, 2008; Hu, Herrick, & Hodgin, 2004; Martins & Martins, 2014; Stanley, 2010). Exploring generational differences has been identified as an important and underdeveloped area for management research (Hess & Jepsen, 2009; Martins, & Martins, 2014; Westerman & Yamamura, 2007). Information on the characteristics and background of each generation can assist in the identification of the specific advantages and disadvantages that each generation provides to the work environment (Lavoie-Tremblay et al., 2010; Martins, & Martins, 2014). Managers face
difficulties in their attempts to discover innovative strategies to retain employees from different generations (Lavoie-Tremblay et al., 2010).

Retention of employees from different generations will be crucial to the success of organisations in the future (Eversole, Venneberg, & Crowder, 2014), and specifically the success of universities (Dube & Ngulube, 2013). Dube and Ngulube (2013) believe that the development of strategies to improve retention of academics can save higher educational institutions a great deal of money. A report from Higher Education of South Africa (HESA, 2014) argues that the investment and cultivation of future generations of academic employees is extremely important; failing to do so will have far-reaching consequences (Subbaye & Dhunpath, 2016). For industrial and organisational psychologists, this type of research is particularly interesting as the field focuses on understanding how employees interact with their work as well as with their co-employees (Thompson & Gregory, 2012).

Another theory linked to age diversity describes the differences in individual career-related needs and preoccupations that are associated with an individual’s particular career stage (Hess & Jepsen, 2009). A person’s career can be linked to a succession of stages, each characterised by various job positions, responsibilities or activities, as well as different attitudes and behaviours (Chang, Chou, & Cheng, 2007; Chen, Chang, & Yeh, 2003a; Chen, Chang, & Yeh, 2003b; Cron, 1984; Super, 1957). In Super’s (1957) theory of career development, an individual will experience four stages of career concerns during the development of his/her career (Hess & Jepsen, 2009). These four stages are the exploration stage (younger than 30 years old), the establishment stage (between 30 and 45 years of age), the maintenance stage (over the age of 45) and finally, the disengagement stage (transition from working to retirement) (Cron, 1984; Menguc, & Bhuian, 2005). Super’s model (Super, 1957) of career stages proposes that individuals have diverse inclinations and preoccupations depending on which career stage they are in (Demerouti, Peeters, & Van der Heijden; 2012; Low, Bordia, & Bordia, 2016; Super, 1957; Super, 1984).

Throughout the exploration stage, the main concern for individuals is to clarify their career interests and abilities in order to make better choices concerning the direction and the construction of their careers (Hess & Jepsen, 2009). Individuals from generation Y (1980–1999) will typically be in either this stage of their career or transforming to the next stage, the establishment stage. During the establishment stage, individuals want to combine their career choices (Hess & Jepsen, 2009) and the emphasis is on finding a niche, growth, advancement and stabilisation (Demerouti et al., 2012). Individuals from generation X (1965–1979) will typically be in either this stage or transforming to the following career stage, the maintenance
stage. It is during the maintenance stage that individuals attempt to embrace what they have established, and the emphasis is on what they have accomplished in their previous career stage, preserving their self-concept, as well as on improving their skills (Demerouti et al., 2012; Hess & Jepsen, 2009). Baby Boomers (1946–1964) will be in either the final phase of the maintenance stage or, depending on the retirement age of the organisation, moving towards the final career stage, the disengagement stage. Finally, the disengagement stage is characterised by a decline in individuals’ energy for and interest in their work (Hess & Jepsen, 2009) and the emphasis is on the development of a different self-concept, which is free from career success, and a transition into retirement (Demerouti et al., 2012).

Researchers in careers have acknowledged further non-age and non-career stage associated career preoccupations that may be predominant in an adult’s career-life story. These are the result of an individual’s career experiences within a disconcerted economy and turbulent employment market (Coetzee, 2015a). Coetzee (2014) believes that psychosocial career preoccupations can be defined as an individual’s mental state with regard to certain concerns of his/her career that are at the forefront of his/her thoughts at a particular point. These concerns may include preoccupations with one’s employability, ongoing learning and development, up-skilling, adaptability to regular change, work/life incorporation and flexibility, career mobility, career agency, self-awareness, and developing closer relationships with one’s work and social community (Coetzee, 2015a; Coetzee, 2015b; Hall, 2013; Savickas, 2013; Sullivan, 2013).

Therefore, the development tasks within each career stage are not inescapably constrained by age frameworks, such as Super (1957) and Savickas (2005) suggest, as not all individuals encounter these specific tasks at the same age, or encounter all specific tasks (Coetzee, 2015b). Rather, Coetzee (2014, 2015a, 2015b) identified three central dimensions of psychosocial career preoccupations that are both non-age and non-career stage related, including career establishment preoccupations (for example, apprehensions regarding fitting into a group, career and economic steadiness and security, creating prospects for self-expression and personal growth and development, and progressing in one’s career in the current organisation), career adaptation preoccupations (for example, employability-related fears about adjusting to fluctuating circumstances which might consist of career changes and adjusting one’s interests, talents and competencies to fit with opportunities in the employment market) and work/life adjustment preoccupations (for example, settling down, reducing one’s workload and reaching greater synchronisation between one’s work and personal life; this might also involve leaving remunerated employment).
Research into the dimensions of psychosocial career preoccupations is, however, extremely limited in the South African workplace context, particularly with regard to retention outcomes such as employees’ work-related commitment (Coetzee, 2015a). Hess and Jepsen (2009) observe that several researchers have found notable differences throughout the different career stages in work ethic (Pogson, Cober, Doverspike, & Rodgers, 2003), in attitudes towards work (Smart, 1998), job attitudes (Flaherty & Pappas, 2002) and organisational commitment (Allen & Meyer, 1993). Little research has focused on the differences over the various career stages in retention strategies, however, particularly in the case of academics in the higher educational environment. Pienaar and Bester (2008) conducted a study to determine the degree to which academics in the early career stage at a South African higher educational institution were committed to the institution. Their results indicated that 66.6% of white male participants, 57% of white female participants, 83% of black male participants and 50% of black female participants were uncertain whether they would stay at the institution much longer; in fact, in some instances, there was a definite probability that they would leave the institution. A study conducted by Theron, Barkhuizen and Du Plessis (2014) found that 33.8% of academics indicated a moderate to strong intention to leave their institutions. This suggests that in the event of labour market conditions improving, it will become more and more difficult to recruit young academics, and to retain the current academic workforce, if appropriate attention is not given to the career dilemmas of academics (Pienaar & Bester, 2008; Rabe & Rugunanan, 2012; Subbaye & Dhunpath, 2016).

Researchers in the field of retention management contend that the success of retention management relies not only on the development of an optimum portfolio of human resource (HR) practices, but also on the management of the expectations of employees in terms of these practices (Al-Emadi, Schwabenland, & Wie, 2015; De Vos & Meganck, 2009). One way of managing these expectations is to manage the psychological contract of employees. Significant research over the last ten years has strengthened the role of the psychological contract and work expectations in guiding relationships and work lives of employees in higher education (O’Meara, Bennet, & Neihaus, 2016). The majority of research on retention focuses on a description of retention practices and procedures, as well as on investigation into the impact of particular HR practices on the retention or turnover of employees (Allen, Shore, & Griffeth, 2003; De Vos & Meganck, 2009; Hsu, Jiang, Klein, & Tang, 2003). The psychological contract and employees’ experience therefore provide for a more comprehensive framework for an understanding of the variety of findings resulting from research into retention and makes provision for the direct evaluation of the influence of various content dimensions on employee retention (De Vos & Meganck; 2009).
According to Krivokapic-Skoko, O’Neill, and Dowell (2009), there are two main conceptualisations of the term psychological contract. The first is based on the notion that the employment relationship consists of two parties who have mutual obligations towards each other – the employee and the organisation (Herriot, Manning, & Kidd, 1997; Lub, Bal, Blomme, & Schalk, 2016; O’Meara et al., 2016). These mutual obligations may be openly communicated through formal contracts, or they may be understood through the explicit or implicit expectations of the employee and the organisation (Krivokapic-Skoko & O’Neill, 2008). The second conceptualisation is based on the psychological contract as it is expressed in the mind of the individual employee only (Krivokapic-Skoko et al., 2009). The second approach relates to the definition of the psychological contract by Rousseau (1995), as an individual’s beliefs regarding the terms and conditions of a mutual exchange agreement between the employee and the organisation (Chih et al., 2016; O’Meara et al., 2016; Peirce et al., 2012).

Since the 1990s, the majority of research on the psychological contract has been based on the second conceptualisation, which emphasises the necessity of the individual employee’s sense of obligation (Krivokapic-Skoko et al., 2009; Turnley & Feldman, 1999). In the higher educational environment, the psychological contract refers to a set of expectations of an academic employee regarding the promises made and might include aspects such as a collegial environment, informal mentorship, initial teaching load, staff support, office space and time to develop (Peirce et al., 2012). According to findings by O’Meara et al. (2016), academic employees have expectations of collegial communication, fair rewards, autonomy, as well as a say in organisational decision-making.

Employees enter into an employment relationship based on the understanding that their employer has certain obligations towards them and that they have certain obligations towards their employer (Addae, Parboteeah, & Davis, 2006). Subsequently, each party to the employment relationship may differ in his or her perceptions as to what these obligations are (Hamilton & Von Treuer, 2012); the psychological contract is therefore idiosyncratic and dynamic in nature (Lam & de Campos, 2015; Rousseau, 1989). For example, an employee will assume that, in return for hard work, consistency, commitment or loyalty, he/she will receive compensation, status, appreciation or the opportunity to be innovative (Bellou, 2009). Conversely, because the two parties may have dissimilar and varying perceptions of the other and his/her expectations, the understanding of the expectations and mutual obligations may not be constant (Krivokapic-Skoko et al., 2009).

A study conducted by Krivokapic-Skoko, Ivers, and O’Neill (2006) differentiated between various contractual elements and categorised them in groups. They classified employee
responsibilities according to four groups: a) organisational citizenship behaviours; b) basic obligations; c) work environment; and, d) loyalty. The responsibilities of employers were grouped according to six categories: a) payment/benefits; b) management; c) work environment; d) fairness; e) empowerment; and f) personal needs. The four employee responsibilities identified the actions and responsibilities that employees would be willing to be held responsible for in return for the employer keeping to what employees considered to be their obligations (Krivkapic-Skoko & O’Neill, 2008).

A psychological contract is fulfilled when employees perceive that their employer has met the obligations that have been promised (Hamilton & Von Treuer, 2012). Employees will respond to this fulfilment by expressing positive organisational attitudes, including commitment and the intention to stay (Lub et al., 2016). In the event that employees perceive that their organisation has not delivered on its promises, despite their having fulfilled their part of the deal, non-fulfilment of obligations occurs (Chih et al., 2016; Freese, Schalk, & Croon, 2011). This is also known as breach of the psychological contract. A breach of the psychological contract refers to the perception that the organisation has failed to fulfil either one or more of its obligations (Chih et al., 2016; Morrison & Robinson, 1997; Parzefall & Coyle-Shapiro, 2011). Employees who believe that their psychological contract has been breached are inclined to respond to their employer with lowered levels of commitment or the intention to leave (De Vos & Meganck, 2009; Jiang, Probst, & Benson, 2015; Lam & De Campos, 2015).

Previous research has also shown that an employee will leave an organisation when the organisation does not fulfil its promises regarding valued obligations (Coyle-Shapiro, 2002; De Vos & Meganck, 2009). When developing retention polices, organisations should therefore identify the retention factors influencing employees, as well as the value these employees attribute to these factors (De Vos & Meganck, 2009). These retention factors may include training, career development, compensation, performance management and communication from an HR manager perspective, and career development opportunities, job characteristics, social atmosphere, compensation and work/life balance from an employee perspective (Al-Emadi et al., 2015; De Vos & Meganck, 2009). Through the application of the psychological contract, a better understanding of the relative importance of the retention factors valued by employees can be achieved (De Vos & Meganck, 2009). Conway and Briner (2005) observe that comparatively few research studies have been designed specifically to evaluate the contents of the psychological contract; although empirical research has advanced significantly over the past decade, empirical research relating to the psychological contracts of academic employees has been very limited (Krivokapic-Skoko et al., 2009). The present study thus attempts to determine the contents of the psychological contract of employees in the higher
educational environment. The disregard for career theory in psychological contract theory has also restricted scholars’ understanding of the influence of an individual’s work experience and preferences on his/her psychological contract and response to breaches of the psychological contract (Lam & De Campos, 2015).

It is evident from the literature that the constructs of psychological contract, psychosocial career preoccupations and generational cohorts in relation to HR practices that influence employees’ retention (i.e. retention factors such as compensation, training and development opportunities, supervisor support, career opportunities, work/life balance and commitment) are important in the context of retention management. Investigating the relationship between these constructs may assist in the construction of a psychological retention profile for the higher educational environment that could inform retention practices.

As a result of the changing nature of the workforce, as well as shifting societal demographics and diversity, organisations have recognised the importance of valuing and managing diversity effectively (Singh & Selvarajan, 2013). Efficient diversity management has a significant effect on employee attitudes and actions, and has an impact on employee turnover and therefore retention (Singh & Selvarajan, 2013). According to Roodt and Kotze (2005), employees’ gender results in considerably different perceptions relating to organisational support and the tendency to leave the organisation. Empirical evidence has also established that gender can be regarded as a moderator between the psychological contract and the intention to leave (Blomme, Van Reede, & Tromp, 2010; Wöcke & Heymann, 2012). A further factor influencing turnover is race. Wöcke and Heymann (2012) found that employees from the designated groups in South Africa are more prone to leave an organisation as a result of pull factors (for example growth opportunities, headhunting, career change and compensation) from other organisations, whereas white employees are more inclined to leave because of push factors (for example retrenchment, relocation and dissatisfaction with compensation or supervisor) within their current working environment. Marital status also has an impact on retention. In a study conducted by Gök and Kocaman (2011), 30.6% of the participants identified personal situations, including marriage, as reason for leaving the organisation. It is therefore clear that certain biographical factors may also have an influence on organisational retention strategies.

Based on the review of the literature, the following research hypotheses were formulated:

H1: There is a statistically positive interrelationship between the psychological career-related construct variables (psychological contract and psychosocial career preoccupations), the
biographical characteristics (generational cohorts, gender, race, marital status, job level and employment status) variables and the retention factors construct variables.

H2: The psychological career-related construct variables (psychological contract and psychosocial career preoccupations) positively and significantly predict the retention factors construct variables.

H3: The theoretical, hypothesised psychological profile has a good fit with the empirically manifested structural model.

H4: There is a significant interaction effect between (1) individuals’ psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in predicting satisfaction with retention factors.

H5: The effects of (a) employer obligations and (b) state of the psychological contract on retention factor satisfaction are moderated by (1) employees’ psychosocial career preoccupations, such that stronger effects are associated with stronger career preoccupations, and (2) by generational cohorts, such that stronger effects are evident for certain generational cohorts.

H6: Individuals from the various generational cohorts and gender, race, marital status, job level and employment status sub-groups differ significantly with regard to the psychological career-related construct (psychological contract and psychosocial career preoccupations) and retention factors variables.

1.2 PROBLEM STATEMENT

Industrial and organisational psychologists and human resource practitioners are faced with the challenge of developing empirically tested and systematically improved approaches in an effort to manage the retention of diverse groups of employees successfully. Their main difficulty is that there is a dearth of research into how employees’ perceptions of the psychological contract in the higher educational environment relate to retention factors. Understanding the moderating effect of generational cohorts and psychosocial career preoccupations is deemed important in order to tailor retention practices for diverse groups of employees.
Investigating the nature and direction of the relationship between individuals' psychological career-related attributes (psychological contract and psychosocial career preoccupations), their biographical variables (including generational cohorts, gender, race, marital status, job level and employment status) and retention factors may assist in the construction of a theoretical and empirically tested psychological profile for the retention of diverse groups of employees in the higher educational environment. This research is a starting point in adopting a dynamic approach towards exploring the relationship dynamics between the individual's psychological career-related attributes (psychological contract and the psychosocial career preoccupations) and those retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment) that are significant to the individual; and how biographical characteristics (generational cohorts, gender, race, marital status, job level and employment status) contribute to the interplay between these variables.

The problem is that it appears that there is a lack of research that has investigated the psychological contract, psychosocial career preoccupations and retention factors of employees, and how biographical characteristics (generational cohorts, gender, race, marital status, job level and employment status) add to the dynamic interplay between these variables, especially in the higher educational environment in South Africa. A review of current literature on the psychological contract, psychosocial career preoccupations, generational cohorts and retention factors highlighted that there is no theoretical models to clarify the relationship between these variables in a single study and therefore knowledge gained from this research could deliver new insights that could inform organisational retention strategies for diverse groups of employees in the higher educational environment.

Research on the relationship dynamics between the psychological career-related attribute variables (psychological contract and psychosocial career preoccupations) and retention factors in a constantly changing and diverse work context could make a valuable contribution to the industrial and organisational and the human resource management disciplines. In conclusion, the results from this empirical study could encourage further research that will explore new directions in the field of retention management practices. An understanding of diverse groups of employees' psychological retention profiles could improve their retention in an organisation.

The problem statement led to the following general research question:
What are the relationship dynamics between an individual's psychological career-related attributes (psychological contract and psychosocial career preoccupations), his/her biographical variables (including generational cohorts, gender, race, marital status, job level and employment status), and satisfaction with retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment), and what elements of the psychological retention profile derived from the empirical relationship dynamics could potentially inform retention management practices for diverse groups of employees in the context of the higher educational environment in South Africa?

Based on the above general research question, the following specific research questions were formulated in terms of the literature review and the empirical study:

1.2.1 Research questions relating to the literature

Research question 1: How does the literature conceptualise generational diversity and retention in the diverse and multi-cultural contemporary workplace?

Research question 2: How are the psychological career-related attributes of psychological contract, psychosocial career preoccupations and generational cohorts conceptualised in the literature, and how do individuals' biographical characteristics relate to these attributes?

Research question 3: What is the theoretical relationship between the psychological career-related attributes (psychological contract and psychosocial career preoccupations) and the retention factor variables (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment)?

Research question 4: Based on the theoretical relationship between the psychological career-related attributes and retention factors constructs, what are the theoretical elements that constitute an integrated psychological retention profile for diverse groups of employees?

Research question 5: What are the implications of the psychological retention profile for retention management practices in the higher educational environment?

1.2.2 Research questions relating to the empirical study
Research question 1: What are the empirical inter-relationships between the psychological career-related construct variables (psychological contract and psychosocial career preoccupations) and the biographical characteristics (generational cohorts, gender, race, marital status, job level and employment status) variables and the retention factors construct variables as manifested in a sample of respondents in the higher educational environment in South Africa? (This research question relates to research hypothesis H1.)

Research question 2: Do the psychological career-related construct variables positively and significantly predict the retention factors construct variables? (This research question relates to research hypothesis H2.)

Research question 3: Based on the statistical relationship between the psychological career-related construct variables (psychological contract and psychosocial career preoccupations) and the retention factors construct variables (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment), is there a good fit between the elements of the empirically manifested structural model and the theoretically hypothesised model? (This research question relates to research hypothesis H3.)

Research question 4: Do significant interaction effects exist between (1) an individual’s psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in predicting satisfaction with retention factors? (This research question relates to research hypothesis H4.)

Research question 5: Are the effects of (a) employer obligations and (b) state of the psychological contract on retention factor satisfaction moderated by (1) employees’ psychosocial career preoccupations, such that stronger effects are associated with stronger career preoccupations, and (2) by generational cohorts, such that stronger effects are evident for certain generational cohorts.

Research question 6: Do individuals from the various generational cohorts, gender, race, marital status, job level and employment status sub-groups differ significantly with regard to the psychological career-related construct variables (psychological contract, psychosocial career preoccupations, and generational cohorts) and retention factor variables? (This research question relates to research hypothesis H6.)

Research question 7: What recommendations can be made for industrial and organisational and human resource management 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 was to construct an overall psychological retention profile based on the empirically derived relationship dynamics between an individual’s psychological career-related attributes (psychological contract and psychosocial career preoccupations), his/her biographical variables (including generational cohorts, gender, race, marital status, job level and employment status) and retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment) in order to inform retention management practices for diverse groups of employees in the context of the higher educational environment in South Africa.

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

The specific aims of the literature review were as follows:

**Research aim 1:** To conceptualise generational diversity and retention in the diverse and multi-cultural contemporary workplace.

**Research aim 2:** To conceptualise the psychological career-related attributes of the psychological contract and psychosocial career preoccupations, and to determine how an individual’s biographical characteristics influence the development of these competencies.

**Research aim 3:** To conceptualise the theoretical relationship between the psychological career-related attributes (psychological contract and psychosocial career preoccupations) and the retention factors construct (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment).
Research aim 4: Keeping the theoretical relationship between psychological career-related attributes and retention factor constructs in mind, to determine the theoretical elements that constitute an integrated psychological retention profile for diverse groups of employees.

Research aim 5: To determine the implications of the psychological retention profile for retention management practices.

1.3.2.2 Empirical study

The specific aims of the empirical study were the following:

Research aim 1: To assess the statistical interrelationship between career-related construct variables (psychological contract and psychosocial career preoccupations), biographical characteristics (generational cohorts, gender, race, marital status, job level and employment status) variables and retention factors construct variables. (This research aim relates to research hypothesis H1.)

Research aim 2: To determine empirically whether psychological career-related construct variables (psychological contract and psychosocial career preoccupations) positively and significantly predict the retention factors construct variables. (This research aim relates to research hypothesis H2.)

Research aim 3: In the light of the statistical relationship between the psychological career-related construct variables (psychological contract, psychosocial career preoccupations, generational cohorts) and the retention factors construct variables (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment), to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model. (This research aim relates to research hypothesis H3.)

Research aim 4: To assess the interaction effect between (1) individuals’ psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in predicting satisfaction with retention factors. (This research aim relates to research hypothesis H4.)

Research aim 5: To assess whether the effects of (a) employer obligations and (b) state of the psychological contract on retention factors satisfaction are moderated by (1) employees’
psychosocial career preoccupations, such that stronger effects are associated with stronger career preoccupations, and (2) by generational cohorts, such that stronger effects are evident for certain generational cohorts.

**Research aim 6:** To investigate empirically whether individuals from the various gender, race, marital status, job level and employment status sub-groups differ significantly with regard to the psychological career-related construct (psychological contract, psychosocial career preoccupations, and generational cohorts) and retention factors variables. (This research aim relates to research hypothesis H6.)

**Research aim 7:** To formulate recommendations for industrial, organisational and human resource management retention practices and future research.

### 1.4 STATEMENT OF SIGNIFICANCE

The factors underlying the difficulties in developing a psychological retention profile for staff retention seem to be diverse and complex. There are many factors that either limit or promote the development of a psychological retention profile for staff retention. The roles played by the psychological contract, psychosocial career preoccupations and generational cohorts, retention factors such as compensation, job characteristics, training and development, supervisor feedback, career opportunities, work/life balance and commitment in the development of a psychological retention profile for staff retention are multifaceted and have thus far not been widely researched in the higher educational environment in South Africa.

This study can be regarded as a starting point in an investigation of the relationship dynamics between the psychological contract (Rousseau, 1995), psychosocial career preoccupations (Coetze, 2014), generational cohorts (Stanley, 2010) and retention factors (Döckel, 2003) in the retention management context in a single study.

The following aspects were taken into account when assessing the potential contribution of the study on a theoretical, empirical and practical level. Chapter 6 outlines in more detail the conclusions made with regard to the contribution of the research on these three levels.

#### 1.4.1 Potential contribution on a theoretical level

On a theoretical level, this study may prove to be useful in identifying the relationships between a set of psychological career-related attributes, namely the psychological contract,
psychosocial career preoccupations, and generational cohorts (as a composite set of independent variables) and retention factors, namely compensation, job characteristics, training and development, supervisor feedback, career opportunities, work/life balance and 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 retention profile for the retention of diverse groups of employees in the contemporary workplace. Such findings would also contribute to the literature on diversity management in retention. In addition, an exploration of how individuals’ biographical characteristics influence the manifestation and development of these constructs could prove useful in understanding retention in the higher educational environment.

1.4.2 Potential contribution at an empirical level

At an empirical level, this study could contribute to the construction of an empirically tested psychological retention profile that could be used to inform retention management practices for diverse groups of employees. Should no relationship be found between the variables, the usefulness of this study would be limited to the psychological contract, psychosocial career preoccupations and generational cohorts as predictors of retention factors. Researchers could then transfer their energy to other research studies and avenues that might produce significant evidence to solve the problem of how psychological career-related variables influence retention of employees.

In addition, this study may indicate whether individuals of various gender, race, marital status, job level, generational cohorts (age) and employment status differ in terms of their psychological career-related attributes and retention factors. In the case of the current South African organisational context, characterised as it is by diverse cultures and different generations, the results may be valuable in the development of an empirically tested psychological retention profile as they may indicate biographical information that highlights the needs of a diverse group of staff members.

1.4.3 Potential contribution at a practical level

On a practical level, if human resource practitioners and industrial and organisational psychologists could develop a greater understanding of the psychological career-related attributes of the psychological contract, psychosocial career preoccupations, and generational cohorts and of retention factors (compensation, job characteristics, training and development,
supervisor feedback, career opportunities, work/life balance and commitment) this could positively influence the retention of valuable knowledgeable employees when considering the psychological profile of diverse groups of employees.

Positive outcomes from the proposed study could include raising an awareness of the fact that individuals in the workplace who are at different career stages or from different generational cohorts and of different gender, race, marital status, job level and employment status might have different psychological contracts and career preoccupations. Such individuals might place different values on various retention factors differently.

Where significant relationships between constructs are found, these results might prove useful for future researchers when exploring the value that individuals from the different generational cohorts place at different career stages place on retention factors. Furthermore, the results of this research may contribute to the body of knowledge on psychological factors that influence the retention of diverse groups of employees in the higher educational environment in South Africa.

1.5 THE RESEARCH MODEL

Mouton and Marais (1996) developed a research model that served as the framework for this research study. They believe that research in the social sciences can be defined as a cooperative human activity in which social reality is examined accurately, with the purpose of achieving a valid understanding of this reality. The assumption of this model is that it represents a social process. It is described as a systems theoretical model with three interrelated subsystems, which are themselves interrelated with the research domain of a specific discipline (Mouton & Marais, 1996). In the case of this study, Industrial and Organisational Psychology is the sub-field of Psychology concerned. This subsystem represents the intellectual climate, the market of intellectual resources and the research process itself (Mouton & Marais, 1996).

1.6 PARADIGM PERSPECTIVE OF THE RESEARCH

A paradigm in the social sciences includes the accepted theories, models, body of research and methodologies belonging to a specific perspective (Mouton, 2001; Mouton & Marais, 1996). The origin of a paradigm is mainly philosophical and is neither testable nor intended to be so. 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 a humanistic-developmental and open systems paradigm and the empirical study from a post-positivist research paradigm.

1.6.1.1 The literature review

(a) The humanistic paradigm

The humanistic paradigm underlines the freedom, dignity, and potential of humans (Brockett, 1997). The basic assumptions of the humanistic paradigm are outlined as follow (Leonard, 2002):

- man is basically good
- individuals are free to make personal choices
- growth of the individual and the race is unlimited
- self-concept development is critical to the maturation of the individual
- individuals are inherently driven toward self-actualisation
- reality is influenced greatly by the individual’s perception of reality
- individuals have responsibilities to self and society

Thematically, the humanistic paradigm relates to the constructs of the psychological contract, retention factors and psychosocial career preoccupations by focusing on people’s strength, their perceptions of reality and their need for personal growth.

(b) Developmental contextual framework

In a developmental contextual framework, human development transpires through multifaceted interactions between individuals and their environment (Vondracek, Lerner, & Schulenberg, 1986; Bronfenbrenner, 1979). The environmental factors influencing an individual can be grouped under four structures (Puffer, 1998):
The microsystem: Comprises the individual as well as the closest proximal ecological influence directly influencing developmental evolution. Individuals are part of a number of microsystems, including family, peers, and school.

The meso-system: Consists of environmental forces produced in the instance when two microsystems are in interaction or connecting with each other, making reciprocal links. These connections produce a broader network of socialising agents that interact mutually, producing more developmental influences than a single microsystem.

The exo-system: Comprises social forces from additional settings influencing the individual. These social forces exert indirect, unidirectional, as well as impersonal developmental pressures (Bronfenbrenner, 1979). The influence of an exo-systemic setting is experienced indirectly.

The macro-system: Comprises the components of an individual’s cultural background. These include the ideals, morals, customs, practices, legal codes and historical events differentiating a specific culture and subculture from others (Berk, 1998; Rice, 1996).

Vondracek et al. (1986) and Bronfenbrenner (1979) theorised the four environmental subsystems, which are embedded within each other (Puffer, 1998).

Thematically, the developmental contextual framework relates to the constructs of the psychological contract (through the meso-system), psychosocial career preoccupations (through the microsystem and exo-system), generational cohorts (through the microsystem and the macro-system) and retention factors (through the meso-system and exo-system) focusing on the environmental factors influencing individuals.

(c) The open systems paradigm

The open systems paradigm views the individual as a part of an organisation that interacts with the outside environment. Hodge, Anthony, and Gales (1996) contend that an organisation constitutes parts that work together as an integrated whole in order to reach the objectives of that organisation. Cunliffe (2008) identifies the following assumptions of an open system paradigm:

- An open system constantly adjusts to changes in the environment.
- It is a composite of various interdependent subsystems that work together to form a whole.
• It endeavours to reach equilibrium, in order to balance its inputs and outputs to uphold a stable flow of activity.
• It develops mechanisms to provide feedback to ensure that this process occurs.

Thematically, the open systems paradigm relates to the constructs of the psychological contract, psychosocial career preoccupations, generational cohorts and retention factors as these constructs focus on the individual as part of an organisation that interacts with the outside environment.

1.6.1.2 The empirical study

The empirical study is presented from the perspective of a post-positivist research paradigm.

According to the positivist research perspective, a direct relationship exists between the world (objects, events, phenomena) and an individual’s opinion and understanding of this world (Willig, 2001). In Wheeldon and Ahlberg’s (2011) view, the positivist research perspective posits that in order to determine the facts about the world, information can be quantified and empirically researched by means of the scientific method. The post-positivist perspective also holds that there is a reality, independent of one’s thinking that can be scientifically studied; however, it is not possible to know this reality with certainty (Chilisa & Preece, 2005). Ontologically, this perspective is distinct in that it accepts a true reality that can only be measured and captured in an imperfect manner (Betz & Fassinger, 2011) as a result of human limitations (Chilisa & Preece, 2005). Epistemologically, this perspective holds that perfect objectivity is unachievable, however desirable. (Betz & Fassinger, 2011). Axiologically, this perspective has changed the conviction that the researcher is independent from the subject of study through the recognition of the background knowledge, theories and hypotheses apprehended by the researcher, as these may have a strong impact on what is observed (Chilisa & Preece, 2005).

Thematically, the empirical study deals with the relationship dynamics between two sets of variables, namely a combined set of psychological career-related attributes (including the constructs psychological contract, career preoccupations and generational diversity) and a composite set of retention factors (including compensation, job characteristics, training and development opportunities, supervisor support, career opportunities and work/life policies). This study used an objective cross-sectional research design approach and focused on measurable aspects of human behaviour. The data was analysed through observable statistical procedures.
1.6.2 The market of intellectual resources

For Mouton and Marais (1996), the market of intellectual resources refers to the collection of beliefs that has a direct bearing on the epistemic status of scientific statements. For the purposes of this study, the theoretical models, meta-theoretical statements and conceptual descriptions relating to the psychological contract, psychosocial career preoccupations and generational diversity (as a set of psychological career-related attributes) and compensation, job characteristics, training and development opportunities, supervisor support, career opportunities and work/life policies (as a set of retention factors), central hypothesis and theoretical and methodological assumptions are presented as the collection of beliefs.

1.6.2.1 Meta-theoretical statements

Meta-theoretical statements embody a significant category of assumptions underlying the theories, models and paradigms of this research (Mouton & Marais, 1996). In terms of the disciplinary context, this study focuses on Industrial and Organisational Psychology as a field of application. Meta-theoretical statements are based on this discipline:

a) Industrial and Organisational Psychology

This study was undertaken in the context of Industrial and Organisational Psychology, a subfield of psychology that applies the principles of psychology to the workplace (Aamodt, 2012). Landy and Conte (2012) define Industrial and Organisational Psychology simply as the application of psychological principles, theory, and research to the workplace. They explain furthermore that Industrial and Organisational Psychology includes research on factors influencing work behaviour, including sociocultural influences, employment-related legislation, personality, gender, race/ethnicity and life span development. This study examines the relationship dynamics between an individual’s psychological career-related attributes (psychological contract, psychosocial career preoccupations, and generational cohort) and retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment), to determine whether an overall psychological retention profile can be constructed to inform retention management practices for diverse groups of employees in the context of the higher educational environment in South Africa. The industrial psychologist and/or human resource practitioner can thus be regarded as a scientist researching the main principles of individual, group and organisational behaviour; a consultant and personnel psychologist who develops scientific information and
applies it to the workplace; as well as an academic who teaches in the research and application of industrial and organisational psychology and human resource management fields (Landy & Conte, 2012).

1.6.2.2 Theoretical models

The theoretical beliefs that are described here refer to testable statements concerning the what (prescriptive) and why (interpretive) of human behaviour and social phenomena. All statements that form part of hypotheses, typologies, models, theories and conceptual descriptions are included in these theoretical beliefs (Mouton & Marais, 1996).

The theoretical models used this research are based on the following:

The literature focuses on the psychological contract (Rousseau, 1995), psychosocial career preoccupations (Coetzee, 2014), generational cohorts (Ryder, 1965; Stanley, 2010) and retention factors (Döckel, 2003).

1.6.2.3 Conceptual descriptions

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

a) Psychological contract

Psychological Contract Theory (PCT) (Rousseau, Tomprou, & Montes, 2013) was used in this study. The psychological contract refers to the beliefs that individuals hold in terms of promises made, accepted and relied upon between one individual and another (Rousseau & Wade-Benzi, 1994; Shen, 2010). The definition of the psychological contract provided by Rousseau extends the definition of Argyris (1960) and others to the beliefs of an individual regarding the mutual obligations that exist between that individual and another party, such as an employer (either as company or individual). These beliefs are based on the perception that promises have been made in exchange for certain considerations, which binds the parties to a composite of reciprocal obligations (Rousseau & Tjorwala, 1998). The Psycones Questionnaire (Psycones, 2006) was used to measure the psychological contract.

b) Generational cohorts

The Generational Cohort Theory (GCT) (Mannheim, 1952) was used for this study. A generational cohort can be defined as a group of people, similar in age, who have experienced
the same historical events within the same time period (Kowske et al., 2010; Ryder, 1965). Individuals from a specific generational cohort will share similar attitudes, emotions, beliefs, values and preferences towards their work and career (Shacklock & Brunetto, 2011; Arsenault, 2004). The cohorts relevant to this study are the Baby Boomers, aged from 50–68 years; Generation X, aged from 35–49 years; and Generation Y, aged from 15–34 years. This construct was measured through the biographical questionnaire.

c) Psychosocial career preoccupations
Coetzee’s (2014) theory of Psychosocial Career Preoccupations was used in this study. She defined psychosocial career preoccupation as an individual’s mental state regarding certain concerns of his/her career development that are at the forefront of his/her thoughts at a particular point in time. She identified three central dimensions of psychosocial career preoccupations, which are both non-age and non-career-stage related (Coetzee, 2014, 2015a, 2015b). These dimensions include career establishment preoccupations, career adaptation preoccupations and work/life adjustment preoccupations. The Psychosocial Career Preoccupations Scale (PCPS) (Coetzee, 2014) was used to measure this construct.

d) Retention
Employee retention can be referred to as those policies and practices that organisations use to discourage valuable employees from leaving their organisation (Hong, Hao, Kumar, Ramendran, & Kadiresan, 2012; Jackson & Schuler, 2004; Pienaar & Bester, 2008). This includes every measure taken to encourage employees to continue rendering their services to the organisation for the maximum period of time (James & Mathew, 2012). Döckel (2003) identified retention factors such as compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment. These can all be regarded as policies and practices employed to retain valuable employees. Döckel’s (2003) Retention Factor Measure Scale (RFMS) was used to measure this construct.

Table 1.2 presents the various constructs, the sub-elements of each construct, the theoretical model on which each construct is based as well as the instrument used to measure each construct:
### Table 1.2
**Core Constructs, Theoretical Models and Instruments relevant to the Research**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Sub-elements</th>
<th>Theoretical model</th>
<th>Measuring instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological contract</td>
<td>• Employer obligations • Employee obligations • Job satisfaction • State of the psychological contract</td>
<td>Psychological Contract Theory (PCT) (Rousseau et al., 2013)</td>
<td>Psycones Questionnaire (PQ) (Psycones, 2006)</td>
</tr>
<tr>
<td>Generational cohorts</td>
<td>• Baby Boomers • Generation X • Generation Y</td>
<td>The Generational Cohort Theory (GCT) (Mannheim, 1952)</td>
<td>Biographical Information Questionnaire</td>
</tr>
<tr>
<td>Psychosocial career</td>
<td>• Career establishment preoccupations • Career adaptation preoccupations • Work/life adjustment preoccupations</td>
<td>Psychosocial career preoccupations' theory (Coetzee, 2014)</td>
<td>Psychosocial Career Preoccupations Scale (PCPS) (Coetzee, 2014)</td>
</tr>
<tr>
<td>preoccupations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retention factors</td>
<td>• Compensation • Job characteristics • Training and development • Supervisor support • Career opportunities • Work/life balance</td>
<td>Döckel’s (2003) theory regarding retention factors</td>
<td>Retention Factor Measurement Scale (RFMS) (Döckel, 2003).</td>
</tr>
</tbody>
</table>
Commitment

1.6.2.4 Central hypothesis

The central hypothesis of this research was formulated as follows:

A relationship exists between an individual's psychological career-related attributes (psychological contract and psychosocial career preoccupations), biographical characteristics (generational cohorts, gender, race, marital status, job level and employment status) and retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment). The hypothesis furthermore assumes that, based on the empirically derived relationship dynamics among the variables, an overall psychological retention profile can be constructed to inform retention management practices for diverse groups of employees in the context of the higher educational environment in South Africa.

1.6.2.5 Theoretical assumptions

- There is a need for basic research that seeks to isolate the psychological contract, psychosocial career preoccupations, generational cohorts and retention factors.
- Environmental, biographical and psychological factors such as socio-cultural background, race/ethnicity, gender, life span development and individuals' psychological contract, psychosocial career preoccupations and generational cohorts will influence the value they place on retention factors.
- The constructs of the psychological contract, psychosocial career preoccupations, generational cohorts and retention factors can be moderated by biographical factors such as gender, race, marital status, job level and employment status.
- Understanding an individual's psychological contract, career stage and generational cohort and retention factors will increase our awareness of the factors that may potentially inform retention management practices for diverse groups of employees in higher educational institutions.
- These variables constitute a psychosocial profile that can be empirically tested and may guide retention management practices in the higher educational environment.
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 should constitute proper research.

Based on this definition, the following five dimensions of research are highlighted (Mouton & Marais, 1996):

- **Sociological dimension** – scientific research is a joint collaborative activity; research is analytical, experimental and exact. The variables and concepts related to this study are described in Chapter 4 (the empirical research) and Chapter 5 (the research results).

- **Ontological dimension** – research in the social sciences is always directed at an aspect or aspects of social reality; this includes human activities, characteristics, institutions, behaviour, product, and so forth. This research study measures the properties of the constructs of the psychological contract, career preoccupations and generational diversity and retention factors.

- **Ideological dimension** – social sciences research is intentional and goal-directed, its main objective being the understanding of the phenomena.

- **Epistemological dimension** – the aim is not merely to understand the phenomena, but to provide a valid and reliable understanding of reality.

- **Methodological dimension** – research in the social sciences may be regarded as objective by virtue of its being critical, balanced, unbiased, systematic, and controllable. In this thesis, exploratory and descriptive research is presented in the form of a literature review on the psychological contract, career preoccupations and generational diversity. Quantitative research (descriptive and explanatory) is presented in the discussion of the empirical study.

### 1.7 RESEARCH DESIGN

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A research design can be described as the procedures to be used in conducting the study. The objective of a research design is to assist in finding the most appropriate answers to the research questions (Cohen, Manion, & Morrison, 2013; Maree & Van der Westhuizen, 2009). It is vital as everything else flows from the choice of design (Vogt, Gardner, Haeffele, 2012). The research design adopted in 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

Weathington, Cunningham, and Pittenger (2010) observe that exploratory research is conducted in order to examine the relationship between variables. This approach is used when a researcher examines a new interest or when the topic of study is relatively new (Babbie & Mouton, 2006; Khan, 2011). This study is exploratory in that it compares various theoretical perspectives of the psychological contract, psychosocial career, generational diversity and retention factors. Empirically, exploratory research relates to the cross-sectional design of the study.

1.7.2 Descriptive research

Descriptive research comprises the description of the characteristics of an existing phenomenon (Salkind, 2012). The objective is to answer research questions that focus on describing phenomena systematically and comprehensively (Vogt et al., 2012).

In the literature review, descriptive research refers to the conceptualisation of the constructs psychological contract, generational cohorts, psychosocial career preoccupations and retention. In the empirical study, descriptive research is conducted in terms of the biographical characteristics of the sample of participants as well as their mean scores on the various measuring instruments.

1.7.3 Explanatory research

The objective of explanatory research is to understand or explain phenomena, not to predict them (Vogt et al., 2012). Therefore, the main aim of this study was not to ascertain causality from its cross-sectional design, but only to assess the magnitude and direction (positive or negative) of the relationship between the variables. In the empirical study, this form of research was applicable to the relationship between the psychological contract, psychosocial career preoccupations, generational cohorts and retention factors.
The end goal of the research study was to formulate a conclusion on the relationship between the constructs psychological contract, psychosocial career preoccupations, generational cohorts and retention factors. The aim was to construct a psychological profile, based on the empirically derived relationship dynamics, which would inform the retention of diverse staff members. This study therefore fulfils the requirements of the type of research outlined above.

1.7.4 Validity

The main purpose of using a research design is to plan and structure the research project in such a manner that it guarantees that the literature review and empirical study are valid for to the variables in the study (Mouton & Marais, 1996). Validity in research refers to internal and external validity. In order for research to be internally valid, the constructs should be measured in a valid manner (Hair, Anderson, Black, & Babin, 2016). On the other hand, external validity refers to the importance of adopting an experimental design, the outcomes of which can be generalised to the whole population from which the sample originated (Salkind, 2012). Both internal and external validity are essential to research design (Cohen et al., 2013; Terre Blanche, Durrheim, & Painter, 2006). In order to ensure validity, a series of informed decisions are required with regard to the purpose of the research, theoretical paradigms to be used, the context within which the research will take place as well as the techniques that will be used to collect and analyse the data (Cohen et al., 2013; Terre Blanche et al., 2006).

1.7.4.1 Validity of the literature review

In this study, the validity of the literature review was ensured by making use of literature that was relevant and up to date in terms of the nature, problems and aims of the research. An effort was made to ensure that the most recent literature sources were consulted, although a number of classical and contemporary mainstream studies were also referred to because of their relevance to the conceptualisation of the constructs that underlie this research study.

1.7.4.2 Validity of the empirical research

Internal validity was ensured by making use of suitable and standardised measuring instruments. A critical examination of the measuring instruments was conducted in order to determine their face-validity, criterion-related validity (to ensure accurate prediction of scores
of the relevant criteria), construct-validity (the extent to which the measuring instruments measure the theoretical constructs they purport to measure) and content validity. Internal validity was furthermore ensured by minimising selection bias through targeting employees working at higher educational institutions in South Africa. The chosen sample was as large as possible to compensate for the effects of extraneous variables. The research questionnaire booklet consisted of standard instructions to participants as well as information about the study. In addition, the statistical procedures were controlled for biographical variables.

External validity refers to the degree of generalisability of the results to a larger population (Cohen et al., 2013). Therefore, a researcher should be able to generalise conclusions resulting from a study to other settings, treatment variables, measurement variables and populations (Mangal & Mangal, 2013). In this study, external validity was ensured through making the results relevant only to individuals working in the higher educational environment in South Africa. Targeting the total population of employees in the higher educational environment assisted in increasing the generalisability of the results to the target population.

The following research elements assisted in ensuring the validity of the data gathering instruments:

- The research constructs were measured in a valid manner through the use of questionnaires that had been scientifically tested and which were regarded as most applicable in terms of face validity, content validity and construct validity.
- Efforts were made to ensure that the collected data were correct, accurately coded and appropriately analysed to ensure content validity. Statistical analysis was done by an expert and the most recent and sophisticated computer packages were used.
- The researcher ensured that the findings of this study were based on the analysed data in order to ensure content validity. The reporting and interpreting of results was done according to statistical procedures.
- The researcher ensured that the final conclusions, implications and recommendations were based on the findings of the research study.

1.7.5 Reliability

Reliability refers to the quality of a measuring method that proposes that the same results would be yielded each time in repeated observations of the same phenomenon (Babbie & Mouton, 2006; Cohen et al., 2013). It is the extent to which a test is repeatable and yields consistent results indicated by what is measured (Kumar, 2014). In the literature review,
reliability was ensured by using existing literature sources, theories and models that are available to researchers (Foxcroft & Roodt, 2005). Reliability of the empirical study was ensured by making use of a representative sample. In this study, disturbance variables were minimised through the sampling procedure as well as by including measuring instruments which had been proved reliable in previous research. This is reported in Chapter 4 (the empirical study). Internal consistency reliability of each of the scales was also tested before proceeding with the statistical analysis, which is reported in Chapter 5.

1.7.6 The unit of research

The main objective of social science research is to understand, explain and predict the behaviour of human beings through observation, reflection and measurement of this social phenomenon (Wheeldon & Ahlberg, 2011). The unit of analysis differentiates between the characteristics, conditions, orientations and actions of individuals, groups, organisations and social artefacts (Cohen et al., 2013; Mouton & Marias, 1996). In terms of individual measurement, the unit of analysis is the individual. In terms of investigating the difference between biographical groups and generational cohorts, the unit of analysis is the subgroup.

1.7.7 The variables

The aim of this research was to measure the relationship between:

- Psychological career-related construct variables and biographical information variables (independent variables) and retention factors (dependent variable)
- Psychological contract variable and biographical characteristics variables (independent variables), generational cohort and psychosocial career preoccupations (moderating variables) and retention factors (dependent variable).

In summary, apart from investigating the relationship dynamics between all the variables, the study aimed to assess the moderation or interaction effect of individuals’ psychosocial career preoccupations and generational cohort on the relationship between their psychological contract and their retention factor satisfaction. In other words, the analysis focused on assessing whether the moderation variables as a set of relatively stable traits (generational cohort and psychosocial career preoccupations) significantly modified the strength or direction of the effect of psychological contract on individuals’ levels of satisfaction with organisational retention factors. In addition, based on the outcome of the correlational and moderation results, moderated mediation modelling was also considered to assess whether the effects of
elements of the psychological contract on satisfaction with retention factors were subject to the level (value) of the moderator variables (psychosocial and generational cohorts). Potentially, this will inform retention management practices at the individual and organisational level. The ultimate purpose of the investigation was to construct a psychological profile for the retention of diverse groups of staff in the higher educational environment. Figure 1.2 depicts these variables:

![Conceptual model of the study](image)

**Independent variables**
- Psychological contract
- Psychosocial career preoccupations
- Biographical variables

**Moderating variables**
- Generational cohorts
- Psychosocial career preoccupations

**Dependent variable**
- Retention factors

*Figure 1.2 Conceptual model of the study*

### 1.7.8 Delimitations

This study is confined to research dealing with the relationship between the psychological contract, psychosocial career preoccupations, generational cohorts and retention factors. In an attempt to identify oblique factors that could influence individuals’ psychological contract, the variables used as control variables were limited to gender, age (generational cohorts), race, marital status, job level and employment status. A control variable is one that has the potential to influence the dependent variable (Salkind, 2012).

No attempt was made to manipulate or classify any information, results or data on the basis of family background, spiritual beliefs or psychological and physical factors. This study was intended as ground research that would limit its focus to the relationship between the psychological contract, psychosocial career preoccupations, generational cohorts and retention factors. Should such a relationship be proved to exist, then the groundwork
information would be useful for future researchers in addressing other issues related to the constructs.

The selected research approach was not intended to establish the cause and effect of the relationship, but merely to investigate whether such a relationship exists, the direction, magnitude and strength of this relationship, and whether these variables are influenced by gender, race, marital status, job level and employment status.

A cross-sectional research design may also posit certain limitations as it may be difficult to make causal inferences (Levin, 2006). It is only a snapshot: in other words, the results may be different should another time-frame be used (Cohen et al., 2013; Levin, 2006). The limitations of the research design were considered in chapter 6.

1.8 RESEARCH METHODOLOGY

The research was conducted in two phases, with different steps in each. These are discussed in the section below. Figure1.3 provides an overview of the phases.
1.8.1 Phase 1: the literature review

The literature review consists of a review of literature dealing with the psychological contract, psychosocial career preoccupations, generational cohorts and retention factors.

Step 1: Generational diversity and retention factors in the diverse and multi-cultural contemporary workplace
The diverse and multi-cultural contemporary workplace was evaluated. Emphasis was placed on generational diversity and retention factors relating to this workplace. Finally, the implications for industrial and organisational practices as well as human resource management practices relating to staff retention were discussed.

**Step 2:** Conceptualisation of the psychological career-related attributes (psychological contract, psychosocial career preoccupations, and generational cohorts) and how individuals’ biographical characteristics influence the development of these attributes

Research in the field of career psychology concerning the constructs of the psychological contract, psychosocial career preoccupations and generational cohorts, and how certain biographical characteristics influence the development of these constructs was critically evaluated. Based on this conceptualisation of psychological career-related attributes, a model was designed to illustrate the principles and concepts discussed in the literature. Finally, the implications for industrial and organisational practices as well as for human resource management practices relating to staff retention were discussed.

**Step 3:** Conceptualisation of the retention factors construct variables of compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment and how individuals’ biographical characteristics influence these retention factors

Research in the field of career psychology relating to the retention factors construct variables of compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment and how individuals’ biographical characteristics influence these retention factors were critically evaluated. Based on this conceptualisation of the retention factors construct variables, a conceptual model was designed to illustrate the principles and concepts discussed in the literature. Finally, the implications for industrial and organisational practices and human resource management practices relating to staff retention were discussed.

**Step 4:** Conceptualisation of the theoretical relationship between the psychological career-related attributes (psychological contract, psychosocial career preoccupations, and generational cohorts) and the retention factors constructs (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment).
This step related to the theoretical integration of the theoretical relationship between the psychological career-related attributes and the retention factors constructs.

**Step 5: Construction of theoretical integrated psychological retention profile and outline of its implications**

This step comprised the construction of a psychological retention profile to be used to inform retention management practices, and its implications for retention management practices.

**1.8.2 Phase 2: the empirical study**

The empirical study was conducted at a university in the higher educational environment in South Africa.

**Step 1: Measuring instruments**

The instruments used to measure the constructs of the psychological contract, psychosocial career preoccupations and retention factors are discussed in chapter 4. A biographical questionnaire eliciting data on participants' age, gender, marital status, employment status and job level was used, together with three quantitative instruments. These were the Psycones Questionnaire (PQ) (Psycones, 2006), the Psychosocial Career Preoccupations Scale (PCPS) developed by Coetzee (2014) and the Retention Factor Measurement Scale (RFMS) developed by Döckel (2003).

**Step 2: Description of population and sample**

The determination and description of the population and sample are discussed in Chapter 4.

**Step 3: Administer measuring instrument**

This step involved the collection of data from the sample and is discussed in more detail in Chapter 4.

**Step 4: Data capturing**

The participants' responses to each of the questionnaires were captured in an electronic database, which was then converted to an SPSS data file.
Step 5: Research hypothesis formulation

Research hypotheses designed to achieve the research objectives were formulated during this step, described in Chapter 4.

Step 6: Statistical processing of data

The statistical procedures used in this research study are explained in more detail in Chapter 4.

Step 7: Reporting and interpretation of results

The results of this study are illustrated in tables, diagrams and/or graphs and the discussion of the findings is presented in a systematic and logical framework, ensuring that the findings of the study are conveyed in a clear and accurate manner. Chapter 5 reports on and discusses these results.

Step 8: Integration of research

The findings of the literature review were integrated with the findings of the empirical study as the overall findings of the research.

Step 9: Conclusions, limitations and recommendations

In the final step, conclusions relating to the results and their integration with the theory were discussed. The limitations of this study were also discussed and recommendations in terms of the psychological contract, career stages, and generational cohorts as constructs used to inform effective retention management practices were made.
1.9 CHAPTER LAYOUT

The chapters in the study are as follows:

**Chapter 1:** Scientific overview of the research

**Chapter 2:** Meta-theoretical context of the study: Retention and generational diversity in the contemporary workplace

**Chapter 3:** Psychological contract and psychosocial career preoccupations

**Chapter 4:** The empirical study

**Chapter 5:** Research results

**Chapter 6:** Conclusions, limitations and recommendations

1.10 SUMMARY

The background and motivation for the research, the aim of the study, the research model, the paradigm perspectives, the theoretical research, its designs and methodology, the central hypothesis and the research method were discussed in this chapter. The motivation for this study was based on the fact that no known research has been conducted on the relationship between the psychological career-related attributes and retention factors in the context of retention management. Chapter 2 addresses the first and second research aim of the literature review, namely: the conceptualisation of retention factors and generational diversity in the contemporary workplace; the conceptualisation of the retention factors of compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment; and how an individual's biographical characteristics influence these retention factors.
CHAPTER 2: META-THEORETICAL CONTEXT OF THE STUDY: RETENTION AND GENERATIONAL DIVERSITY IN THE CONTEMPORARY WORKPLACE

Globalisation and economic development currently generates a workplace that is more complex than ever (Yi, Ribbens, Fu, & Cheng, 2014). South African organisations are facing numerous challenges as they are confronted with a skills scarcity and an increasing turnover rate among talented employees (Ready & Conger, 2007; Smit, Stanz, & Bussin, 2015). The battle for talented employees has had an influence on the retention of employees (Schlechter, Thompson, & Bussin, 2015). As a result, employee retention has been deliberated over as an essential instrument in generating organisational growth and performance (Ibidunni, Osibanjo, Adeniji, Salau, & Falola, 2016). Retention of talented and skilled employees is also a significant contributor to the sustainability and competitiveness of an organisation (Coetzee, Oosthuizen, & Stolz, 2015).

In South Africa, emphasis has recently been placed on organisational diversity as a product of employee and cultural diversity; however, less consideration has been given to generational differences present in organisations (Smit et al., 2015). Apart from the challenges of globalisation and economic development, organisations are also confronted with significant changes in the composition of the population (Stone & Deadrick, 2015). Worldwide, the composition of the age of the workforce will transform significantly over the next few years as a result of an aging population (Appannah & Biggs, 2015; Bal et al., 2015). Kleinhans et al. (2015) argue that the challenges accompanying differing values and dispositions specific to particular generations that have an influence on engagement and behaviours within the workplace should be recognised and addressed, as these may have an adverse effect on the strength and future of the academic workforce. In order for organisations to attract, as well as retain, talented workers from all generations, therefore, they will have to change their human resource (HR) practices (Stone & Deadrick, 2015) to suit these differing values and preferences. Managers should take generational differences into consideration in order to develop generation-specific HR practices for the retention of knowledge employees (Singh & Gupta, 2015).

It is thus the purpose of this chapter to place the present study in perspective by outlining the meta-theoretical context that determines its definitive borders. The chapter conceptualises the constructs of retention and generational diversity and of the retention factors of compensation, job characteristics, training and development, supervisor support, career opportunities, and
work/life balance, and explains how individual’s biographical characteristics influence these retention factors.

2.1 RETENTION IN THE CONTEMPORARY WORKPLACE

In this section the focus is on the conceptualisation of retention in the workplace, Döckel’s (2003) retention factor framework and the variables that influence retention factors.

2.1.1 Conceptualisation

Employee retention can be referred to as the policies and practices used in organisations to deter valuable employees from leaving their organisation (Hong et al., 2012; Jackson & Schuler, 2004; Kakar, Raziq, & Khan, 2015; Pienaar & Bester, 2008). In addition, it can be described as those actions undertaken by an organisation, in the form of human resource practices and policies, which enhance the probability that employees will remain with the organisation for the maximum period of time or until a specific task has been accomplished (Akila, 2012; Iqbal & Hashmi, 2015; James & Mathew, 2012; Kumar & Santhosh, 2014; Singh & Prakash, 2013).

Furthermore, retention can be seen as those initiatives taken by organisations to prevent employees from leaving the organisation, such as rewarding employees for good performance, ensuring pleasant working relations as well as maintaining a safe, healthy working environment (Netswera, Rankhumise, & Mavundla, 2005; Van Dyk, Coetzee, & Takawira; 2013). Employee retention can therefore be defined as the complete set of human resource policies and strategies espoused by an organisation in its human resource practices to ensure that the best possible talent is attracted and retained for the maximum period of time (Balakrishnan & Vijayalakshmi, 2014; Idris, 2014; Shekshnia, 1994). For the purposes of this study, retention is defined as every human resource policy, practice and strategy aimed at increasing the probability that all employees will stay with the organisation for the longest period possible.

Retention of employees is a cause of considerable concern and a complex issue for many organisations today (Shore, 2013; Tladinyane, Coetzee & Masenge, 2013). Employees, intellectual property, expertise, relationships and business processes are an organisation’s most valuable assets (Byerly, 2012). The cost of losing these valuable assets contributes significantly to an organisation’s expenses (Ratna & Chawla, 2012). An employee leaving an organisation takes with him valuable knowledge about the organisation, its customers, current
projects and its history (Ratna & Chawla, 2012). Table 2.1 shows the factors that are taken into account when calculating the cost of employee turnover (Byerly, 2012; Cascio, 1976):

Table 2.1
Factors when Considering Calculating Turnover Cost

<table>
<thead>
<tr>
<th>Factors</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Separation costs</strong> (Byerly, 2012; Cascio, 1976; Masango &amp; Mpofu, 2013; Schlechter et al., 2015)</td>
<td>Exit interviews, administrative functions, severance pay</td>
</tr>
<tr>
<td><strong>Vacancy costs</strong> (Byerly, 2012; Cascio, 1976; Masango &amp; Mpofu, 2013; Morrell, Loan-Clarke &amp; Wilkinson, 2004; Ratna &amp; Chawla, 2012; Schlechter et al., 2015; Takawira et al., 2014)</td>
<td>The net costs, minus salary savings, of increased overtime or temporary replacement employees</td>
</tr>
<tr>
<td><strong>Replacement costs</strong> (Byerly, 2012; Cascio, 1976; Jain, 2011; James &amp; Mathew, 2012; Masango &amp; Mpofu, 2013; Morrell et al., 2004; Ratna &amp; Chawla, 2012; Schlechter et al., 2015; Takawira et al., 2014)</td>
<td>Costs of attracting, interviewing, and testing applicants; moving expenses; pre-employment administrative expenses</td>
</tr>
<tr>
<td><strong>Training costs</strong> (Byerly, 2012; Cascio, 1976; Jain, 2011; James &amp; Mathew, 2012; Masango &amp; Mpofu, 2013; Morrell et al., 2004; Ratna &amp; Chawla, 2012; Schlechter et al., 2015; Takawira et al., 2014)</td>
<td>Bringing new employee up to an acceptable knowledge level to enable him/her to perform the job</td>
</tr>
<tr>
<td><strong>Performance differential costs</strong> (Byerly, 2012; Cascio, 1976; Jain, 2011; James &amp; Mathew, 2012; Morrell et al., 2004; Ratna &amp; Chawla, 2012; Takawira et al., 2014)</td>
<td>Reduced productivity during the warm-up period for a new employee</td>
</tr>
</tbody>
</table>
costs for attracting, interviewing and testing applicants, training costs such as training new employees, and performance differential costs such as the reduced productivity of a new employee. It is evident that the importance of staff retention has increased as a result of the increasing loss of valuable knowledge and expertise, which in turn has an effect on organisational sustainability and competitiveness (Burke & Ng, 2006; Tladinyane et al., 2013). Several researchers (Idris, 2014; Samuel & Chipunza, 2009; Sigler, 1999) agree that employee retention is extremely important for an organisation’s competitive advantage; the loss of valuable employees can have a detrimental effect on the productivity and profitability of an organisation.

Retention management has come then to be an important source of competitive advantage in the contemporary and increasingly globalised business world (James & Mathew, 2012; Vaiman, 2008). Effective retention management is essential and entails an ongoing analysis of the nature and reasons for turnover and the development of a suitably targeted and structured set of retention strategies (Allen, Bryant & Vardaman, 2010; James & Mathew, 2012).

Armstrong (2009) believes that effective retention strategies should be constructed on an understanding of the factors that have an effect on whether employees leave or stay. Retention factors refer to those HR practices that support the facilitation of an employee’s decision on whether to stay or leave an organisation (Netswera et al., 2005; Van Dyk, 2011). The following section discusses the Retention Factor Framework of Döckel (2003).

2.1.2 The Retention Factor Framework of Döckel

A South African study led by Döckel (2003) identified six critical retention factors that should be considered by organisations in their attempts to retain employees with superior technology skills (Coetzee et al., 2015; Döckel et al., 2006; Van Dyk & Coetzee, 2012). These factors, used in the present study, include compensation, job characteristics, opportunities for training and development, supervisor support, career opportunities, and work/life balance. This set of retention factors can be regarded as key human resource practices influencing both employee retention and turnover intention (Coetzee & Stolz, 2015). These retention factors result in lower voluntary turnover, reduced intentions to leave, improved productivity, higher commitment and satisfaction among employees and the more effective management of retention practices (Coetzee & Stolz, 2015).
2.1.2.1 Compensation

Compensation in this context refers to the competitiveness of an organisation’s remuneration packages, its remuneration policy and salary increases (Döckel, 2003; Van Dyk et al., 2013). Compensation can furthermore be described as the degree to which an organisation employs just and competitive compensation practices (Presbitero, Roxas, & Chadee, 2016; Schlechter et al., 2015). It can be regarded as one of the most significant factors for employee retention (Ibidunni et al., 2016; Kakar et al., 2015). Compensation can also be defined as the collective monetary and non-monetary rewards given in return for the services of the employee (Roy, 2015). Monetary rewards consist of salary, salary add-ons and incentive payments, including bonuses and profit sharing (Mubarak et al., 2012; Pfeffer, 1998). Non-monetary rewards are indirect financial rewards that employees receive for their work (Döckel, 2003; Schlechter et al., 2015).

Compensation plays a crucial role in the retention of employees as it provides satisfaction for what they receive in return for their efforts (Farris, 2000; Mubarak et al., 2012). In a national study, more than 50% of academic staff indicated that they were unsatisfied with their salary and fringe benefits (Ng’ethe et al., 2012; Presbitero et al., 2016; Rosser, 2004). Through compensation, employees are provided with the prospect of security, independence, acknowledgment as well as improved self-worth (Döckel et al., 2006; Hoyt & Gerdloff, 1999). Various authors have found a positive relationship between salary, the fairness of compensation, and commitment (Döckel et al., 2006; Ibidunni et al., 2016; Igbaria & Greenhaus, 1992; Mathieu & Zajac, 1990; Schaubroeck, May, & Brown, 1994).

2.1.2.2 Job characteristics

Job characteristics refer to the positive aspects of the job and may include wide-ranging work, opportunities to be part of challenging assignments, opportunities to work with the best people, freedom, flexibility and the ability to pursue interesting tasks (Döckel, 2003; Coetzee et al., 2015; Van Dyk et al., 2013). Highly knowledgeable employees prefer jobs in which allow them to apply a range of skills, that present challenging assignments and offer job autonomy (Spector, 2008; Van Dyk & Coetzee, 2012). Döckel (2003) argues that the particular characteristics of a job can increase the retention of employees, which can lead in turn to the development of more organisational commitment as a result of employees’ sense of increased competence and the meaningfulness of their work. Studies have found a positive relationship between skill variety and organisational commitment (Döckel et al., 2006; Mathieu & Zajac, 1990; Meyer & Allen, 1991).
2.1.2.3 Training and development

Training and development can be described as the extent to which acceptable platforms to develop and train employees are available within an organisation (Presbitero et al., 2016). Van Dyk and Coetzee (2012) believe that the aim of training and development, and of educational investments, is to provide opportunities for advancement. One of the most important requirements for constant enhancement in employee effectiveness and efficiency is the improvement of their skills, knowledge and abilities (Mubarak et al., 2012). Providing employees with sufficient training and development opportunities constitutes an essential part of an organisation’s fulfilment of the psychological contract between itself and its employees, which intensifies their employees’ sense of attachment to the organisation (Bergiel, Nguyen, Clenney, & Taylor, 2009; Van Dyk et al., 2013). Professional development is a key element in making universities centres of ideas and innovation (Ng’ethe et al., 2012).

Academic employees benefit from intellectual and collegial stimulation from their peers when they attend professional events and national and international conferences (Ng’ethe et al., 2012). Training and development of academic employees is thus an essential aspect of their professional careers (Rosser, 2004). Through training, employees are provided with the prospect of advancement and they feel that they are valued by the organisation, which leads to feelings of self-worth and organisational commitment (Kakar et al., 2015; Meyer & Allen, 1997; Van Dyk, 2011). Organisations can increase their employees’ commitment by encouragement, planning and investment in their development and their education (Döckel, 2003). In general, organisations that have effective training and development programmes have been found to have higher employee satisfaction, productivity and profitability (Joo & Park, 2010; Presbitero et al., 2016).

2.1.2.4 Supervisor support

Supervisor support refers to the recognition and feedback that supervisors provide to their employees (Van Dyk & Coetzee, 2012). More intense feelings of loyalty to the organisation may develop when employees are provided with continuous praise and feedback (Döckel et al., 2006). Various research studies have shown that supervisor support has a positive effect on the retention of valuable employees (Allen et al., 2003; Bergiel et al., 2009; George, 2015; Van Dyk et al., 2013; Van Dyk & Coetzee, 2012). George (2015) observes that several studies have found that the experience of supervisor support is of greater significance to an employee than the experience of being supported by the organisation.
Academic employees are the centre of any university and their contribution to these institutions should be recognised if they are to feel valued (Ng’ethe et al., 2012). Where individuals are praised and provided with regular feedback, more intense feelings of loyalty and commitment to the organisation may develop (Döckel et al., 2006; Eisenberger, Fasalo, & Davis-LaMastro, 1990; Ibidunni et al., 2016). Research has also shown that an employee’s relationship with his/her superior is a significant factor in raising the level of employee satisfaction and the likelihood of retention (Ibidunni et al., 2016).

2.1.2.5 Career opportunities

Career opportunities refer to the degree to which an organisation offers opportunities for its employees to develop their career in the organisation (Aruna & Anitha, 2015; Presbitero et al., 2016). Career opportunities involve all those activities engaged in by an employee, together with the organisation, in order to match the employee’s career goals and job requirements (Roy, 2015; Schlechter et al., 2015). Career opportunities are internal and external career options that an employee may have (Van Dyk et al., 2013; Van Dyk & Coetzee, 2012). Internal career opportunities refer to opportunities within the employee’s current organisation, such as a promotion or movement to a different position within the same organisation. External career opportunities are those opportunities in another organisation (João, 2010; Van Dyk & Coetzee, 2012). Career opportunities are the most significant predictor of retention, and are more influential than any other type of reward (Döckel et al., 2006; Kochanski & Ledford, 2001).

Promotional procedures for academic employees are long, stressful and cumbersome and, in some instances, the requirements are unreasonable (Tettey, 2006). Van Dyk (2011) argues that career opportunities may have significant implications for organisational commitment; previous research has indicated that a paucity of career opportunities contributes meaningfully to high employee turnover (Presbitero et al., 2016). There is a positive relationship between an employee’s perception of the organisation’s observance of career opportunities, comprising internal promotions, training and development, and job security and commitment (Baruch, 2004; Döckel et al., 2006). There is also overwhelming agreement in the literature that lower employee turnover rates will be experienced within organisations where strong career development practices are employed to assist employees to develop and manage their careers (Presbitero et al., 2016).

2.1.2.6 Work/life balance
Döckel (2003) and Presbitero et al. (2016) agree that work-life balance can be described as the perception of a satisfactory balance between an individual's personal life and work schedule, including the minimum conflict between the various roles an individual has to fulfil in terms of personal and work life. Work-life balance can also be explained as the degree to which an organisation provides opportunities for its employees to become actively involved in both job-related and non-job-related activities (Presbitero et al., 2016; Schlechter et al., 2015). Work-life policies may include flexible working schedules, family leave policies – permitting employees to have periods away from work to attend to family matters – and childcare assistance (Burke & Cooper, 2002; Döckel et al., 2006).

For employees working in knowledge-based environments, work/life balance, where employees can manage their personal time and are able to take work home, is becoming an increasingly significant consideration (Presbitero et al., 2016). Research has shown that employees working for organisations with work/life policies that include parental leave, flexible working hours, assistance with childcare as well as information regarding childcare, are more committed to their organisation and express significantly lower intentions to leave their employment (Döckel et al., 2006; Grover & Crooker, 1995; Presbitero et al., 2016).

2.1.2.7 Commitment

Commitment refers to an individual's attachment, loyalty and or identification with an entity (Morrow, 1993; Singh & Gupta, 2015). Organisational commitment can be defined as the psychological state that describes an employee’s relationship with the values and purposes of the organisation and which influences the decision of an employee to remain with the organisation (Allen & Meyer, 1991; Santosh & Muthiah, 2016). Meyer and Allen (1991, 1997) developed a model for organisational commitment and identified three components: affective commitment, continuance commitment and normative commitment. Table 2.2 provides a brief synopsis of the three organisational commitment components (Singh & Gupta, 2015):
### Component Description

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective commitment</td>
<td>An employee’s emotional attachment and identification with the organisation</td>
</tr>
<tr>
<td>Continuance commitment</td>
<td>The intention of an employee to stay in the organisation to avoid the expenses of leaving it</td>
</tr>
<tr>
<td>Normative commitment</td>
<td>An employee’s sense of obligation towards the organisation</td>
</tr>
</tbody>
</table>

From Table 2.2 it is clear that there are different aspects to organisational commitment. Although employees may develop all three components, studies have revealed that affective commitment is the most valuable component of commitment as it has been found to be negatively related to absenteeism, workplace stress, intention to leave and employee turnover (Singh & Gupta, 2015). The nurturing of employees’ organisational commitment is one of the key concerns for knowledge-driven organisations in retaining knowledge employees (Singh & Gupta, 2015). Santosh and Muthiah (2016) argue that employees with high organisational commitment will not have the desire to leave their organisations (Lee & Maurer, 1991). However, in this study, commitment was measured in terms of individuals’ intention to stay and intention to leave the current organisation.

In summary, HR practices relating to compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment are critical factors in the retention of employees. A recent study conducted by Theron et al. (2014) investigated the factors that encouraged academic employees to remain in higher educational institutions and those factors that encouraged them to leave. The results indicated that compensation and recognition and supervisor/managerial support were the most significant factors in encouraging academic employees to stay in higher educational institutions (Theron et al., 2014). Furthermore, the most significant factors encouraging academic employees to leave higher educational institutions were dissatisfaction with financial compensation (54.2%), opportunities for promotion (46.4%), unhappiness with career development opportunities (41.2%), retirement (41.2%) and offers of higher salaries from another organisation (38.6%) (Theron et al., 2014).

Umamaheswari and Krishnan (2016) found that work/life balance, career development and supervisor support were critical factors (with a variance of 63.7%) in organisational commitment. Dube and Ngulube (2013) believe that a need exists to prioritise, formalise and institutionalise and institutional knowledge retention framework to encourage the retention of
human resources. The present research is intended to assist in this formalisation of a retention framework for employees in the higher educational environment.

2.1.3 Variables influencing retention

Several variables may influence employee retention. Previous research has indicated that an employee’s intention to stay with an organisation fall into three main groupings: 1) the personal characteristics of an employee, for example age, gender, and level of employment, 2) the nature of an employee’s existing job, and 3) satisfactory working conditions, for example the quality of supervision, promotion opportunities, training and development opportunities and communication within an organisation (Bushe, 2012; Gaiduk & Gaiduk, 2009; Ng’ethe et al., 2012). Gender, race and marital status have also been identified by research as significant retention factors, as individuals from a specific race or gender portray different turnover behaviour (Mubarak et al., 2012).

Finding from a study by Cropsey et al. (2008) revealed that attrition of minority and female academics was a result of professional development concerns, low remuneration and displeasure with leadership (51% response rate) (Pololi, Krupat, Civian, Ash, & Brennan, 2012). Other studies have indicated that limited recognition for good work and the struggle to balance personal and professional responsibilities are related to employees’ intentions to leave an organisation (Lowenstein, Fernandez, & Crane, 2007; Pololi et al., 2012). Studies have also found that female and minority academics agree that they are subjected to unconscious and conscious bias (Pololi et al., 2012; Pololi, 2010), and that females were more likely to contemplate leaving academia as a result of the level of job stress (Blix, Cruise, Mitchell, & Blix, 1994), and if they were not satisfied with certain facets of the professional work life (Ryan, Healy, & Sullivan, 2012). Studies have also found that full-time female professors had a high propensity to leave their jobs (Ehrenberg, Kasper, & Rees, 1990; Mubarak et al., 2012). Ryan et al. (2012) found that ethnic minorities were more inclined to leave an academic institution, and academia altogether, than their white counterparts.

A study conducted among academics in Kenya found that age was a variable that influenced employees’ intentions to leave the university (Ng’ethe et al., 2012). Younger academics were more inclined to exit an academic institution because of dissatisfaction than older academics (Pololi et al., 2012). The varying work styles and attitudes of younger and older generations continue to pose a challenge to organisations (Ngobeni & Bezuidenhout, 2011). An Australian study showed that younger employees were more motivated by compensation, training and development opportunities, career progression, opportunities to grow, recognition and
stimulating work, whereas older employees were more motivated by autonomy, mentoring opportunities, and stimulating work (Chew, 2004; Ng’ethe et al., 2012).

Moreover, studies have indicated that job satisfaction appears to escalate with advanced life stages and also amongst married academics (Ryan et al., 2012). The literature suggests that early career stage academics criticise the performance appraisal system, the lack of opportunities for promotion, inadequate remuneration, insufficient feedback and a lack of guidance from mentors (Pienaar & Bester, 2008).

An additional variable that may have an influence on retention is tenure. Research at the Makerere University found that remuneration and tenure had an effect on the retention of academics (Amutuhaire, 2010; Ng’ethe et al., 2012). A study conducted by Ngobeni and Bezuidenhout (2011) indicated that employees who were employed for between 16 and 20 years (64%), and between 26 and 30 years (60%), were apprehensive because of the lack of consideration for their development at work. This study also revealed significant relationships between turnover intentions and gender, qualification, and tenure. Literature regarding turnover intentions has also indicated that both age and tenure are related to leaving one’s job voluntarily (James & Mathew, 2012). James and Mathew (2012) argue that younger employees and employees with a shorter tenure will be more likely to leave an organisation than older employees or those employed for a longer period.

Organisational culture may also influence retention of employees as studies have shown that it has a direct effect on the satisfaction and commitment of employees as well as on their intentions to leave (James & Mathew, 2012; MacIntosh & Doherty, 2005; Silverthorne, 2004). The culture of an organisation may be either motivating or demotivating for employees, as a strong communication system may result in lower turnover levels (James & Mathew, 2012).

From the above it is clear that there are several variables that may have an influence on the retention of employees. Regardless of considerable research within the area of turnover in the South African environment, the exact reasons for employees’ staying or leaving their organisation of employment remain unclear (Sibiya, Buitendach, Kanengoni, & Bobat, 2014). Sibiya et al. (2014) believe that age, tenure and education are demographic characteristics that may have an effect on employees’ intentions to stay or leave an organisation. A study conducted by Radford, Shacklock and Meissner (2015) determined that age, family, location of work in relation to their home and their health were key personal factors in an employee’s reasons for staying with an organisation.
In summary, this section conceptualised retention as an important human resource strategy in the workplace and one that contributes to the competitive advantage of an organisation. Without proper retention management strategies and HR practices, organisations may be subject to high turnover rates, in turn losing money as a result of high turnover costs. Higher educational institutions are finding it difficult to retain important talented staff in the academic environment (HESA, 2011; Theron et al., 2014). Explanations for the high turnover rate in higher educational institutions include compensation and remuneration packages, promotion opportunities, lack of funding for research, cultural differences at institutional level, and heavy workloads (Theron et al., 2014). It can therefore be concluded that there are certain factors that assist in the retention of employees. In this regard, Radford et al. (2015) identified job satisfaction, work environment, compensation, career opportunities and job security as important retention factors.

Demographic characteristics may also influence the retention of employees. Therefore, for the purpose of this study, gender, race, marital status, job level and employment status are used as control variables to investigate their potential influence on the dependent variable, that is, retention factors. The value of taking these variables into account is that they indicate that employees are diverse on various levels. Although there is an abundance of literature on diversity, as mentioned above, less attention has been given to the generational diversity of organisations (Smit et al., 2015). For this reason the following section focuses on generational diversity in the contemporary workplace.

2.2 GENERATIONAL DIVERSITY IN THE CONTEMPORARY WORKPLACE

In this section the focus is on the conceptualisation of diversity in the workplace and, more specifically, generational diversity in the contemporary workplace. The generational cohort theory is then explained, followed by a discussion of the variables influencing generational cohort needs/perceptions.

2.2.1 Conceptualisation

The experiences of employees at work differ with regard to how they perform, how they are motivated as well as how communication takes place (Pant & Vijaya, 2015). Consequently, these differences create diversity in the workplace (Harvey & Allard, 2009; Pant & Vijaya, 2015). The term diversity can be defined simply as the degree to which differences exist among individuals within a group (Van Knippenberg, Van Ginkel & Homan, 2013; Wambui, Wangombe, Muthura, Kamau & Jackson, 2013). Diversity refers to the recognition of individual
differences as well as group differences (Wambui et al., 2013). In addition, Patrick and Kumar (2012) postulate that diversity involves not only the way in which an individual perceives him/herself but also how he/she perceives others, and these perceptions will affect his/her interactions with others.

Although diversity covers aspects such as gender, age, race, ethnicity, religion, education, and much more (Hsiao et al., 2015; Patrick & Kumar, 2012), research has also indicated that these demographic characteristics mostly reflect surface-level diversity (Eagly & Chin, 2010; Harrison, Price, Gavin, & Florey, 2002; Robbins & Judge, 2015). Surface-level diversity can be defined as the differences in easily observable characteristics including age, gender, race, ethnicity or disability; however, these characteristics do not automatically reflect the behaviours of these individuals although they may stimulate certain stereotypes (Hsiao et al., 2015; Robbins & Judge, 2015).

Thus diversity includes differences within the psychological characteristics of individuals, such as personalities, beliefs, values, and attitudes that represent deep-level diversity (Hsiao et al., 2015; Mchane & Glinow, 2015). Robbins and Judge (2015) define deep-level diversity as those differences that exist in the psychological characteristics of individuals; these become increasingly more significant for determining similarity as individuals get to know each other better. These characteristics are not observable, but manifest themselves through an individual’s choices, statements and activities (Mchane & Glinow, 2015). An example of this type of diversity can be observed in the deep-level diversity across generations (Mchane & Glinow, 2015), which will be discussed in more depth in section 2.2.2.

Generally, there are two approaches to defining workplace diversity. The narrow approach defines it only as an aspect related to equal employment opportunities (Cole & Kelly, 2011). This refers to surface-level diversity and includes categories such as race, ethnicity, religion, gender and age. The broader approach takes into account all the ways in which employees might be different (Cole & Kelly, 2011), that is, deep-level diversity. This approach takes into account aspects such as teaching, education, sexual orientation as well as differences in values, beliefs, abilities and personalities (Wambui et al., 2013). For the purposes of this study, diversity is defined as both surface-level differences and deep-level differences.

Organisations should then take the broader approach into account when managing diversity. Diversity management refers to a process that values the similarities and differences of employees in order to develop and sustain a positive working environment, to reach all employees’ potential and to maximise their contributions to the strategies and objectives of an
organisation (Patrick and Kumar, 2012). Consequently, diversity management refers to the valuing of the varying perspectives of individuals within an organisation (Pant & Vijaya, 2015). Cox (1993) observes that diversity management includes the planning and implementation of organisational structures and procedures in order to manage employees and to ensure that the possible benefits of diversity are exploited while the possible disadvantages are minimised.

If diversity is effectively managed within an organisation and the work environment provides for and knows the value of a diverse workforce (Chrobot-Mason & Aramovich, 2015), this may result in positive outcomes for the organisation. Employees may demonstrate desirable behaviours, which may contribute to organisational performance (Mamman, Kamoche, & Bakuwa, 2012; Richard, 2000, Cox, 1993). On the other hand, organisations where workforce diversity is not valued or supported may face negative outcomes such as absenteeism, intergroup conflict and high turnover (Chrobot-Mason & Aramovich, 2015; Mamman et al., 2012).

In the main, studies investigating the effects of diversity in the workplace have been regarded as restricted and inconsistent (Chrobot-Mason & Aramovich, 2015; Jehn & Bezrukova, 2010). More specifically, exploring generational differences has been identified as an important and as yet underdeveloped area for management research (Hess & Jepsen, 2009; Westerman & Yamamura, 2007). Generational diversity is a pressing issue globally in the design of work environments that will attract and retain both the younger and older generations (Hendricks & Cope, 2012; Shacklock & Brunetto, 2012). Rood (2010) argues that stress related generational diversity is a growing problem. The generational cohort theory, and its application in addressing this issue, is discussed in the next section.

2.2.2 Generational cohort theory

The notion of generations was originally discussed by Karl Mannheim (1952). He defined the concept of generations as individuals who share common experiences and distinctiveness in terms of their responses (Ignatius & Hechanova, 2014; Yi et al., 2014). According to Mannheim’s theory of generations (Mannheim, 1952), individuals who are most affected by key societal events and communal recollection are those who experienced them personally during their late teenage years and early adulthood (Kleinhans et al., 2015; Ting, De Run, & Fam, 2012).

A generation can therefore be seen as a distinguishable group, which has similar years of birth and therefore shares important life events at significant developmental stages (Kleinhans et
A ‘cohort’ can be defined as a group of individuals who were born during the same period and who have experienced significant events in their late adolescence and early adulthood (Rogler, 2002; Ting et al., 2012).

McMullin, Comeau, and Jovic (2007) believe that there are two components that define a generation: the impartial experience of being born in a specific time frame, and similar subjective experience of historic consciousness. These experiences and events should occur between early adolescence and late teenage years (Ignatius & Hechanova, 2014). This stage is significant as this is the stage at which the development of generational identity and consciousness occurs (Ignatius & Hechanova, 2014).

Individuals from the same generational cohort will reason and act differently to those from other generational cohorts (Gursoy et al., 2008). They will also share similar values and beliefs that will determine their behaviours and actions, but will differ from other generational cohorts owing to specific generational experiences (Farr-Wharton, Brunetto, & Shacklock, 2012; Kupperschmidt, 2000). According to the generational cohort theory, generations who grow up during an era of socioeconomic uncertainty will learn survival skills such as economic determinism, whereas generations who grow up during an era of socioeconomic certainty will learn post-modernistic values (Favero & Heath, 2012; Rogler, 2002). Dou, Wang and Zhou (2006) argue further that a generational cohort will place the highest subjective value on the socioeconomic resource that was most limited during their youth.

A generational cohort is generally 20–25 years in length; however, this may vary depending on the external events that define it (Eastman & Liu, 2012; Schewe, Meredith, & Noble, 2000). There are currently four generational cohorts working in today’s organisations (Far-Wharton et al., 2012); this study focuses only on the Baby Boomers, Generation X and Generation Y. Generation Z (born since 2000), is only starting to enter the labour market now or will be entering the labour market soon (Iorgulescu, 2016) and therefore not part of the focus of this study. These generational cohorts, including their birth years, life events, core values and work-related values are indicated below in Table 2.2 (Debevec, Schewe, Madden, & Diamond, 2013; Dries, Pepermans, & De Kerpel, 2008; Gibson, Greenwood, & Murphy 2009; Rood, 2010; Zemke, Raines, & Filipczak, 2000):

Table 2.3
A Synopsis of the Significant Life Events, Core Values and Work Values of the Three Generational Cohorts
<table>
<thead>
<tr>
<th>Generation</th>
<th>Birth year</th>
<th>Current age</th>
<th>Life events</th>
<th>Core values</th>
<th>Work-related values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby boomers</td>
<td>1946–1964</td>
<td>52–70</td>
<td>Assassinations of JF Kennedy and Martin Luther King, Jr, Moon landing, Raging inflation rate, Political and economic instability, Life after WWII</td>
<td>Optimism, Personal gratification, Growth, Dichotomous Hedonistic, Self-indulgent</td>
<td>Value job security, Proactive, Live to work, Innovativeness, ‘Workaholics’, Wary of authority</td>
</tr>
<tr>
<td>Generation Y</td>
<td>1980–1999</td>
<td>17–36</td>
<td>Economic crisis, Internet usage, Beginning of social networking activities, Mergers and acquisitions, MTV, 9/11 terror attacks</td>
<td>Optimistic, Creative, Civic-minded, Pro-diversity, Ambitious, Entrepreneur, Confidence, Collectivism</td>
<td>Pro-work/life balance, Mobile, Value prompt recognition and reward, Team players, Willing to learn</td>
</tr>
</tbody>
</table>
Adaptable to new technologies
Casual
Live first, then work
Contract mentality
Multi-tasking
High maintenance

Table 2.3 indicates that Baby Boomers have witnessed dramatic events such as the assassinations of JF Kennedy and Martin Luther King, Jr and the moon landing. They value job security and live to work. Generation X has witnessed the beginning of computers and values diversity and technology. Members of this generation tend to be more informal and try to balance life and work. Generation Ys have witnessed life-changing events such as the 9/11 terror attack. They tend to be casual and believe in living first, and then working live first, then work, contract mentality, multi-tasking and high maintenance.

It is evident from Table 2.3 that different generational cohorts have different values. The conduct, work attitudes and expectations of employees from the various generational cohorts can be subjective to their specific life events and culture (Tay, 2011). It is very important that managers and employers take preventative measures to avoid any perceived gap between the perceptions and expectations of employees from the various generational cohorts (Tay, 2011). For this reason, the variables influencing the specific generational cohorts’ needs and or perceptions are discussed in the following section.

2.2.3 Variables influencing generational cohort needs/perceptions

Individuals from each generational cohort presume that everyone knows their specific needs and respects them for who they are (Tay, 2011). Feelings of dissatisfaction and disappointment could surface in the event that these expectations are not met and may result in inter-organisational conflict and tension. This can be avoided if management is sensitive to the needs and perceptions of the various generational cohorts and has empathy for the way they reason and work (Tay, 2011). The variables influencing the needs and perceptions of each generational cohort are discussed in detail in the following subsections.
2.2.3.1 Baby Boomers (live to work)

Baby Boomers were born after the Second World War and were brought up in an era characterised by relative positiveness, opportunity and growth (Kleinhans et al., 2015; Stanley, 2010). They grew up in the ‘60s to the tune of sex, drugs and rock and roll (Gibson et al., 2009). The largest generation in history, they are competitive in nature, and believe in growth, change and expansion (Lowe et al., 2008). With such large numbers, members of this cohort have had to compete constantly for employment, promotions and attention throughout their working life (Hannay & Fretwell, 2011), and they expect to be promoted on the basis of their seniority and loyalty towards the organisation (Tay, 2011).

A significant characteristic of Baby Boomers is that their work is the most important aspect of their lives and their work ethic is strong (Stanley, 2010). As a result, divorce rates have increased and the family structure has been redefined (Lowe et al., 2008). They have a reputation for being self-absorbed (Gibson et al., 2009) and for having a sense of entitlement (Gibson et al., 2009). Baby Boomers respect authority, but want to be seen as equals; they tend to seek consensus, to dislike authoritarianism and laziness and to micro-manage others (Lowe et al., 2008). They seek recognition for their contributions through incentives such as monetary advancements and promotions (Hendricks & Cope, 2012).

Holding the bulk of management positions in the workplace, the Baby Boomers have significant power in organisations (Hannay & Fretwell, 2011). They also initiate participative management and teamwork in organisations as they are very people-orientated (Hannay & Fretwell, 2011; Salahuddin, 2010; Smola & Sutton, 2002).

2.2.3.2 Generation X (work to live)

Generation X is the smallest generation. They are the children of the workaholic Baby Boomers who witnessed their parents being downsized (Hoole & Bonnema, 2015; Lowe et al., 2008). They were brought up in an environment of two career families, rising divorce rates, downsizing and the dawn of rapid technological and communication developments (Stanley, 2010); they tend to be less loyal to organisations than the Baby Boomers (Crampton & Hodge, 2007; Gibson et al., 2009) and postpone marrying and having children as they do not take these commitments lightly (Debevec et al., 2013). Having experienced their parents being downsized, they have typical attitudes including job insecurity and expectations of work/life balance (Shacklock & Brunetto, 2011). They are typically independent, individualistic and
distrustful of large organisations (Kleinhans et al., 2015); what they lack in social skills they make up for in their technical abilities. They are unlikely to work for only one organisation in their lifetime and place no value on working long hours; they respond well to a coaching management style as well as to prompt feedback and credit for their efforts (Lowe et al., 2008).

The Generation X cohort is more concerned with their career options and keeping a work/life balance (Crampton & Hodge, 2007; Gibson et al., 2009). Members of this generation seek an enjoyable working environment (Patota, Schwartz, & Schwartz, 2007). They are also considerably more mobile than the Baby Boomers and will move from one job to another in order to develop their careers (Gibson et al., 2009; Johnson & Lopes, 2008). Hendricks and Cope (2012) argue that the use of technology is an inherent part of their work ethic and they can thus become easily frustrated by lengthy meetings where decisions should be made. They are also not essentially concerned with personal contact with others (Hendricks & Cope, 2012). Within the work environment, the Generation X cohort is not as hierarchical as the Baby Boomers and members are generally better educated (Farr-Wharton et al., 2012; Kupperschmidt, 2000). They could also be regarded as ‘free-agents’ rather than ‘team players’ (Debevec et al., 2013).

There is an upward trend among the woman of this generation to defy the ‘supermom-role’ and abandon their high-powered careers in order to raise their children (Favero & Heath, 2012), suggesting that they value a work/life balance more and are reluctant to sacrifice their personal lives for a career (Farr-Wharton et al., 2012).

2.2.3.3 Generation Y

Generation Ys have grown up in a world where huge amounts of information are available at the push of a button. This has made them technologically savvy and masters of the mobile telephone, the internet and video games (Aruna & Anitha, 2015; Kleinhans et al., 2015; Stanley, 2010). This youngest cohort is not as cynical as the Generation Xers and tends to have a ‘team player’ mind-set rather than the ‘free-agent’ mind-set of the Generation Xers (Debevec et al., 2013; Hoole & Bonnema, 2015). They place great importance on diversity in society (Debevec et al., 2013; Hoole & Bonnema, 2015; Kleinhans et al., 2015) and are extremely socially cognisant and eco-conscious (Eastman & Liu, 2012). This group rates social responsibility very highly; this may be expressed in volunteerism and a cautious selection of the organisation to which they render their services (Favero & Heath, 2012; Martin & Tulgan, 2006).
Generation Ys dislike a strict hierarchy, find it difficult to communicate with superiors and are less likely to accept leadership from an older superior (Palese, Pantali, & Saiani, 2006; Shacklock & Brunetto; 2011). Generation Y members have high levels of confidence and optimism, together with expectations for immediate feedback and constant recognition (Crumpacker & Crumpacker, 2007). They typically enter the workplace with a good education with reference to quantity and quality; however, communication and problem-solving skills are below average (Crumpacker & Crumpacker, 2007). They prefer an inclusive management style and do not like to be micromanaged (Aruna & Anitha, 2015; Lowe et al., 2008).

Generation Ys believe that work should accommodate their personal lives (Favero & Heath, 2012). They seek work that will provide them with flexibility, telecommuting possibilities, and the option to leave on a temporary basis to advance their education or to volunteer their time (Favero & Heath, 2012; Martin & Tulgan, 2006). They are more inclined to chase training and development opportunities (Farr-Wharton et al., 2012) and are orientated towards achievement and their careers (Farr-Wharton et al., 2012; Stuenkel, Cohen, & De la Cuesta, 2005). They appreciate teamwork and regard team gatherings as opportunities for communication (Hendricks & Cope, 2012). They grew up in an age of instant messaging and as a result are inclined to read less than previous generations (Hendricks & Cope, 2012). Emails and local intranet sites, rather than lengthy policies and procedures, are good instruments for communication objectives (Hendricks & Cope, 2012).

It is thus evident that the three generations vary in how they perceive their work and lives, their desires and priorities. Table 2.3 indicates the differences in the perceptions of work held by the three generations (Cammarata, 2013; Stanz, 2010):

Table 2.4

<table>
<thead>
<tr>
<th>Generational Cohorts’ Work-Related Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby Boomers</td>
</tr>
</tbody>
</table>

60
<table>
<thead>
<tr>
<th>Training</th>
<th>Too much and I will leave</th>
<th>Required to keep me</th>
<th>Continuous and expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning style</td>
<td>Facilitated</td>
<td>Independent</td>
<td>Collaborative and networked</td>
</tr>
<tr>
<td>Communication style</td>
<td>Guarded</td>
<td>Centred and spoken</td>
<td>Collaborative</td>
</tr>
<tr>
<td>Problem solving</td>
<td>Horizontal</td>
<td>Independent</td>
<td>Collaborative</td>
</tr>
<tr>
<td>Decision-making</td>
<td>Team informed</td>
<td>Team included</td>
<td>Team decided</td>
</tr>
<tr>
<td>Leadership style</td>
<td>Get out of the way</td>
<td>Coach</td>
<td>Partner</td>
</tr>
<tr>
<td>Feedback</td>
<td>Once per year</td>
<td>Weekly/daily</td>
<td>On demand</td>
</tr>
<tr>
<td>Technology use</td>
<td>Unsure</td>
<td>Unable to work without it</td>
<td>Unfathomable if not provided</td>
</tr>
<tr>
<td>Job changing</td>
<td>Sets me back</td>
<td>Necessary</td>
<td>Part of my daily routine</td>
</tr>
</tbody>
</table>

Table 2.4 reveals that the generational cohorts differ in terms of training, learning styles, communication styles, problem solving, decision-making, leadership style, feedback, technology use and job changing. In summary, the contemporary workplace consists of employees from three generations, namely the Baby Boomers, Generation X and Generation Y. These generations differ in terms of their values and perceptions regarding work-related outcomes. Kleinhans et al. (2015) argue that the academic workforce is faced with challenges posed by generation-specific values and perceptions determining engagement and behaviour in the workplace. Research is required to address these challenges, in order to determine generation-related perceptions in the work context (Kleinhans et al., 2015). Bussin and Van Rooy (2014) contend that there is a need for more research within each generational cohort to determine the particular drivers and values of each cohort as findings from previous studies in this context in South Africa have produced inconsistent results. Furthermore, Lub et al. (2014) found that although more empirical research into generational diversity in the workplace is currently being conducted, the subjects and findings of this research still vary considerably, however. In addition, there is also a need to determine how generational diversity affects the academic environment, specifically that of higher education, because of its importance in terms of retention and productivity (Kleinhans et al., 2015). Kleinhans et al. (2015) also argue
that the identification of generational characteristics and their effects on work-related variables might offer a framework with which to effectively recruit and retain staff from different generations at higher educational institutions. One of the aims of this study was to determine empirically whether different generations are satisfied with different retention factors. The following section integrates Döckel’s (2003) retention factors and the values of the three generational cohorts.

2.3 INTEGRATION OF RETENTION FACTORS AND GENERATIONAL COHORT VALUES

As different generations have different values, organisations are confronted with an intricate task in aligning various HR systems to the values of these generations (Stone & Deadrick, 2015). Research has shown that the various generations have differing perceptions of work ethic and work/life balance (Kleinhans et al., 2015). In the next section an analysis of the various retention factors valued by the three generational cohorts in question is provided.

2.3.1 Compensation

Generation Xers place great emphasis on monetary compensation (Gamage et al., 2014). Michael (2014) found that the Xers placed more worth on their salary and physical belongings than Generation Y employees. Employees from the Generation Y cohort, on the other hand, regarded inner benefits as more important than monetary compensation (Gamage et al., 2014), although they also placed a high value on material belongings (Michael, 2014). Baby Boomers did not place as much emphasis on extrinsic rewards as the younger generations (Queiri, Yusoff, & Dwaikat, 2014).

2.3.2 Job characteristics

One factor that should be considered in the retention of Baby Boomers is that of job design. Jobs for this generation should be designed in such a way that employees experience low job stress, as work stress has been found to be an indicator of early retirement among older workers (Appannah & Biggs, 2015). In the case of Generation Yers, who are easily distracted, job enrichment and job rotation are important factors in their retention (Gamage et al., 2014). They also have high expectations for advancement within the organisation (Gilley et al., 2015). Generation X employees feel rewarded when they have freedom within their jobs (Michael, 2014). The Xers pursue the fast track, a work experience that is distinctive, and a changing
environment; as soon as they become uninterested, they will seek employment elsewhere (Michael, 2014).

2.3.3 Training and development

The availability of training and development opportunities is a vital aspect in attracting and retaining Baby Boomers (Appannah & Biggs, 2015). The availability of training and development opportunities for older workers enhances self-efficacy, employability and the drive to continue working (Appannah & Biggs, 2015).

Training and development opportunities are also an important tool for retaining Generation Yers (Aruna & Anitha, 2015; Price Waterhouse Coopers, 2008). This generation has a preference for multimedia training and development programmes, which enrich them both horizontally and perpendicularly and give them skills within a multi-directional career structure (Aruna & Anitha, 2015; Shaw, 2008). In addition, training and development opportunities that are ongoing are of key importance to Generation X employees (Michael, 2014).

2.3.4 Supervisor support

Supervisor support is very important for Generation Y employees. They expect their supervisors to provide prompt, honest feedback and they pursue regular compliments and support from their supervisors (Aruna & Anitha, 2015; Crumpacker & Crumpacker, 2007). Generation Ys also prefer an inclusive management style that is healthy and that comprises all the benefits they require (Aruna & Anitha, 2015).

On the other hand, Baby Boomers and Generation Xs prefer a more bureaucratic leadership style from their supervisors (Aruna & Anitha, 2015).

2.3.5 Career opportunities

As soon as Generation Y employees believe that they have mastered a certain position, they do not hesitate to change to another organisation (Aruna & Anitha, 2015). Studies have found that Generation Ys will change their careers at least six times during their lifetime (Aruna, & Anitha, 2015; Burmeister, 2009). As they have confidence in their own expertise, they will
remain loyal to an organisation for as long as that organisation offers important work and career development opportunities (Anura, & Anitha, 2015).

2.3.6 Work/life balance

Appannah and Biggs (2015) observe that studies have found that an organisation with flexible work options is a major contributor to retaining older workers. Flexible work options are commonly regarded as positive and are significant in extending the working life of Baby Boomers (Earl & Taylor, 2015). Retention strategies for Baby Boomers may then include the following (Appannah & Biggs, 2015; Earl & Taylor, 2015; Eversole et al., 2012): a compressed work-week; flexible hours; job sharing; the option of transition to part-time work; teleworking; and career breaks or long-term leave.

Employees from the Generation X cohort value family time and therefore place a high premium on a work/life balance (Houlihan, 2015). Employees from the Generation Y cohort also regard a work/life balance as an integral factor when choosing between jobs (Gilley et al., 2015).

2.3.7 Commitment

The findings of a study conducted by Van Dyk and Coetzee (2012) revealed that an employee’s satisfaction with the organisation’s retention factors relate significantly to his/her organisational commitment. Furthermore, Lumley, Coetzee, Tladinyane and Ferreira (2011) found that employees who view their salary, promotion, supervisor support, fringe benefits, and contingent rewards as satisfactory will feel more emotionally committed to their organisation. Recent studies have shown that employees’ work environment, their supervisor support and training and development opportunities are factors that are most significant in increasing organisational commitment (Umanaheswari & Krishnan, 2016).

A study conducted among nurses indicated that participants from the Baby Boomers cohort scored significantly higher on affective commitment than participants from Generations X and Y (Brunetto, Teo, Shacklock, & Wharton, 2012; Singh & Gupta, 2015). A study on managers found that younger managers showed lower organisational commitment when compared to older generations (Alessia & Regina, 2008; Singh & Gupta, 2015). A study by Singh and Gupta (2015) revealed that participants from the younger generations displayed less commitment to their organisations.
There are clearly similarities and differences between what generations value in terms of retention factors. A South African study conducted by Bussin and Van Rooy (2014) found that non-monetary rewards were becoming increasingly important for all generations. This is depicted in Table 2.4 (Bussin & Van Rooy, 2014):

Table 2.5
Preferences with regard to Reward if Offered by another Organisation

<table>
<thead>
<tr>
<th>Reward</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation</td>
<td>High preference in all generations</td>
</tr>
<tr>
<td>Benefits</td>
<td>High preference in all generations</td>
</tr>
<tr>
<td>Work-life environment</td>
<td>High preference in Generation X</td>
</tr>
<tr>
<td>Performance and recognition</td>
<td>High preference in all generations</td>
</tr>
<tr>
<td>Career development and opportunities</td>
<td>High preference in all generations, but Generation Y has the highest preference of all</td>
</tr>
</tbody>
</table>

In summary, the similarities and differences among generational cohorts in terms of retention factors are reflected in Table 2.5. Table 2.6 provides a summation of the integration of retention factors and generational cohorts’ values:

Table 2.6
Integration of Retention Factors and Generational Cohorts’ Values

<table>
<thead>
<tr>
<th>Retention factors</th>
<th>Baby Boomers</th>
<th>Generation X</th>
<th>Generation Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation</td>
<td>Low emphasis on extrinsic rewards</td>
<td>High emphasis on monetary compensation</td>
<td>High emphasis on inner benefits</td>
</tr>
<tr>
<td>Job characteristics</td>
<td>Low job stress</td>
<td>Job freedom</td>
<td>Job enrichment and job rotation are important</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------</td>
<td>-------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Training and development</td>
<td>High importance (drive to continue working)</td>
<td>High importance (continues working)</td>
<td>High importance (multi-media training)</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>Bureaucratic leadership style</td>
<td>Bureaucratic leadership style</td>
<td>Inclusive management style</td>
</tr>
<tr>
<td>Career opportunities</td>
<td>Unnecessary</td>
<td>Necessary</td>
<td>Very important</td>
</tr>
<tr>
<td>Work/life balance</td>
<td>High importance</td>
<td>High importance</td>
<td>High importance</td>
</tr>
<tr>
<td>Organisational commitment</td>
<td>Very loyal to organisation</td>
<td>Lack loyalty</td>
<td>More focused on career development</td>
</tr>
</tbody>
</table>

Table 2.6 indicates that attitudes towards retention factors such as compensation, job characteristics, training and development, supervisor support, career opportunities and work/life balance, vary in the three generations. This was also the case in a study conducted by Parry and Urwin (2011), which concluded that, in general, research has found more similarities than differences between the generational cohorts.

### 2.4 EVALUATION AND SYNTHESIS

The literature reveals that the contemporary workplace has changed dramatically over the last few decades. With employees from more than three different generations working together, human resource management practitioners and industrial psychologists are faced with a considerable challenge when trying to keep these employees satisfied with their working environment, and ultimately retaining them. These generations’ perceptions of work vary significantly. It is therefore important that human resource management practitioners and industrial psychologists take cognisance of the important generational differences when developing retention strategies within their organisations.

A recent survey indicated that almost 70% of participants felt that their organisation needed specific strategies to address generational differences (Rajput, Bali, & Kesarwani, 2013). Kleinhans et al. (2015) believe that if the values and preferences of different generational cohorts found in the multigenerational workplace are fully understood, then human resource practitioners and industrial psychologists would be better equipped to institute policies and strategies to meet the needs of the current academic workforce. Additionally, research that
determines the expectations of the various generations is required as this would assist in the development of strategies to attract, develop and retain young Generation Y employees/graduates and to prevent Generation X academics from leaving corporate careers. This generation is necessary to fill the gap triggered by the retirement of Baby Boomers (Rajput et al., 2013).

This discussion has demonstrated that the various generations are satisfied with the retention factors discussed in section 2.1.2 differently. For this reason, a psychological retention profile for diverse generational groups will be a powerful tool for human resource management practitioners, industrial psychologists and managers. Such a psychological profile could advance our understanding of how generations are satisfied in terms of retention factors and ultimately assist in the retention of employees from different generational cohorts.

2.5 CHAPTER SUMMARY

In this chapter the first and second research aims of the literature review were addressed, namely conceptualising retention factors and generational diversity in the contemporary workplace and conceptualising the retention factors of compensation, job characteristics, training and development, supervisor support, career opportunities, and work/life balance. In addition, an explanation of how an individual’s biographical characteristics influence these retention factors was provided.

In Chapter 3 the psychological career-related attributes of the psychological contract and psychological career preoccupations are conceptualised. Individual biographical characteristics that influence these competencies are also discussed. Furthermore, a conceptualisation of the theoretical relationship between the psychological career-related attributes and the retention factor constructs is discussed. This is followed by the construction of a theoretical integrated psychological retention profile and a discussion of the implications of this profile for retention management practices.

CHAPTER 3: PSYCHOLOGICAL CONTRACT AND PSYCHOSOCIAL CAREER PREOCCUPATIONS

Employees working at institutions of higher education are faced with a complex environment and their role in the rebuilding and improvement of South Africa is very significant (Cross, Mungadi, & Rouhani, 2002; Le Roux & Rothmann, 2013). Higher education employees leave
these institutions for many reasons, including higher compensation, more respected departments, and an absence of collegiality at their own institution, better location as well as to be near family (O’Meara et al., 2016). Aspects such as globalisation, global competition, deregulation and innovations in technology have gradually had an effect on the relationship between employees and employers (Seopa, Wöcke, & Leeds, 2015). A successful employment relationship is linked to a psychological contract that is positive, built on trust and fairness, and which is anticipated to increase job satisfaction, well-being, and employee retention (Diedericks, 2012; Le Roux, & Rothmann, 2013). Several studies have found that organisations have to meet their employees’ psychological contract needs if they are to attract and retain them (Conway, Guest, & Trenberth, 2011; Low et al., 2016).

Such rapid organisational changes might also result in career expectations left unfulfilled (Lam & De Campos, 2015). These developments are likely to affect the psychological contracts of employees, as many experience the obstructions of unfulfilled promises (Lam & De Campos, 2015). By considering the changes in an employee’s career, personal and family needs, organisations could achieve a competitive advantage and retain valuable employees (Litano & Major, 2015).

This chapter conceptualises the constructs psychological contract and psychosocial career preoccupations. The practical implications of the theoretical relationship between these constructs are explained through the use of appropriate models and a theoretical psychological retention profile for diverse generational groups is developed. The implications of this profile for retention are then discussed.
3.1 PSYCHOLOGICAL CONTRACT

In this section the focus is on the conceptualisation of the psychological contract construct as well as Rousseau's (1995) theoretical model of the psychological contract.

3.1.1 Conceptualisation

The concept of the psychological contract emerged in response to the relationship that exists between the employer and the employee (Agarwal, 2015). The psychological contract can be defined as the opinions that a person holds concerning the terms and conditions that surround his/her employment relationship (Payne, Culbertson, Lopez, Boswell, & Barger, 2015). The construct of the psychological contract also refers to an individual's beliefs and perceptions with regard to the reciprocal obligations owed by the employee to the employer and vice versa in the light of the exchange relationship that exists between them (Agarwal, 2016; Bordia, Bordia, & Restubog, 2016; Karagonlar, Eisenberger, & Aselage, 2016; Lam, & De Campos, 2015; Le Roux, & Rothmann, 2013; Li, Wong, & Kim, 2016; Lub et al., 2016; Restubog, Zagenczyk, Bordia, Bordia, & Chapman, 2015; Rousseau, 1995; Rousseau, 1990).

In other words, the psychological contract is an employee’s beliefs regarding the reciprocal agreement in terms of obligations of an economic and socio-emotional nature that result from the perception of promises exchanged with the organisation (O'Donohue, Martin, & Torugsa, 2014; Rousseau, 1995). The psychological contract is built on the notion of reciprocity, where humans interact in social exchanges and expect the other party to reciprocate likewise (Bal, De Lange, Jansen, & Van der Velde, 2008; Seopa et al., 2015).

Moreover, the concept of the psychological contract refers to employees’ belief that they should receive certain incentives, such as a high salary and job satisfaction in return for their contributions made to the employer, which include hard work and loyalty (Lam & De Campos, 2015; Lu, Capezio, Restubog, Garcia, & Wang, 2016; Rousseau, 1990). Payne et al. (2015) argue that task performance, loyalty, flexibility and collegiality can be referred to as employee obligations whereas employer obligations include compensation, training, career development, concern for employee wellbeing, as well as support.

The difference between the psychological contract and formal employment contracts is that the psychological contract is perceptual (Li et al., 2016). The psychological contract is based on the perceptions of an individual regarding mutual obligations in the employment relationship. It is typically an unwritten and unspoken contract (O’Meara et al., 2016). Within
the organisational environment, the psychological contract is an undocumented covenant that binds the parties to it and sets the mutual obligations between them (Li et al., 2016; Robbins, 2003).

These mutual obligations may be either implicit or explicit and are delivered to employees from any number of sources such as communications from agents from the organisation or co-workers who observe employees in the organisation, as well as policies and practices of the organisation (Karagonlar et al., 2016). For the purpose of this study the concept of the psychological contract is defined as the perceived, unwritten contract that exists between an employee and employer in terms of the employment relationship, referring to mutual obligations such as compensation, job satisfaction, loyalty and hard work.

3.1.2 Psychological contract theory

The psychological contract theory has its origins in the social exchange theory (Blau, 1964). It proposes that employees and employers, as parties to an exchange relationship, experience a sense of obligation to reciprocate to contributions made by the other party in equal value, in order to fulfill the notions of fairness and to assist in the continuance of the exchange relationship (Blau, 1964; Gouldner, 1960; Lub et al., 2016; Rayton, Brammer, & Millington, 2015). According to the social exchange theory (Blau, 1964), an imbalance in the fulfilment of obligations will result in negative consequences within the social exchange relationship; the opposite will result in positive attitudes as well as positive experiences within the exchange relationship (Le Roux & Rothmann, 2013; Shore & Barksdale, 1998). Social exchanges are related to employees’ job satisfaction, well-being and work behaviour such as intention to resign (Cole, Schaninger, & Harris, 2002; Le Roux & Rothmann, 2013).

The psychological contract and social exchange theories share the notion that parties to the exchange relationship will respond to those obligations that are significant to them (Rayton et al., 2015). However, these theories differ in that the social exchange theory is concerned with the delivered content of the exchange relationship whereas the psychological contract theory is concerned with whether the delivered content has met the expectations of the parties in the exchange relationship (Rayton et al., 2015).

The concept of the psychological contract was first introduced by Argyris (1960). His research focused on the context of the superior’s leadership style where the ‘psychological work contract’ highlighted the unspoken relationship between the leader and subordinates, as a result of the leadership style employed by the leader (Agarwal, 2015). Levinson (1962) then
described it as an unwritten agreement, based on mutual obligations (Manxhari, 2015). A
decade later saw Schein (1970) building on the psychological contract concept by
accentuating the various expectations that exist between the employee and employer
(Agarwal, 2015).

It was only in 1995, however, with Rousseau’s (1995) ground-breaking publication, that the
concept of the psychological contract really received serious attention (Manxhari, 2015). Given
that most scholars had accentuated the primary concepts, needs and expectations as
characteristics of the psychological contract, Rousseau (1989) tested these longstanding
assumptions by redefining the psychological contract theory (Restubog, Kiazad, & Kiewitz,
2015).

Rousseau (1995) defined the psychological contract as an individual’s views, which are
formed by the organisation, of the conditions of an exchange agreement concerning that
individual and the organisation. She furthermore described three additional characteristics of
the psychological contract (Restubog et al., 2015):

- The psychological contract is based on perceptions and idiosyncratic in nature.
- The type of psychological contract can be differentiated among different time frames,
degree of specificity, resources exchanged and performance-reward contingency.
- Violation of the psychological contract creates the core process through which
psychological contracts influence the attitudes and behaviours of employees.

These three characteristics of the psychological contract will be discussed in detail in the
following sections.

3.1.2.1 Perceptual and idiosyncratic nature of the psychological contract

The psychological contract is a reflection of an employee’s beliefs concerning mutual
obligations (Lu et al., 2016; Rousseau, 1990). It is thus related to an individual’s perceptions
of promises and obligations that are mutually exchanged with the organisation (McGrath,
Millward, & Banks, 2016). The psychological contract is developed, based on the perception
of an individual regarding the reciprocity contained in the relationship (Bordia et al., 2015).
Consequently, the psychological contract is subjective in nature (Bordia et al., 2015; Lu et al.,
2015; Persson & Wasielewski, 2015; Van den Heuvel, Schalk, Freese, & Timmerman, 2016)
and based on the perceptions of an individual regarding the implicit and explicit promises
made within the exchange relationship. As a consequence of this subjectivity, each psychological contract is unique and specific to an individual and comprises the inner perceptions of this individual, which are formed and kept independently (George, 2009).

As a result of these inner perceptions of an individual, the psychological contract is not only subjective but also dynamic in nature and may consequently result in misinterpretations and problems between the parties in the employment relationship (Festing & Schäfer, 2014). Persson and Wasieleski (2015) argue that the dynamic nature of the psychological contract is undisputed as it is constantly changing and evolving over time through experience. In contrast with written or explicit contracts, perceptions, expectations and emotions are the components that shape the psychological contract (Persson & Wasieleski, 2015).

The distinctive lifelong experiences and dealings with others that are particular to an employee assist in the development of his/her schema of the employment relationship; these necessarily have an effect on the formation of the psychological contract (Karagonlar et al., 2016). The psychological contract is furthermore constructed on information gathered from various sources, which forms the basics of the psychological contract (Bordia et al., 2015; Dick, 2006; Rousseau, 1995). Rousseau (2001) outlines various phases in the formation of the psychological contract. These are briefly outlined in Table 3.1:

**Table 3.1**

*Phases of Contract Formation*

<table>
<thead>
<tr>
<th>Phase in the employment relationship</th>
<th>Sources of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-employment</td>
<td>Professional norms; Societal beliefs</td>
</tr>
<tr>
<td>Recruitment</td>
<td>Active promise exchange; Evaluation of signals by both organisation and employee</td>
</tr>
<tr>
<td>Early socialisation</td>
<td>Continuing promise exchange; Active information seeking by workers/agents</td>
</tr>
<tr>
<td>Later experiences</td>
<td>Intermittent promise exchange; Less active information seeking by workers/agents</td>
</tr>
<tr>
<td>Evaluation (revision or violation)</td>
<td>Inconsistent information leads to evaluation; Incentives/costs of change impact revision</td>
</tr>
</tbody>
</table>

Table 3.1 explains that the psychological contract is formed long before the actual employment relationship. Employees pursue and process information relating to their current schema in order to develop a psychological contract (Bordia et al., 2015; Sweller & Sweller, 2006). Given
the nature of the psychological contract, employees may therefore develop the perception that
the organisation has certain obligations towards them, and they, in turn have certain
obligations towards the organisation (Persson & Wasieleski, 2015). The content of the
psychological contract thus comprises specific components that the employee perceives as
the organisation’s obligation towards him/her (Bordia et al., 2015; Rousseau, 1995). Although
it is challenging to provide a complete list of the concrete components of a psychological
contract (Seopa et al., 2015), a study conducted by Herriot et al. (1997) identified the following
employer and employee obligations, based on a representative sample of the UK workforce.
These are outlined in Table 3.2:

Table 3.2
The Content of the Psychological Contract

<table>
<thead>
<tr>
<th>Employer obligations</th>
<th>Employee obligations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Providing adequate induction and training</td>
<td>• Working contracted hours</td>
</tr>
<tr>
<td>• Ensuring fairness in organisational procedures</td>
<td>• Doing a good job in terms of quality and quantity of work</td>
</tr>
<tr>
<td>• Allowing for the meeting of personal or family needs</td>
<td>• Honesty</td>
</tr>
<tr>
<td>• Consulting and communicating with employees</td>
<td>• Loyalty</td>
</tr>
<tr>
<td>• Allowing employees discretion in the performance of their job</td>
<td>• Treating the organisation’s property carefully</td>
</tr>
<tr>
<td>• Showing humanity to employees</td>
<td>• Dressing and behaving correctly with customers and colleagues</td>
</tr>
<tr>
<td>• Recognition of employee contributions</td>
<td>• Flexibility</td>
</tr>
<tr>
<td>• A safe and congenial work environment</td>
<td></td>
</tr>
<tr>
<td>• Justice in the application of organisational procedures</td>
<td></td>
</tr>
<tr>
<td>• Pay</td>
<td></td>
</tr>
<tr>
<td>• Benefits</td>
<td></td>
</tr>
<tr>
<td>• Security</td>
<td></td>
</tr>
</tbody>
</table>

The components outlined in Table 3.2 reflect what employees perceive the organisation to
have promised them, or employer obligations, as well as what they have promised to the
organisation, employee obligations. These components have been grouped into two general
types of the psychological contract, namely transactional and relational, and these are
discussed in the following section. It is important for organisations to have an understanding of and to manage the expectations of an employee in order to fulfil its obligations in terms of the contract (Festing and Schäfer, 2014).

3.1.2.2 Typology of the psychological contract

Psychological contracts can be classified according to three typologies, namely transactional, relational and balanced contracts (Lub et al., 2016; O’Meara et al., 2016; Persson & Wasieleski, 2015; Restubog et al., 2015; Rousseau, 1990). These typologies are grounded in key dimensions that describe the stability, time frame and the exchange relationship (Persson & Wasieleski, 2015). In other words, they are based on what the individual believes will be exchanged (O’Meara et al., 2016). As indicated in Table 3.3, the type of psychological contract can be determined using six generic contract features (McLean Parks & Smith, 1998; O’Donohue et al., 2015; Rousseau, 1995; Thompson & Bunderson, 2003):

Table 3.3
Interpretive Framework for Psychological Contracts

<table>
<thead>
<tr>
<th>Contract type</th>
<th>Transactional PC</th>
<th>Relational PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salient beneficiary</td>
<td>Self</td>
<td>Joint (self and organisational community)</td>
</tr>
<tr>
<td>Content focus</td>
<td>Economic, material, such as pay in exchange for hours worked</td>
<td>Socio-emotional, non-material, such as job security in exchange for loyalty</td>
</tr>
<tr>
<td>Organisation’s obligations</td>
<td>Provide continued work, safe working environment, fair compensation</td>
<td>Provide training, career development, promotion opportunities, job security</td>
</tr>
<tr>
<td>Individual’s obligations</td>
<td>Fulfil specified requirements</td>
<td>Fulfil generalised requirements, loyalty, commitment, organisational</td>
</tr>
<tr>
<td></td>
<td></td>
<td>citizenship behaviour</td>
</tr>
<tr>
<td>Scope and tangibility</td>
<td>Narrow, specific, observable, non-flexible reciprocity</td>
<td>Pervasive, less specific, subjective, flexible reciprocity</td>
</tr>
<tr>
<td>Stability and duration</td>
<td>Static, close-ended, specific time-frame</td>
<td>Dynamic, open-ended indefinite time-frame</td>
</tr>
</tbody>
</table>
The first of these typologies, the transactional contract, is marked by unambiguous exchanges, including a constricted series of behaviours over a definite period of time (Manxhari, 2015). This type of contract is centred upon financial exchanges, which are short-term in nature, such as merit pay, and involves little participation from either the employee or employer (Agarwal, 2015; Robinson, Kraatz, & Rousseau, 1994; Seopa et al., 2015). It is furthermore based on the expectations of employees of monetary and other rewards in exchange for their time and efforts (O’Meara et al., 2016) and distinguished by very specific roles and responsibilities (Seopa et al., 2015).

The transactional contract is based on terms and conditions of the employment relationship that are explicit in nature and include specified responsibilities as well as a short-term time frame (Rousseau, 2004). In essence, it refers to those matters that can be objectified, such as events and tangible items (Seopa et al., 2015). Gardner et al. (2015) argue that this type of contract is based on a quid pro quo transaction that translates to employer money in exchange for employee productivity. Concerns relating to trust, commitment and attachment are absent from transactional contracts as these contracts are demarcated specifically in terms of a monetary exchange, within specified time frames and tasks performed (Seopa et al., 2015).

The second type of psychological contract, the relational contract, in contrast to the transactional contract is not time bound. This includes the exchange of financial as well as non-financial rewards and is characterised by continuing or long-term, all-embracing exchange relationships (Persson & Wasielewski, 2015; Seopa et al., 2015). Gardner et al. (2015) observe that the relational contract is based on open-ended agreements, including the exchange of socio-emotional elements such as trust, commitment and loyalty (Agarwal, 2015) and on financial resources. The relationships between the employers and employees are dynamic in nature and include mutual obligations between these social representatives (Persson & Wasielewski, 2015).

The scope of the relational contract is therefore far-reaching as it affects employees’ personal and family life and requires substantial investments from both the employees and the employers, including continuous career development and training. This results in a high level of reciprocal interdependence (DelCampo, 2007; Festing & Schäfer, 2014; Rousseau, 1995). The relational contract is characterised by aspects such as loyalty, where the employee and employer are committed to reciprocate each other’s needs, and the sustainability of a long-term engagement (Manxhari, 2015). One of the main objectives of the relational contract is
the development of a lasting, permanent relationship that is reciprocally beneficial for both the employee and the employer (Gardner et al., 2015).

Incentives included in a relational contract include opportunities for training and development, impartial opportunities for promotion, stable wages and benefits, job security, and decision-making based on the long-term well-being of employees (Gardner et al., 2015). The development of the relational contract is dependent on several factors. Firstly, the relationship between employee and employer should have the potential to develop over time (Persson & Wasieleski, 2015). Secondly, through time, historical data grows, which assists in the formation of the beliefs and expectations that exist between the participants in the relationship (Persson & Wasieleski, 2015).

The third and final type of psychological contract is the balanced contract. This type is a combination of the transactional contract and the relational contract (Persson & Wasieleski, 2015). The continuous time frame and mutual reciprocity of the relational contract, combined with the performance demands and renegotiations of the transactional contract form the balanced contract (Rousseau, 2004). The balanced contract are therefore characterised by long-standing relationships with greater flexibility in contract agreements that makes provision for developing and changing circumstances (Dabos & Rousseau, 2004; Persson & Wasieleski, 2015).

Psychological contract researchers have begun to take notice of the differences in the types of psychological contracts and work outcomes (Lu et al., 2016). Positive relational contracts are consistently related to positive employee responses to aspects in the work environment, including organisational commitment, behaviours of organisational citizenship, job satisfaction, as well as the intention to stay (Gardner et al., 2015; Li, Rousseau, & Silla-Guerola, 2006). Negative relationships have been found between the relational contract and turnover intentions (Lu et al., 2016; Raja, Johns, Ntalianis, 2004). In contrast, transactional contracts have been found to be positively correlated with turnover intentions and negatively associated with job satisfaction and organisational commitment (Lu et al., 2016).

3.1.2.3 Psychological contract breach and violation

Employees assess the performance of the psychological contract with the other party in the exchange relationship as soon as the relationship commences (Bordia et al., 2015; Morrison & Robinson, 1997). Psychological contract fulfilment boosts trust and results in reciprocal benefits for both parties to the exchange relationship (Li et al., 2016; Rodwell, Ellershaw, &
Flower, 2015). However, in the event that an employee feels that the other party has failed to deliver on certain promises or expectations, psychological contract breach occurs (Morrison & Robinson, 1997; Rayton et al., 2015).

The concept of psychological contract breach generally refers to the perception of employees that the other party to the exchange relationship has failed to deliver on its promised expectations, with subsequent undesirable reactions (Lam & De Campos, 2015; Morrison & Robinson, 1997). A breach of the psychological contract occurs when the parties to the exchange relationship experience a perceived gap between them arising from a misinterpretation or occurring when one of the parties fails to deliver on promised obligations (Li et al., 2016).

Researchers have identified three main causes for an employee feeling that the psychological contract has been breached, including deliberate reneging, unintentional reneging (disruption) and incongruence (de Ruiter, Schalk, & Blomme, 2016; Morrison & Robinson, 1997; Rousseau, 1995). Deliberate reneging occurs in a situation where an organisation decisively reneges on a promised expectation (de Ruiter et al., 2016). For example, an organisation may break its promises regarding job security and salary increases in order to increase its financial status for the benefit of its stakeholders (de Ruiter et al., 2016; Turnley & Feldman, 1999).

Unintentional reneging usually occurs when an organisation is willing but unable to deliver on its promises (de Ruiter et al., 2016). In such cases, the organisation experiences financial distress and cannot deliver on these promises. The most significant characteristic of this type of reneging is that it is uncontrollable and caused externally, removing the accountability from the organisation (Cassar, Buttigieg, & Briner, 2013; de Ruiter et al., 2016).

A breach of the psychological contract as a result of incongruence occurs when the organisation is convinced that it has delivered on its promises while the employee perceives that the organisation has failed to do so (de Ruiter et al., 2016; Robinson & Morrison, 2000). It might be that in such cases the parties to the exchange relationship have divergent perceptions of their reciprocal obligations (Vantilborgh, Bidee, Pepermans, Griep, & Hofmans, 2016).

Many researchers refer to the concepts of psychological contract breach and psychological contract violation as intertwined. Persson and Wasieleski (2015), however, believe that these two concepts are not the same. Psychological contract breach refers to the consciousness of an employee that his/her contributions have not been not equally reciprocated by the
employer; psychological contract violation, on the other hand, refers to an emotional state that accompanies such a breach (Persson & Wasieleski, 2015). Psychological contract violation can be regarded as a direct consequence of psychological contract breach (Wang & Hsieh, 2014).

Psychological contract violation has been defined as an emotive experience characterised by an emotional state of antipathy, anger and frustration, which may be the result of the perception that promised obligations have not been reciprocated (Baccili, 2001; de Ruiter et al., 2016). In other words, a breach is seen as an affective occurrence that might result in employees experiencing an emotionally indicated affective reaction such as a sense of violation (Restubog et al., 2015).

Employees experiencing psychological contract breach are reluctant to keep to their side of the exchange agreement and could limit their efforts or even extract themselves from the relationship altogether (Bordia et al., 2015). A great deal of research has indicated that the experience of psychological contract breach results in negative outlooks and workplace behaviours such as mistrust and a decrease in commitment, poor performance, absenteeism and staff turnover (Conway et al., 2011; Lam & De Campos, 2015; Zhao, Wayne, Glibkowski, & Bravo, 2007).

Researchers have also found that psychological contract breach is linked to a host of negative work-related behaviours, including reduced job security and satisfaction, as well as to an upsurge in work/life conflict and burnout (Bal et al., 2008; Chambel & Oliveira-Cruz, 2010; de Cuyer & de Witte, 2007; Jiang et al., 2015). Psychological contract breach is also related to increased organisational cynicism, poor citizenship behaviours, reduced dedication and job satisfaction, corrupted organisational commitment and an increased intention to leave the organisation (Bashir & Nasir, 2013; Conway et al., 2011; Dulac, Coyle-Shapiro, Henderson, & Wayne, 2008; Lambert, Edwards, & Cable, 2003; Li et al., 2016; Shih & Chuang, 2013).

Mediating the relationship between psychological contract fulfilment or breach and behavioural outcomes such as commitment and intention to leave are the concepts of fairness and trust (Clinton & Guest, 2004; Guest, 2004). Guest (2004) argues that these two concepts, fairness and trust, can be closely linked to the psychological contract. Therefore Guest and Conway (2004) extended the concept of the psychological contract to include the concepts of fairness and trust which can be regarded as the state of the psychological contract. In other words, where the psychological contract focuses on the perceptions of the reciprocal expectations and obligations between employer and employee, the state of the psychological...
contract considers whether these expectations and promises were met, whether they were fair as well as its consequences on trust (Guest, 2004; Guest & Conway, 2002). The state of the psychological contract can be considered as a significant antecedent of employee attitudes and behaviour which goes beyond the differences explained through the content of the psychological contract (Guest, 1998; Van der Vaart et al., 2013).

In summary, the concept of the psychological contract can be explained as the perceived, unwritten contract that exists between an employee and employer in terms of the employment relationship and mutual obligations. Over the past decade, significant research has strengthened the role of the psychological contract and work expectations in guiding relationships and academic work lives (O’Meara et al., 2016). Several studies have found that unfulfilled expectations result in negative behaviour from employees, such as poor performance, absenteeism and high turnover, mistrust and lack of commitment (Lam & De Campos, 2015). A study conducted by le Roux and Rothmann (2013) concluded that the work experience of an employee and the fulfilment of the psychological contract will predict an employee’s intention to leave. Future research should also focus on the relationship between the state of the psychological contract and the attitudes and behaviours of employees and the extent to which it predicts behaviour such as job satisfaction, commitment and intention to leave (Gracia, Silla, Peiró, & Fortes-Ferreira, 2007; Van der Vaart et al., 2013).

Le Roux and Rothmann’s (2013) findings also indicated that a sound exchange relationship is based on psychological contract fulfilment and observance of the psychological contract (le Roux & Rothmann, 2013). These researchers believe that there is a gap in research that investigates the effects of different demographic variables, such as gender, tenure and age on the direct and indirect relationship between psychological contract and turnover intentions (le Roux and Rothmann, 2013). Lam and De Campos (2015) also posit that future research that includes knowledge workers at different career stages is necessary if the relational and progressive context that may have an impact on their psychological contract and career attitudes is to be better understood. This study therefore aimed to determine the content of the psychological contract of employees at different career stages (discussed in Chapter 2) with different psychosocial career preoccupations. This is discussed in the following section.

### 3.2 Psychosocial Career Preoccupations

In the following section the construct psychosocial career preoccupations are conceptualised and Coetzee’s (2014) theory of psychosocial career preoccupations is discussed.
3.2.1 Conceptualisation

An individual’s career is an enthralling and multifaceted phenomenon and has an effect on many aspects of the individual’s life (Babalola & Bruning, 2015). An individual’s career can be defined as the sequence of his or her work experiences through his or her lifetime (Arthur, Hall, & Lawrence, 1989; Babalola & Bruning, 2015; Harris, Pattie, & McMahan, 2015). In the course of an individual’s career, he or she may change from one organisation to another in order to experience career advancement (Harris et al., 2015).

The traditional conceptualisation of the career, including aspects such as job security and life-long employment at a particular organisation, ruled academic research during the early 20th century (Hall, 1976; Litano & Major, 2015). Ground-breaking notions of vocational guidance supported the concept of hierarchical reliance and steady relationships (Baruch, Szücs, & Gunz, 2015; Savickas et al., 2009; Wilensky, 1961). As a result, employees were appointed at entry-level positions and, through promotions, progressed hierarchically while maintaining steady employment within a particular organisation (Litano & Major, 2015; Savickas et al., 2009). The traditional career excluded an employee’s existence outside work as a significant aspect of career development (Litano & Major, 2015).

However, as a result of rapid developments in information technologies, together with globalisation at the onset of the 21st century, it has become more challenging to forecast what the future holds for employees in a globalised environment with reduced career prospects and increased and multifaceted career challenges (Cook & Maree, 2016; Savickas et al., 2009). Traditional career theories can no longer provide an acceptable foundation for interventions designed to deal with the constantly changing 21st century career environments (Maree, 2015; Savickas, 2013). This has resulted in the evolution of a “new” or “contemporary” career (Babalola & Bruning, 2015).

Contemporary careers are regarded as a succession of transitions, choices and amendments over the course of an individual’s life, and less as a sole decision (Bland & Roberts-Pittman, 2014; Coetzee, 2015a; Fouad & Bynner, 2008). These careers vary from the traditional in the following ways: the individual, and not the organisation is in control of his or her career; contemporary career paths are more fluid, horizontal and multidirectional, whereas traditional career paths were more rigid, ascendant and linear (Babalola & Bruning, 2015).

Vocational development theories centred on the ‘person-environment fit’ are losing ground and a job for life can now be regarded as an historical idea (Merino-Tejedor, Hontangas, &
Boada-Grau, 2016). The 21st century has necessitated an adjustment by employees to transformation and its bearing on the world of work; the individual now has to make changes at various stages and in numerous ways in order to be successful in an uncertain environment (Maree, 2015). Consequently, research relating to careers has undergone a theoretical change from career development to career self-management, life-designing, and career construction, including adaptability and employability concerns (Coetzee, 2015b; Maurer & Chapman, 2013; Nazar & Van der Heijden, 2012; Savickas, 2013).

Existing theories related to careers and vocational guidance methods are inadequate today as they are entrenched in the supposition of permanence of individual characteristics and secure employment in bounded organisations (Savickas et al., 2009). Furthermore, careers were conceptualised as a fixed series of stages where notions of vocational identity and career planning, development and stages were employed to predict an individual’s adjustment to stable work environments (Savickas et al., 2009).

Contemporary careers, on the other hand, are associated with preoccupations related to psychosocial aspects including adjustment, adaptation and the redefinition of the self in situations where work-life roles and the context of work changes with more regularly recurring work role transitions (Coetzee, 2015; Hall, 2013; Savickas, 2011; Verbruggen, Dries, & Van Vianen, 2013). Several researchers have emphasised the need for individuals to grow psychological strengths to deal with the challenges related to numerous career transitions (Zhou, Guan, Xin, Mak, & Deng, 2016).

In response to these changes, Coetzee (2014, 2015a, 2015b) developed the term ‘psychosocial career preoccupations’, which can be defined as an individual’s psychological state resulting from concerns about his or her career that are at the forefront of his or her thoughts at a particular point in time. These concerns typically relate to issues to do with vocational developmental tasks of adaptability that one comes across during a career life cycle and that are significant in the career life story (Coetzee, 2015a; Savickas, 2005; Sharf, 2010). The theoretical model on which this definition is based is discussed in the following section.

### 3.2.2 Theory of psychosocial career preoccupations

Coetzee’s (2014) theory of psychosocial career preoccupations has its origins in contemporary career theory, including Super’s life stage theory (1957; 1990) and Savickas’s theory of developmental career tasks of adaptability (2005, 2013). According to traditional career theories, an individual’s career can be viewed as a series of separate stages, where
each stage involves normative developmental tasks as well as a discrete arrangement of attitudes and behaviour (Arnold & Clark, 2015; Hall, 1976; Super, Savickas, & Super, 1996). Each stage represents momentous career segments in which individuals develop particular attitudes towards the employment relationship (Lam, Ng, & Feldman, 2011; Low et al., 2016).

In Super’s (1957, 1980) career-stage model, employees at various career stages will display particular developmental ambitions and personal concerns (Low et al., 2016). Super (1957, 1980) identified four career stages, namely the exploration stage, where individuals are anxious about the correct vocational choice; the establishment stage, where individuals are excited to follow a career within an organisation, with the emphasis on organisational success; the maintenance stage, where employees continue to be productive within the organisation but are concerned about aspects that are not related to work; and the disengagement stage, where employees will leave the organisation in due course and devote their time and effort to arrangements for their life after work (Low et al., 2016). Table 3.4 summarises theses career stages, together with the developmental ambitions and personal concerns of each career stage.
Table 3.4
Super’s Life Stage Model (Coetzee & Roythorne-Jacobs, 2012)

<table>
<thead>
<tr>
<th>Life stages</th>
<th>Characteristics</th>
<th>Self-related developmental tasks</th>
<th>Work-related career developmental tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration</td>
<td>Crystallising, specifying and implementing self-concept</td>
<td>Connecting self-concept to world of work (developing self-concept)</td>
<td>Identifies types of work through part-time jobs, and job shadowing</td>
</tr>
<tr>
<td>(adolescence, age +14–25)</td>
<td></td>
<td>Tentative career choices – learning more about opportunities</td>
<td>Makes transition from school to work or further education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trial and error (exploration and experimentation with possible selves)</td>
<td></td>
</tr>
<tr>
<td>Establishment (early adulthood, age +25–45)</td>
<td>Stabilising, consolidating and advancing period of trial in the late twenties and a period of stabilisation in the thirties and early forties</td>
<td>Working to make one’s place in chosen field of work</td>
<td>Pursues advancement (e.g. responsibility) Economic stability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Settling down in chosen/permanent position</td>
<td>Succession of job changes before a final choice (trial)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learning to relate to others</td>
<td>During stabilisation, security and advancement become priorities</td>
</tr>
<tr>
<td>Maintenance (middle adulthood, age +46–65)</td>
<td>Holding, updating and innovating</td>
<td>Realistic self-assessment, opportunities to learn new skills, and the sharing of skills and expertise Setting new priorities</td>
<td>Maintains levels of achievement despite challenges of competition, rapid changes in technology and family</td>
</tr>
<tr>
<td>Decline (old age from +65)</td>
<td>Decelerating, retirement, planning and retirement living</td>
<td>Finding new balance of involvement with society and with self Reappraisal of self-concept</td>
<td>Decline in work activity – greater activity in roles involving family, volunteer work and leisure Community service</td>
</tr>
</tbody>
</table>
Table 3.4 indicates that each career stage can be characterised by certain developmental tasks for the individual as well as developmental tasks for the individual’s career. Savickas’s career construction theory (Savickas, 1997; 2002; 2005) provides insight into vocational development that relates to a contextual viewpoint of vocational development through the life-span (Duffy, Douglass, & Autin, 2015). Underlying this theory is the notion of adaptability – the psychosocial process that relates to an individual’s inclination to manage change and transitions (Maree, 2016; Savickas, 2013). The career construction theory thus perceives vocational development as an ongoing process of refining the match between the self and circumstances through dynamic engagement in the psychosocial developmental activities of adaptability (Coetzee 2015a; Savickas, 2005; 2013). Savickas (2005; 2013) distinguishes between four main career stages, based on Super’s (1957; 1980) career stage theory. These involve psychosocial activities of adult vocational development that encompasses a mini rotation through all the various transitions an individual faces throughout his/her life (Coetzee, 2015b; Sharf, 2010). The four career stages, together with the preoccupations of developmental tasks of adaptability, are reflected in Table 3.5 (Coetzee, 2015b):
### Table 3.5

*Main Career Stages, Developmental Adaptability Tasks and Preoccupations*

<table>
<thead>
<tr>
<th>Career stage</th>
<th>Developmental adaptability tasks</th>
<th>Preoccupations (dominant life themes)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exploration</strong></td>
<td>Gathering knowledge and information regarding society, how to manage work concerns in the process of exploring options for a career and taking occupational decisions that match the relevant sociocultural environment (Sullivan &amp; Crocitto, 2007)</td>
<td>Interpretation of what employees may want to do, in what manner they learn about entrance level jobs, how they perform in their part-time positions, and whether they want additional education (Coetzee, 2015b; Sharf, 2010)</td>
</tr>
<tr>
<td><strong>Establishment</strong></td>
<td>Being a part of an organisation as well as the greater community in the course of discovering one's professional niche (Sullivan &amp; Crocitto, 2007)</td>
<td>Concerns relating to advancement in one's work, experiencing a sense of stability on the job, knowing the rudimentary requirements of the job, and perceiving the job on a long-term basis (Coetzee, 2015b; Sharf, 2010)</td>
</tr>
<tr>
<td><strong>Maintenance</strong></td>
<td>Maintaining one’s decisions about one’s occupation and one’s self-concept throughout the process of experiencing transitions in the work environment, re-evaluating the self and family concerns, and comparing oneself with other employees (Sullivan &amp; Crocitto, 2007)</td>
<td>Concerns relating to keeping one’s job together with learning the requirements of the job, improving one’s performance, and managing new technological developments (Coetzee, 2015b; Sharf, 2010)</td>
</tr>
<tr>
<td><strong>Disengagement</strong></td>
<td>Shaping a fresh life arrangement, separate from an occupation and organisation in the course of reflecting on one’s life (Sullivan &amp; Crocitto, 2007)</td>
<td>Concerns relating to losing a job as a result of health or physical restrictions, decelerating work, or working part-time, or retiring (Coetzee, 2015b; Sharf, 2010)</td>
</tr>
</tbody>
</table>
Table 3.5 summarises the adult developmental tasks that are related to adaptability within each career stage, and which in turn provide guidance on how to reinstate stability and to sustain continuity in a widening, ambiguous social context (Coetzee, 2015b; Savickas, 2005). The contemporary career is developing into a less organised career (Arthur & Rousseau, 1996; Zhou et al., 2016) and can therefore be regarded as a succession of lifelong decisions, changes and adjustments (Coetzee, 2015b; Savickas, 2013). As a result of these changes and transitions, individuals have the tendency to forecast and adapt to the lifelong career transitions and role changes (Cook & Maree, 2016; Hartung, 2007). Researchers have identified additional career preoccupations, not related to careers or age, which may be significant in the career-life stories of adults and the result of career experiences in a troubled economy and an unreliable employment market (Coetzee, 2015a).

Preoccupations concerning an individual’s employability, constant learning and development, the ability to improve skills, adaptability in the face of frequent changes, integration and flexibility of work/life, career mobility, revitalisation and transition, career agency, awareness of self, and fostering close connections with colleagues and social community are some preoccupations not related to career stages or age (Coetzee, 2015a; 2015b; Hall, 2013; Savickas, 2013; Sullivan, 2013). Consequently, Coetzee (2014; 2015a; 2015b) identified three principle dimensions of psychosocial career preoccupations that are not related to age or career stages. An overview of these preoccupations is provided in Table 3.6 below:

Table 3.6

Psychosocial Career Preoccupations

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Psychosocial career preoccupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career establishment preoccupations</td>
<td>Fitting into a group, career and economic steadiness and security, creating prospects for self-expression and personal growth and development, and progressing in one’s career in the current organisation</td>
</tr>
<tr>
<td>Career adaptation preoccupations</td>
<td>Employability-related fears about adjusting to fluctuating circumstances that might include career changes and adjusting one’s interests, talents and competencies to fit opportunities in the employment market</td>
</tr>
<tr>
<td>Work/life adjustment preoccupations</td>
<td>Settling down, reducing one’s workload and reaching greater synchronisation between one’s work and personal life, possibly extracting oneself from remunerated employment</td>
</tr>
</tbody>
</table>
Table 3.6 reveals the three dimensions as the foundation of psychosocial career preoccupations. On reconsidering the models of Savickas (2013) and Coetzee (2015b), it appears that there are several commonalities:

- The career establishment preoccupations correlate with the developmental adaptability tasks that relate to the exploration career stage (fitting-in and progressing within the organisation and feeling a sense of stability on the job).
- The career adaptation preoccupations correlate with the developmental adaptability tasks that relate to the career maintenance stage (maintaining the self-concept in the process of experiencing changes in the work environment, learning more about new requirements, improving one’s performance and dealing with new technological developments).
- Career preoccupations of work/life adjustment concerns correlate with the developmental adaptability tasks relating to the maintenance career stage (re-evaluating the self and family concerns) and the disengagement career stage (shaping a fresh life arrangement separate from the organisation, decelerating work or retiring).

It can be concluded from the above that a distinction can be drawn between career theories linking certain career preoccupations to a particular age (Super, 1957) or career stage (Savickas, 1997), and Coetzee’s (2014) theory of psychosocial career preoccupations that links career preoccupations to vocational developmental tasks. A study conducted by Coetzee (2015a) concluded that certain career preoccupations were not age-related. These findings (Coetzee, 2015a) suggested that the career establishment preoccupations of an employee are inclined to be positively related to their commitment to work, and negatively to external interests of job and career, therefore potentially affecting retention. Little research regarding Coetzee’s (2015a) framework of psychosocial career preoccupations is available, and it is hoped that this study will make a valuable contribution to the field. There is also no current research linking psychosocial career preoccupations and the psychological contract. It can be assumed that employees sharing similar psychosocial career preoccupations would share similar psychological contracts in terms of what they expect from the organisation and what they promise to the organisation.

3.3 VARIABLES INFLUENCING PSYCHOLOGICAL CONTRACT AND PSYCHOSOCIAL CAREER PREOCCUPATIONS
The following variables (gender, race, age, job level, and employment status) influence the psychological contract and psychosocial career preoccupations:

3.3.1 Gender

Gender in this context can be defined as the roles, behaviours, actions, and characteristics that a particular society deems appropriate for men and women (Chin & Hung, 2013). Gender should be regarded as a determining factor in professional development (Marušić & Bodroža, 2015). Studies have shown that women’s careers are formed differently than those of their male counterparts as a result of their life contexts (Lewis, Harris, Morrison, & Ho, 2015; O’Neil & Bilimoria, 2005). Female employees chase different career attributes from men as well as different career opportunities related to individual reasons or lifespan progression (Grant-Vallone & Ensher, 2011; Lewis et al., 2015). Women advance through their careers at different rates and in divergent sequences, dependent on a number of factors including family responsibilities and status (Finstad-Milion & Naschberger, 2014; Yarnall, 2008). Table 3.7 provides a summary of characteristics of the career development paths of men and women (Finstad-Milion & Naschberger, 2014). The career orientation of a man is more focused on physical, traditional career success, and is thus more inclined towards a bounded, hierarchical career, whereas the career orientation of a woman is more focused on psychological, non-traditional career success, thus conforming to a boundaryless career (Jung & Takeuchi, 2016; Sullivan & Arthur, 2006).

Table 3.7

<table>
<thead>
<tr>
<th>Characteristics of Men’s and Women’s Traditional Career Paths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man’s career</td>
</tr>
</tbody>
</table>

88
Table 3.7 differentiates between the career paths of males and females in terms of the direction of the career, the individual choice, purpose, career exploration and retreat from the labour market. The psychological contract of males and females may differ and gender does affect the relationship between the psychological contract and an individual's intention to leave (Blomme et al., 2010). Regardless of their increasing education and training levels, together with their significant involvement in the research sector, representation of females at top levels of academic and research institutions is still extremely low (Hüttges & Fay, 2015). It is therefore essential to recognise the obstacles in the way of females' career development in academic and research environments if the full potential of human capital of a society is to be realised (Hüttges & Fay, 2015).

Gender may have an effect on the perceptions of employees of an organisation (Bellou, 2009; Mathieu & Zajac, 1990) as each gender appears to react differently to human resource management practices (Chin & Hung, 2013). Women place more value on enjoyable work, the achievement of goals and receiving recognition (Bellou, 2009). They place greater value on intrinsic job factors such as challenging work opportunities, training and development and a friendly working environment, whereas their male counterparts are more concerned with extrinsic job factors such as high compensation, fringe benefits and job security (Bellou, 2009; Metcalfe, 1993). Research has shown, that the development, retention and advancing of women still falls short within organisations (Walsh, Fleming, & Enz, 2016).

3.3.2 Race
Employees from minority groups within an organisation may have different expectations of the psychological contract (Pant & Vijaya, 2015). As a result, black professionals experience several career challenges (Maree, 2016). Research into methods to address the career concerns of black employees in South Africa at different levels is particularly necessary (Maree, 2016). Furthermore, there is a need for further research into the important elements of the psychological contract for individuals from different race groups (Pant & Vijaya, 2015).

### 3.3.3 Age

Rousseau (2001) argues that an employee will develop a mental schema of his or her psychological contract from various sources, including influences from society as well as formative pre-employment aspects. For this reason, employees born into different generational cohorts have developed different mental schemas with regard to the environment in which they work and live arising from situations and events that occurred during adolescence (Lub et al., 2016). These various generational mental schemas can consequently influence the psychological contract of individuals from these generations in the following ways: firstly, through the development of perceived employer obligations that are generation-specific (Lub et al., 2016; Lub, Bal, Blomme, & Schalk, 2014; Lub, Nije Bijvank, Bal, Blomme, & Schalk, 2012); and secondly, through the manner in which various generations respond to fulfilled employer obligations (Lub et al., 2016; Lub et al., 2014).

Lub et al. (2016) believe that some of their findings concerning generational cohorts and psychological contract obligations could also be ascribed to career stage effects. Academics in early career stages have various expectations in terms of their professional relationships and career advancement (O’Meara et al., 2016). They perceive their role as comprising three dimensions, namely teaching, research and service (Jung, 2014). They are idealistic, passionate about their profession, and expect to apply their abilities (Jung, 2014). This period is accompanied by high stress levels and low satisfaction (Jung, 2014). The experience of employees in the exploration stage creates job attitudes, work environment perceptions and levels of job satisfaction that are less than positive (Cron & Slocum, 1986; Malik & Subramanian, 2015). Young academics worldwide experience the first few years in academia as perplexing, anxiety-inducing, and characterised by conflicting messages (Jung, 2014).

In the middle stage of their career, these individuals see greater synergy between their roles (Jung, 2014). They have more positive perceptions about their work environment (Malik & Subramanian, 2015). Research has found that academics in the maintenance stage experienced greater and more positive relationships between various aspects of job
satisfaction and role ambiguity (Malik & Subramanian, 2015). As academics progress in their careers, their expectations are adjusted downward (O’Meara et al., 2016). In the later stages of their careers, academics attempt to redefine their role as academic in order to consider a specific focus area (Jung, 2014). Disengaged senior academics experience the loss of important colleagues, an absence of collegiality, and gaps between policy and practice as unmet work expectations (O’Meara et al., 2016).

Several studies conducted on pay satisfaction and career stages have shown that employees’ satisfaction with their compensation is negatively correlated with age and career stage (Gould & Hawkins, 1978; Kowske et al., 2010; Malik & Subramanian, 2015; Miao, Lund, & Evans, 2009; Morrow & McElroy, 1987). It is thus clear that different generations and employees at different career stages exhibit different needs. Table 3.8 below provides a summary of needs at each career stage (Chen et al., 2003a) and the preoccupations of each generational cohort.
<table>
<thead>
<tr>
<th>Career stage</th>
<th>Career stage preoccupations</th>
<th>Generational cohort</th>
<th>Preoccupations</th>
</tr>
</thead>
</table>
| Disengagement stage (transition from working to retirement) | • Only concerned with successful completion of career  
• Less emphasis on current job and more focus on other roles  
• Arranging activities related to retirement  
• Handing over the job; providing direction and consultation; and passing experience to less experienced personnel  
• Maintaining an acceptable level of performance while building a stronger sense of self-identity outside work  
• Shifting time and energy towards family life, friendships, religion, etc.  
• Need to adapt to a less productive lifestyle, staying at home with no specific duties | Baby Boomers (1946–1964) | • Brought up in era of positivity, opportunity and growth  
• Competitive in nature, believe in growth, change and expansion  
• Work is the most important aspect of their lives and their work ethic is strong  
• Respect authority, want to be seen as equals, seek consensus, dislike authoritarianism and laziness |
| Maintenance stage (over the age of 45 years) | • Retaining earlier accomplishments and re-evaluation of career direction  
• Already achieved a certain level of on-the-job status and keen to retain this status, while re-evaluating future career prospects  
• Already gained a considerable level of knowledge, rich in job experience and qualified to direct others  
• Promotional opportunities limited; already high up in organisational hierarchy | Generation X (1965–1979) | • Brought up in an environment of two career families, rising divorce rates, downsizing and dawn of rapid technological and communication developments  
• Work attitudes of job insecurity and expectations of work/life balance  
• Independent, individualistic and distrustful of large organisations |
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<tr>
<td>• Adopting parallel, cross-functioning means to integrate work and widening professional horizons to make work more interesting</td>
<td>• What they lack in social skills they make up for in their technical abilities</td>
<td>• Unlikely to work for only one organisation in their life and place no value on working long hours</td>
<td>• Respond well to prompt feedback and credit for their efforts</td>
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<tr>
<td>• Keen to experience success and respect of co-workers</td>
<td>• Technologically savvy and masters of mobile phones, the internet and video games</td>
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<tr>
<td>• Ambitious and industrious, eager to improve knowledge and open to pursuit of professional goals</td>
<td>• Dislike hierarchy, find it difficult to communicate with superiors and are less likely to accept leadership from an older superior</td>
<td>• High levels of confidence and optimism, together with expectations of immediate feedback and constant recognition</td>
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<tr>
<td>• Keen to keep track of their personal performance status, and external opportunities and threats – to determine their competitive advantage</td>
<td>• Enter the workplace with good education as far as quantity and quality are concerned</td>
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<td>• Tasks involve raising professional knowledge and level of autonomy to boost job performance, creative development and innovative skills</td>
<td>• Communication and problem-solving skills are below average</td>
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<td>• More willing to take on additional responsibilities</td>
<td>• Do not like to be micro-managed</td>
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<td>• Seek empowerment and greater levels of autonomy</td>
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<td>• Desire promotion and to balance requirements of job with family responsibilities</td>
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<tr>
<td>• Focus is on establishing a suitable professional field through self-assessment, and gaining an understanding of own interests and abilities</td>
<td>• Technologically savvy and masters of mobile phones, the internet and video games</td>
<td>• Evaluate own level of interest</td>
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</tbody>
</table>
- Need to upgrade their skills and knowledge to meet the requirements of the job
- Obtaining necessary knowledge to enable successful performance
- Dislike hierarchy, find it difficult to communicate with superiors and are less likely to accept leadership from an older superior
- High levels of confidence and optimism, together with expectations of immediate feedback and constant recognition
- Enter the workplace with good education as far as quantity and quality are concerned
- Communication and problem-solving skills are below average
- Do not like to be micro-managed
Table 3.8 provides an explanation of the particular career stage into which the three generational cohorts, the Baby Boomers, Generation X and Generation Y, fit currently. Baby Boomers can be regarded as in the disengagement career stage, Generation X employees are more likely to fit into the maintenance career stage and Generation Y employees will be either in the establishment or exploration career stage.

3.3.4 Job level

Researchers have indicated that the content of the psychological contract varies among employee groups at different job levels or hierarchical levels within the organisation. Thus this content will differ between shop floor workers, supervisors and managers (Pant & Vijaya, 2015).

3.3.5 Employment status

Organisational tenure can be defined as the period of service an employee has rendered within a specific organisation, as well as the experience this employee has accrued in this organisation (Jiang, Wang, & Lin, 2016). A short-tenured employee will have greater expectations of career development, intrinsic tasks and self-control (Jiang et al., 2016).

In conclusion, different person-centred characteristics may influence the psychological contract and the psychosocial career preoccupations of employees. There is a clear distinction between the career paths of males and females and therefore their expectations regarding their careers and employment relationship will also differ. Age is also an important factor when considering the psychological contract of employees; however, this might be more closely related to the career stage of the employee than to his or her actual age. Kooij, De Lange, Jansen, and Dikkers (2007) and Holian (2015) argue that age can be conceptualised from four different approaches, namely chronological age, performance-based age (influenced by an individual’s abilities), psychosocial age (how an individual sees him/herself), organisational age (seniority level and age compared to other colleagues), and a life span approach to age (influenced by life stage, environmental and biological aspects). The psychological contract of employees from various job levels and employment status might also differ.
3.4 INTEGRATION: TOWARDS CONSTRUCTING A PSYCHOLOGICAL RETENTION PROFILE FOR DIVERSE GENERATIONAL GROUPS

Diverse employees bring unique skills sets and characteristics to an organisation. It is imperative to understand their expectations in order to understand them better, both individually and collectively (Pant & Vijaya, 2015). Psychological contract changes have received a great deal of attention in the psychological contract literature; however, few studies have considered how organisations can develop psychological contracts that fit their employees’ expectations concerning contributions and inducements (Low & Bordia, 2011; Low et al., 2016). The current study used the social exchange theory, which is the leading theory focused on the employer-employee relationship (Suutari, Tornikoski, & Mäkelä, 2012) as the foundation for the psychological contract. This theory holds that the employee and employer participate in an exchange relationship, where contributions made by one party are reciprocated by the other (Lub et al., 2016). Pant and Vijaya (2015) believe that the psychological contract can be used as a valuable framework in forming a better understanding of the expectations of a heterogeneous set of employees and in managing them more effectively as a result.

Moreover, career scholars have also indicated that individuals’ beliefs regarding their decisions, desires and attitudes differ with their career stage (Lam et al., 2011; Low et al., 2016). Consequently, the career stage of employees and/or their particular psychosocial career preoccupations at a specific time in their lives might have an influence on their inclinations towards certain psychological contract elements (Low et al., 2016), as well as their organisational commitment and retention (Coetzee, 2015a; Döckel et al., 2006; João & Coetzee, 2012). Using the social exchange theory, the researcher can define an individual’s career as a set of various social exchanges through which an individual develops his or her own perceptions of a career (Hall, 2013; Suutari et al., 2012). This individual, unique career perception is developed by an employee’s own preferences and preoccupations concerning the inducements or returns that he or she expects from the employer (Suutari et al., 2012).

The social exchange theory (Blau, 1964) therefore provides a concrete framework for linking the concepts of the psychological contract and career development, as both these concepts deal with individuals’ perceptions of the exchange relationship between them and their employer. By adopting this theory and addressing research aim 4, this study proposed a theoretical relationship between the psychological career-related attributes (psychological contract, psychosocial career preoccupations, and generational cohorts) and the retention
factors constructs (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment). Consequently, centred on the theoretical relationship between the psychological career-related attributes and the retention factors constructs, the theoretical integration further addressed research aims 4 and 5, which was the construction of a theoretically integrated psychological retention profile that could be used to inform retention management practices and to outline the implications of the psychological retention profile for retention management practices.

Chapters 2 and 3 provided a comprehensive review of the literature on the independent variables, the psychological career-related construct variables, the moderating variables, generational cohorts and psychosocial career preoccupations and the dependent variable, the retention factors. This was relevant to this research study and addressed research aims 1, 2 and 3, that is to conceptualise generational diversity and retention in the diverse and multi-cultural contemporary workplace; to conceptualise the retention factors of compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance, and commitment; to establish how individual biographical characteristics influenced these retention factors; to conceptualise the psychological career-related attributes of the psychological contract and psychosocial career preoccupations; and to establish how individual biographical characteristics might influence the development of these competences.

Figure 3.1 provides a diagrammatic illustration of the proposed integrated theoretical relationship between the psychological career-related attributes and the retention factors constructs. Table 3.8 provides an overview of the hypothesised relationship between the constructs and Figure 3.3 reflects an overview of the proposed psychological retention profile.
Figure 3.1 An integrated overview of the hypothesised relationship between the psychological career-related attributes and the retention factors constructs
3.4.1 Retention management in the contemporary workplace

It became evident from the literature review that the retention of employees of high quality is of the utmost importance for the survival of any organisation (Biemann, Kearney, & Marggraf, 2015; Jiang et al., 2016). Retention of employees is a major cause for concern and a complex issue for many organisations today (Shore, 2013; Tladinyane et al., 2013). Employees, intellectual property, expertise, relationships and business processes are the most valuable assets of an organisation (Byerly, 2012).

3.4.2 Diversity management in the contemporary workplace

Organisations worldwide are becoming more diverse, flexible and multifaceted in response to intense global competition (Jung & Takeuchi, 2016). The contemporary workforce is diverse both at surface level, in matters of gender, race, ethnicity, nationality, age and physical capabilities, and at a deeper level, in aspects such as values, attitudes, personality, education and religion.

3.4.3 Psychological contract

The psychological contract construct was conceptualised in section 3.1 of this chapter and illustrated in Figure 3.1. The characteristics of the psychological contract were discussed, including the perceptual and idiosyncratic nature of the psychological contract, its typology, breaches and violation of the contract as well as the state of the psychological contract. These characteristics relate to the subscales of the psychological contract, which include employer obligations, employee obligations, satisfaction and state of the psychological contract. The psychological contract can assist in determining how it relates to satisfaction with retention factors, compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment.

3.4.4 Psychosocial career preoccupations

The construct of psychosocial career preoccupations was conceptualised in section 3.2 of this chapter and depicted in Figure 3.1. Coetzee’s (2014) theoretical model was discussed in detail and the subscales of career establishment preoccupations, career adaptation preoccupations and work/life adjustment preoccupations were explained. Employees at different stages in their career development have different psychosocial career preoccupations; psychosocial
career preoccupations might assist in determining the levels of satisfaction with various retention factors of employees with different psychosocial career preoccupations.

3.4.5 Generational cohorts

The construct generational cohorts was defined and explained in Figure 3.1. The three generational cohorts that relevant for this study, namely Baby Boomers, Generation X and Generation Y, were discussed in detail in Chapter 2. The psychological contract of different generations might differ and therefore their satisfaction with the retention factors may also differ. Ultimately, this could have an effect on the retention of valuable employees.

3.4.6 Retention factors

The retention factors construct was defined and explained in Figure 3.1 and all the retention factors, including key HR practices such as compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment, were discussed in detail in Chapter 2. The demographic characteristics influencing retention factors include generational cohorts, gender, race, marital status, job level and employment status.

Moreover, the relationships between the four constructs were also explored. A conceptual outline of the four constructs and their interrelationships on a theoretical level is provided in Figure 3.2. The hypothesis is that the psychological career-related attributes will have an influence on retention factors constructs.
Figure 3.2 Hypothesised relationship between psychological career-related attributes and retention factors

It was thus necessary to investigate the relationship between the various sub-elements of each of the three constructs. It was hoped that this would provide important human resource practitioners with insights into the relationships between the various constructs and ultimately indicate the actions required to retain valued and diverse employees. The hypothesised relationships between the constructs, based on information gleaned from the literature review, are outlined in Figure 3.3. The hypothesised integrated relationship between the psychological career-related attributes and the retention factors constructs are illustrated in Table 3.8 according to the three psychological behavioural dimensions, namely individual, practical and organisational. Human resource practitioners and industrial psychologists could use this theoretical relationship to devise meaningful retention strategies for employees from different career stages and generational cohorts. This could ultimately enhance the retention of valued employees. Additionally, in order to be of greater assistance to human resource practitioners and industrial psychologists, this study developed an empirically tested psychological retention profile, illustrated in Figure 3.3 and summarised in Table 3.9.

Table 3.9
## Psychological Retention Profile Constituting Psychological Contract, Psychosocial Career Preoccupations, Generational Cohorts, and Retention Factors

<table>
<thead>
<tr>
<th>Psychological behavioural dimensions</th>
<th>Psychological Contract</th>
<th>Psychosocial Career Preoccupations</th>
<th>Generational Cohorts</th>
<th>Retention factors</th>
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</thead>
<tbody>
<tr>
<td>Individual</td>
<td>• Employer obligations</td>
<td>• Career establishment preoccupations</td>
<td>• Baby Boomers</td>
<td>• Compensation</td>
</tr>
<tr>
<td></td>
<td>• Employee obligations</td>
<td>• Career adjustment preoccupations</td>
<td>• Generation X</td>
<td>• Job characteristics</td>
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<tr>
<td></td>
<td>• Satisfaction with</td>
<td>• Work/life adjustment preoccupations</td>
<td>• Generation Y</td>
<td>• Training and development</td>
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<td>psychological contract</td>
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<td>• Supervisor support</td>
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<td></td>
<td>• State of the</td>
<td></td>
<td></td>
<td>• Career opportunities</td>
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<td></td>
<td>psychological contract</td>
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<td>• Work/life balance</td>
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<td>• Commitment</td>
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<tr>
<td>Organisational</td>
<td>• Employer obligations</td>
<td>• Career establishment preoccupations</td>
<td>• Baby Boomers</td>
<td>• Compensation</td>
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<td></td>
<td>• Employee obligations</td>
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<td>• Satisfaction with</td>
<td>• Work/life adjustment preoccupations</td>
<td>• Generation Y</td>
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<td>the psychological</td>
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<td>• Supervisor support</td>
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<td>psychological contract</td>
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<td></td>
<td>• Commitment</td>
</tr>
<tr>
<td>Implications for retention</td>
<td>The psychological</td>
<td>The psychosocial career preoccupations have the potential to assist in determining the levels of satisfaction with retention factors among employees with different psychosocial career preoccupations</td>
<td>The generational cohorts have the potential to assist in determining the difference in levels of satisfaction with retention factors between generational cohorts</td>
<td>The retention factors may have an effect on the retention of valuable, diverse employees</td>
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<td>contract has the</td>
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Figure 3.3 illustrates the theoretical hypothesised psychological retention profile that includes the psychological career-related attributes and the retention factors constructs.
As shown in Figure 3.3, the theoretical psychological retention profile has two dimensions, individual and organisational.

On both an individual and an organisational level, the retention of individuals may be subject to employer obligations, employee obligations, and satisfaction with the psychological contract and the state of the psychological contract (Rousseau, 1995; Guest, 2004). Retention practices should take into account the content of the psychological contract of individual employees as well as their satisfaction with the psychological contract and the state of the psychological contract. This would assist in the development of specific retention strategies.
that might enhance employees’ psychological contracts and lead ultimately to greater commitment and lower staff turnover.

Employees’ psychosocial career preoccupations, such as career establishment preoccupations, career adaptation preoccupations and work/life adjustment preoccupations could also have an influence on their retention (Coetzee, 2014). Retention practices should determine individual employees’ specific career preoccupations. This could inform retention practices and foster the development of retention strategies that will encourage employees with different psychosocial career preoccupations to remain at the institution concerned.

The specific generational cohort to which an individual belongs, that is Baby Boomers, Generation X or Generation Y, might also have an influence on his/her retention (Mannheim, 1952). Retention practices should therefore be informed by the specific needs of different generational so as to develop retention strategies that are specific for employees from particular generational cohorts.

The retention factors that might influence an individual’s retention include compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment (Döckel, 2003). If they are to be successful, retention practices should be designed with these retention factors in mind.

Based on the hypothesised theoretical models, the following theoretical hypotheses were formulated. Their implications for retention practices are discussed below:

3.4.7 Hypothetical relationship between psychological contract and psychosocial career preoccupations

Individuals with different psychosocial career preoccupations will have different expectations regarding employer and employee obligations in their psychological contract. Their feelings of satisfaction as far as the psychological contract is concerned might differ, as may the state of their psychological contract across the various psychosocial career preoccupations. Low et al. (2016) argue that the role of employees at various career stages will guide them in determining appropriate employer and employee obligations. Provided that employees experience different developmental ambitions and personal concerns at different career stages, they might require different inducements to fulfil these needs (Low et al., 2016; Super, 1957).
For these reasons, retention policies ought to be designed in such a manner as to accommodate the different needs or preoccupations of employees who have different psychosocial career preoccupations. For instance, an employee with work/life adjustment preoccupations might place less value on career opportunities as a retention factor than an employee with career establishment preoccupations.

3.4.8 Hypothetical relationship between the psychological contract and the generational cohorts

Individuals from different generations are likely to have different expectations of employer and employee obligations in their psychological contract, and they may view the psychological contract very differently too. Employees from different generational cohorts have experienced life events and circumstances during adolescence which are particular to that generation. They have developed particular mental schemas of the world in which they live and work; these different schemas will have an impact on their psychological contract (Lub et al., 2016).

For this reason, retention policies should be designed in such a manner that the needs of employees from different generational cohorts are taken into account. For example, job security is a less important retention factor for employees from generation Y than for those from generation X or the Baby Boomers.

3.4.9 Hypothetical relationship between the psychological contract and retention factors

The psychological contract refers to an individual’s perception of the terms and conditions of a mutual exchange agreement between him/her and the organisation (Rousseau, 1989); this contract and how it relates to retention factors will differ from individual to individual.

The implications of this hypothesis for retention practices are that they will have to consider the individual expectations of employees if they are to be successful. Each employee has a unique perception of the promises made between employee and organisation and the mutual obligations implied as well as the state of the psychological contract. Individual employees will differ in terms of what they expect from their organisation: an individual who is dissatisfied with his/her psychological contract and the state of his/her psychological contract will be more difficult to retain. Such dissatisfaction may lead to a breach of the psychological contract, which may in turn have a negative effect on employee behaviour (Kraak, Lunardo, Herrbach...
Organisations will therefore have to ensure that employees are satisfied with the terms of their psychological contract.

3.4.10 Hypothetical relationship between the psychosocial career preoccupations and generational cohorts

There may be a correlation between psychosocial career preoccupations and generational cohorts. Employers and academic institutions have a real opportunity to improve career development if they understand the particular needs of different generations (Foster, 2017). Holian (2015) argues that generational differences can be ascribed to differences in life and career stages. Kong, Sun, and Yan (2016) found that employees from the Generation Y cohort were more concerned about their individual career development than employees from Generation X and the Baby Boomers. Other studies have indicated that employees from the Baby Boomers cohort, who are now in the late career stage and around the age of early to mid-50’s are changing their jobs, occupations and careers (Kojola & Moen, 2016).

Should there be a correlation between the psychosocial career preoccupations and the various generational cohorts, retention policies can be formulated in terms of these correlations.

3.4.11 Hypothetical relationship between psychosocial career preoccupations and retention factors

A correlation may exist between psychosocial career preoccupations, including career establishment preoccupations, career adjustment preoccupations and work/life adjustment preoccupations, and satisfaction with various retention factors, including compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment. An individual with certain psychosocial career preoccupations might be satisfied with retention factors that are different to those favoured by another individual with different psychosocial career preoccupations. Previous research has indicated that the career life stories of adults may include preoccupations such as employability concerns, continued learning, training and development opportunities, work/life balance, adaptability to frequent career changes and career mobility (Coetzee, 2015a; Hall, 2013; Savickas, 2013; Sullivan, 2013). Psychosocial career preoccupations at different stages of his/her career development might predict the levels of satisfaction this individual feels for various retention factors.

If there is a correlation between psychosocial career preoccupations and satisfaction with the retention factors, then retention management policies and strategies can be developed to take
these correlations into account. This would assist in the retention of employees with differing career developmental preoccupations.

3.4.12 Hypothetical relationship between generational cohorts and retention factors

There might be differences in terms of the levels of satisfaction felt for retention factors by individuals from the Baby Boomer, Generation X and Generation Y generational cohorts. A recent study by Foster (2017) found that Baby Boomers would consider remaining at the organisation for reasons of more flexible working hours and appropriate compensation. Generation X employees highlighted compensation, growth and development opportunities, and professional autonomy as key retention factors (Foster, 2017). Generation Y employees emphasised that career opportunities, regular feedback and work/life balance were important retention factors for them (Foster, 2017).

A relationship between the generational cohorts and the retention factors necessitates retention policies that are designed in such a manner as to take into account the various generational cohorts’ most valued retention factors. Retention strategies can then be designed to ensure that the retention factors are appropriate to the specific generational cohort.

3.4.13 Hypothetical moderating role of generational cohorts and psychosocial career preoccupations

Individuals from different generational cohorts might have a moderating effect on the relationship between the psychological contract variables and the retention factors variables. Several research studies of the psychological contract have failed to include the potential of generational differences in interpreting the psychological contract (Del Campo, Haggerty, Haney, & Knippel, 2011; Festing & Schäfer, 2014). As mentioned above, individuals from different generations have developed different mental schemas about the world they live and work in and this will have an impact on their psychological contract (Lub et al., 2016); individuals from a particular generation might share similar perceptions regarding the reciprocal relationship with their employers.

Individuals with different psychological career preoccupations might have a moderating effect on the relationship between the psychological contract variables and the retention factors variables. Employees at different career stages experience different developmental ambitions and personal concerns, and they will anticipate different inducements to fulfil their needs (Low
et al., 2016; Super, 1957). Therefore, individuals in a particular career stage might share similar desires in terms of the psychological contract.

The psychological contract of employees from the same generational cohort or with the same psychosocial career preoccupations might be similar and thus they may be satisfied with similar retention factors. It would thus be useful to determine the psychological contracts of the three generational cohorts and their psychosocial career preoccupations to build a profile that will enable one to determine which retention strategies are most appropriate to each generational cohort and psychosocial career preoccupation.

3.5 EVALUATION AND SYNTHESIS

The main objective of the literature review was to determine the relationship dynamics between an individual’s psychological career-related attributes (psychological contract, psychosocial career preoccupations and generational cohorts) and his/her satisfaction with several retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, and work/life balance).

This literature study found that South African universities, faced with an ageing workforce, are finding it very difficult to retain academics who can continue to provide services to humanity (Dube & Ngulube, 2013). Many organisations struggle with the concept of retention and this creates huge difficulties for them. Failure to retain an employee implies not merely the departure of an employee; it is associated with various turnover costs including separation costs (Byerly, 2012; Cascio, 1976; Masango & Mpofu, 2013; Schlechter et al., 2015); vacancy costs (Byerly, 2012; Cascio, 1976; Masango & Mpofu, 2013; Morrell et al., 2004; Ratna & Chawla, 2012; Schlechter et al., 2015; Takawira et al., 2014), replacement costs (Byerly, 2012; Cascio, 1976; Jain, 2011; James & Mathew, 2012; Masango & Mpofu, 2013; Morrell et al., 2004; Ratna & Chawla, 2012; Schlechter et al., 2015; Takawira et al., 2014), training costs (Byerly, 2012; Cascio, 1976; Jain, 2011; James & Mathew, 2012; Masango & Mpofu, 2013; Morrell et al., 2004; Ratna & Chawla, 2012; Schlechter et al., 2015; Takawira et al., 2014) and performance differential costs (Byerly, 2012; Cascio, 1976; Jain, 2011; James & Mathew, 2012; Morrell et al., 2004; Ratna & Chawla, 2012; Takawira et al., 2014).

In an effort to assist human resource practitioners and industrial psychologists, Döckel (2003) identified six critical retention factors to consider in the retention of high technology skills employees. These factors are key HR practices relating to compensation, job characteristics, opportunities for training and development, supervisor support, career opportunities, and work/life
balance and commitment. The purpose of this study was therefore to determine how the psychological contract, psychosocial career preoccupations and generational cohorts related to Döckel’s (2003) six retention factors.

The wide-ranging social concerns raised globally by a multigenerational workforce have encouraged research into developments and concerns that might affect organisations, managers and employees (Holian, 2015). Table 3.10 provides a summary of the current literature that relates the three generations in question the Baby Boomers, Generation X and Generation Y, to the retention factors of compensation, job characteristics, training and development, supervisor support, career opportunities and work/life balance:

Table 3.10

<table>
<thead>
<tr>
<th>Generations and Retention Factors</th>
<th>Literature source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retention factors</strong></td>
<td></td>
</tr>
<tr>
<td>Compensation</td>
<td>Bussin &amp; Van Rooy; 2014; Gamage et al., 2014; Michael, 2014; Queiri et al., 2014</td>
</tr>
<tr>
<td>Job characteristics</td>
<td>Appannah &amp; Biggs, 2015; Gamage et al., 2014; Gilley et al., 2015; Michael, 2014</td>
</tr>
<tr>
<td>Training and development</td>
<td>Appannah &amp; Biggs, 2015; Aruna &amp; Anitha, 2015; Michael, 2014; Price Water house Coopers, 2008; Shaw, 2008</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>Aruna &amp; Anitha, 2015; Crumpacker &amp; Crumpacker, 2007</td>
</tr>
<tr>
<td>Career opportunities</td>
<td>Aruna &amp; Anitha, 2015; Burmeister, 2009</td>
</tr>
<tr>
<td>Work-life balance</td>
<td>Appannah &amp; Biggs, 2015; Earl &amp; Taylor, 2015; Eversole et al., 2012; Gilley et al., 2015; Houlihan, 2015</td>
</tr>
</tbody>
</table>

It is evident from the literature that different generational cohorts might value the retention factors differently. Holian (2015) believes that there appears to be a gap in research studies that have been conducted and very few provide improved techniques to support organisations in their understanding of managing a multigenerational workforce. Managing and understanding a diverse generational workforce in a better manner could contribute to the development of improved retention strategies that are more successful in retaining employees.

Together with the concerns related to a multigenerational workforce, a further concern is that these changes in the workforce might result in work expectations left unfulfilled (Lam & De
Campos, 2015). Such unfulfilled expectations are likely to have an influence on the psychological contract of employees. In Chapter 2 it was discussed that individuals from the same generational cohort will reason and act differently to individuals from other generations (Gursoy et al., 2008) as they share similar values and beliefs that will determine their behaviours and actions (Far-Wharton et al., 2012; Kupperschmidt, 2000). Karagonlar et al. (2016) argue that the formation of the psychological contract can be influenced through distinctive lifelong experiences and dealings with others; these experiences assist in the development of their schema of the employment relationship. The assumption is that the content of the psychological contract will be similar for those from the same generation and will differ between generations. The literature also makes it clear that an unfulfilled or violated psychological contract can lead to high turnover of valuable employees. It is thus necessary to determine the content of the psychological contract in each generation in order to develop a psychological retention profile for these diverse employees.

A second variable that might assist in the development of a psychological retention profile for diverse generational groups is psychosocial career preoccupations. Coetzee (2014) developed a theory that distinguishes between three core dimensions of psychosocial career preoccupations that are not related to age or career stage. Employees might find themselves in one of these dimensions: career establishment preoccupations; career adaptation preoccupations; and work/life adjustment preoccupations (Coetzee, 2014). Each of these dimensions has certain preoccupations. The assumption can be made that employees with similar psychosocial career preoccupations will have psychological contracts that share similar content.

The literature review has made it clear that the variables psychological contract, generational cohorts and psychosocial career preoccupations are all related to and have an influence on retention factors.

### 3.6 CHAPTER SUMMARY

In this chapter the concepts of the psychological contract and psychosocial career preoccupations were conceptualised. The variables influencing these two concepts were discussed. This was followed by an integration of the concepts in order to construct a psychological retention profile for diverse generational groups.
This chapter thus addressed research aims 3, 4, 5 and 6 of the literature review, namely to conceptualise the psychological career-related attributes of the psychological contract and psychosocial career preoccupations, and how an individual's biographical characteristics influence the development of these competencies; to conceptualise the theoretical relationship between psychological career-related attributes and retention factor constructs; to construct a theoretical integrated psychological retention profile that could be used to inform retention practices; and to outline the implications of the psychological retention profile for retention management practices.

The literature research aims 1, 2, 3, 4 and 5 were achieved:

| Research aim 1: To conceptualise generational diversity and retention in the diverse and multi-cultural contemporary workplace. |
| Research aim 2: To conceptualise the psychological career-related attributes of the psychological contract and psychosocial career preoccupations, and how an individual's biographical characteristics influence the development of these competencies. |
| Research aim 3: To conceptualise the theoretical relationship between psychological career-related attributes (psychological contract, psychosocial career preoccupations, and generational cohorts) and retention factors constructs (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment). |
| Research aim 4: To determine the theoretical elements that constitute an integrated psychological retention profile for diverse groups of employees based on the theoretical relationship between the psychological career-related attributes and retention factors constructs. |
| Research aim 5: To outline the implications of the psychological retention profile for retention management practices. |

In Chapter 4 the empirical investigation, with the specific aim of determining the statistical strategies, will be discussed. This part of the study investigated the relationship dynamics between the psychological career-related attribute constructs (psychological contract, psychosocial career preoccupations and generational cohorts) and the retention factors
constructs (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment).
CHAPTER 4: EMPIRICAL STUDY

This chapter deals with the statistical strategies employed to determine whether a psychological retention profile to be used for retention practices could be constructed for diverse generational employees in the higher educational environment. This was done by investigating the relationship dynamics between psychological career-related construct variables (psychological contract and psychosocial career preoccupations), biographical variables (including generational cohorts, gender, race, marital status, job level, employment status) and retention factors construct variables (compensation, job characteristics, training and development, supervisor support, career opportunities, work-life balance and commitment).

This chapter opens with a summary of the sample size and population of the research study. This is followed by a discussion of and motivation for the measuring instruments used. The data gathering and statistical processing methods are then described. Finally, the formulation of the research hypotheses is explained.

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

Step 1: Determination and description of data
Step 2: Choosing and motivating the psychometric battery
Step 3: Ethical considerations and administration of the psychometric battery
Step 4: Capturing of criterion data
Step 5: Formulation of research hypotheses
Step 6: Statistical processing of the data
Step 7: Reporting and interpreting the results
Step 8: Integration of research findings
Step 9: Formulation of research conclusions, limitations and recommendations

Steps one to six are addressed in this chapter and steps seven to nine are addressed in Chapters 5 and 6.
4.1 DETERMINATION AND DESCRIPTION OF THE SAMPLE

A sample is a small percentage of a population chosen for observation and analysis (Hussain, 2011), where a population refers to the total or sum of all members (Khan, 2011). Sampling is done in order to save resources such as time and money (Kumar, 2014). The most significant factor to consider when sampling is whether the size of the sample will be representative of the total population (Tredoux & Durrheim, 2013). There are two approaches to sampling (Cohen, Manion and Morrison, 2013). A probability sampling approach refers to a situation where every individual or element has the exact same probability or chance of being selected as part of the sample (Khan, 2011). The other approach, a non-probability sampling approach, refers to a situation where the probability of being chosen for the sample is unknown (Cohen et al., 2013).

Purposive sampling was chosen for this study. Purposive sampling is a non-probability sampling method where the sample has been selected for a particular purpose (Cohen et al., 2013). The objective of this sampling technique is to select a sample in a strategic manner so as to ensure that the sample will be relevant to the research questions being posed (Bryman, 2012). The sample is selected in such a way that selected individuals are different in terms of significant characteristics applicable to the research questions (Bryman, 2012). The use of this sampling technique is advantageous as its objective is to uphold accuracy and to identify a sample that is constructed according to variables and characteristics that are specific and focused on the study (Valerio et al., 2016). This sampling technique does however take time as a result of the specific variables and characteristics that are pursued (Valerio et al., 2016).

In this research study, the population comprised academic and support staff of a higher educational institution in South Africa. A purposive sample of all 5 713 employees employed at this institution, varying in gender, race, age, marital status and employment status was targeted. Participants were required to complete an online survey of the four measuring instruments and 579 usable questionnaires were received \((n = 579)\). Thus, a response rate of 9.86% was obtained. This finding was regarded as a limitation of the study, that is, the findings could not be generalised to the entire population.

The profile of the sample is described according to the following biographical variables: gender, race, age, generational cohorts, marital status and employment status. These categories were included, based on the investigation in the literature review of the influence of these variables on the psychological career-related construct variables (psychological contract and psychosocial career preoccupations) and the retention factor construct variables.
(compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment).

4.1.1 Distribution of gender groups in the sample

Table 4.1 and Figure 4.1 illustrate the distribution of gender groups in the sample. Male participants made up 62.7% of the sample and female participants, 37.3% (n = 579).

Table 4.1

Gender Distribution in the Sample (n = 579)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>363</td>
<td>62.7</td>
<td>62.7</td>
<td>62.7</td>
</tr>
<tr>
<td>Females</td>
<td>216</td>
<td>37.3</td>
<td>37.3</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>579</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.1: Sample distribution by gender (n = 579)

4.1.2 Distribution of race groups in the sample
Table 4.2 and Figure 4.2 depict the racial distribution in the sample. Black Africans comprised 52.0%, coloureds comprised 5.0%, Indian/Asians, 3.1% and Whites 38.2% of the total sample of research participants (n = 579). These frequencies indicated that the black African racial group made up the majority of the sample (52.0%). Overall, participants from black ethnic origins (Africans, coloureds and Indian/Asians: 60.1%) were predominant in the sample.

Table 4.2
*Race Distribution in the Sample (n = 579)*

<table>
<thead>
<tr>
<th>Race group</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Black African</td>
<td>301</td>
<td>52.0</td>
<td>52.0</td>
<td>52.0</td>
</tr>
<tr>
<td>Coloured</td>
<td>29</td>
<td>5.0</td>
<td>5.0</td>
<td>57.0</td>
</tr>
<tr>
<td>Indian/Asian</td>
<td>18</td>
<td>3.1</td>
<td>3.1</td>
<td>60.1</td>
</tr>
<tr>
<td>White</td>
<td>221</td>
<td>38.2</td>
<td>38.2</td>
<td>98.3</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>1.7</td>
<td>1.7</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>579</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Figure 4.2: Sample distribution by race (n = 579)*

**4.1.3 Distribution of age groups in the sample**
Table 4.3 and Figure 4.3 illustrate the distribution of the age groups in the sample. The ages of the participants were grouped into categories, ranging between 18 years to 65 years. The frequencies were concentrated mostly around the 36 to 45 year age group (29.7%) and the 46 to 55 year age group (28.3%). Participants aged 18 to 25 years made up 1.6% of the sample; those between 26 to 35 years comprised 22.5% and those between 56 to 65 years, 17.9% of the total sample (n = 579). The mean age of the sample of participants was 45 (SD = 23.40).

The age groups are presented in Table 4.3 according to Super’s life stage model (Coetzee & Roythorne-Jacobs, 2012). Participants younger than 25 years are in the exploration stage (1.6%); those between the ages of 26 and 45 years are in the establishment stage (52.2%); those aged between 46 years and 65 years are in the maintenance stage (46.2%); and those older than 65 years are in the decline stage.

Table 4.3

*Age Distribution in the Sample (n = 579)*

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
<th>Super’s life stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18–25 years</td>
<td>9</td>
<td>1.6</td>
<td>1.6</td>
<td>1.6</td>
<td>Exploration stage</td>
</tr>
<tr>
<td>26–35 years</td>
<td>130</td>
<td>22.5</td>
<td>22.5</td>
<td>24.1</td>
<td>Establishment stage</td>
</tr>
<tr>
<td>36–45 years</td>
<td>172</td>
<td>29.7</td>
<td>29.7</td>
<td>53.8</td>
<td>Establishment stage</td>
</tr>
<tr>
<td>46–55 years</td>
<td>164</td>
<td>28.3</td>
<td>28.3</td>
<td>82.1</td>
<td>Maintenance stage</td>
</tr>
<tr>
<td>56–65 years</td>
<td>104</td>
<td>17.9</td>
<td>17.9</td>
<td>100</td>
<td>Maintenance stage</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>579</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>
4.1.4 Distribution of generational groups in the sample

Table 4.7 and Figure 4.7 depict the distribution of generational groups in the sample. This indicated that 21.7% of the sample was from Generation Y (15–34 years); 43.8% were from Generation X (35–49 years); and 34.5% were from the Baby Boomer generation (50–68 years).

Table 4.4
Generational Group Distribution in the Sample (n = 579)

<table>
<thead>
<tr>
<th>Generational group</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Y</td>
<td>125</td>
<td>21.7</td>
<td>21.7</td>
<td>21.7</td>
</tr>
<tr>
<td>Generation X</td>
<td>253</td>
<td>43.8</td>
<td>43.8</td>
<td>65.5</td>
</tr>
<tr>
<td>Baby Boomers</td>
<td>199</td>
<td>34.5</td>
<td>34.5</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>579</strong></td>
<td><strong>100.0</strong></td>
<td></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
4.1.5 Distribution of marital status in the sample

Table 4.5 and Figure 4.5 illustrate the distribution of marital status of participants in the sample. The majority of the sample was married (58.7%) or single (29.4%). Only 8.5% were divorced and a mere 1.2% indicated that they were widowed.

Table 4.5

Marital Status Distribution in the Sample (n = 579)

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>170</td>
<td>29.4</td>
<td>29.4</td>
<td>29.4</td>
</tr>
<tr>
<td>Married</td>
<td>340</td>
<td>58.7</td>
<td>58.7</td>
<td>88.1</td>
</tr>
<tr>
<td>Divorced</td>
<td>49</td>
<td>8.5</td>
<td>8.5</td>
<td>96.6</td>
</tr>
<tr>
<td>Widowed</td>
<td>7</td>
<td>1.2</td>
<td>1.2</td>
<td>97.8</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>2.2</td>
<td>2.2</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>579</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
4.1.6 Distribution of employment status groups in the sample

Table 4.6 and Figure 4.6 illustrate the employment status of the sample. The distribution indicated that 82.6% were permanently employed whereas 16.7% were employed on a contract-basis.

Table 4.6

<table>
<thead>
<tr>
<th>Employment status</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent</td>
<td>478</td>
<td>82.6</td>
<td>82.6</td>
<td>82.6</td>
</tr>
<tr>
<td>Contract</td>
<td>97</td>
<td>16.7</td>
<td>16.7</td>
<td>99.3</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>0.7</td>
<td>0.7</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>579</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Figure 4.6: Sample distribution by employment status (n = 579)

4.1.7 Distribution of job level groups in the sample

Table 4.7 and Figure 4.7 indicate the job level distribution in the sample: 1.9% of the participants worked as research assistants; 3.5% worked as secretaries; 5.0% worked as administrative assistants; 26.6% worked as administrative officers; 3.6% worked as junior lecturers; 13.5% worked as lecturers; 9.2% worked as senior lecturers; 5.4% worked as associate professors and 6.6% worked as professors. A total of 24.9% indicated that they worked in ‘other’ posts.
Table 4.7

Job Level Distribution in the Sample (n = 579)

<table>
<thead>
<tr>
<th>Job level</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Research assistant</td>
<td>11</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Secretary</td>
<td>20</td>
<td>3.5</td>
<td>3.5</td>
<td>5.4</td>
</tr>
<tr>
<td>Administrative assistant</td>
<td>29</td>
<td>5.0</td>
<td>5.0</td>
<td>10.4</td>
</tr>
<tr>
<td>Administrative officer</td>
<td>154</td>
<td>26.6</td>
<td>26.6</td>
<td>37</td>
</tr>
<tr>
<td>Junior lecturer</td>
<td>21</td>
<td>3.6</td>
<td>3.6</td>
<td>40.6</td>
</tr>
<tr>
<td>Lecturer</td>
<td>78</td>
<td>13.5</td>
<td>13.5</td>
<td>54.1</td>
</tr>
<tr>
<td>Senior lecturer</td>
<td>53</td>
<td>9.2</td>
<td>9.2</td>
<td>63.3</td>
</tr>
<tr>
<td>Associate professor</td>
<td>31</td>
<td>5.4</td>
<td>5.4</td>
<td>68.7</td>
</tr>
<tr>
<td>Professor</td>
<td>38</td>
<td>6.6</td>
<td>6.6</td>
<td>75.3</td>
</tr>
<tr>
<td>Other</td>
<td>144</td>
<td>24.7</td>
<td>24.7</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>579</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.7: Sample distribution of job level (n = 579)
4.1.8 Distribution of tenure groups in the sample

Table 4.8 and Figure 4.8 illustrate the tenure distribution of the sample. This distribution showed that 13.1% of the participants had been employed for less than a year in the institution; 8.8% had worked there for more than a year but less than two years; 22.5% worked for more than two years but fewer than five years; 29% had worked at the institution for more than five years but fewer than 10 years; 10.5% had worked for more than 10 years but fewer than 15 years; 7.1% had been employed there for more than 15 years but fewer than 20 years; and 9% had worked at the institution for more than 20 years.

Table 4.8

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Less than a year</td>
<td>76</td>
<td>13.1</td>
<td>13.1</td>
</tr>
<tr>
<td></td>
<td>More than one year but fewer than two years</td>
<td>51</td>
<td>8.8</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>More than two years but fewer than five years</td>
<td>130</td>
<td>22.5</td>
<td>22.5</td>
</tr>
<tr>
<td></td>
<td>More than five years but fewer than 10 years</td>
<td>168</td>
<td>29.0</td>
<td>29.0</td>
</tr>
<tr>
<td></td>
<td>More than 10 years but fewer than 15 years</td>
<td>61</td>
<td>10.5</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>More than 15 years but fewer than 20 years</td>
<td>41</td>
<td>7.1</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td>More than 20 years</td>
<td>52</td>
<td>9.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>579</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.1.9 Distribution of educational qualification in the sample

Table 4.9 and Figure 4.9 indicate the distribution of educational qualification in the sample. This distribution was as follows: 10.0% of the sample had obtained an NQF level 4 qualification (matric/National Senior Certificate); 4.7% had an NQF level 5 qualification (higher certificate); 11.6% had an NQF level 6 qualification (diploma or advanced certificate); 15.2% had an NQF level 7 qualification (bachelor’s degree or advanced certificate); 16.9% had obtained an NQF level 8 qualification (postgraduate diploma or professional qualification); 21.1% had an NQF level 9 qualification (master's degree); 16.4% had obtained an NQF level 10 qualification (doctoral degree). 4.1% of the sample indicated that they had other qualifications.
### Educational Qualification Distribution in the Sample (n = 579)

<table>
<thead>
<tr>
<th>Educational qualification</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 12 (NQF level 4)</td>
<td>58</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Higher certificate (NQF level 5)</td>
<td>27</td>
<td>4.7</td>
<td>4.7</td>
<td>14.7</td>
</tr>
<tr>
<td>Diploma or Advanced Certificate (NQF level 6)</td>
<td>67</td>
<td>11.6</td>
<td>11.6</td>
<td>26.3</td>
</tr>
<tr>
<td>Bachelor's Degree or Advanced Certificate (NQF level 7)</td>
<td>88</td>
<td>15.2</td>
<td>15.2</td>
<td>41.5</td>
</tr>
<tr>
<td>Postgraduate Diploma or Professional Qualification (NQF level 8)</td>
<td>98</td>
<td>16.9</td>
<td>16.9</td>
<td>58.4</td>
</tr>
<tr>
<td>Master's Degree (NQF level 9)</td>
<td>122</td>
<td>21.1</td>
<td>21.1</td>
<td>79.5</td>
</tr>
<tr>
<td>Doctoral Degree (NQF level 10)</td>
<td>95</td>
<td>16.4</td>
<td>16.4</td>
<td>95.9</td>
</tr>
<tr>
<td>Other</td>
<td>24</td>
<td>4.1</td>
<td>4.1</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>579</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>
Figure 4.9: Sample distribution by educational qualification (n = 579)

4.1.10 Summary of socio-demographic profile of sample

In summary, the socio-demographic profile of the sample indicated that significant characteristics to be taken into consideration in the interpretation of the empirical results were as follows: gender, race, age, marital status, employment status, job level, generational groups, tenure and educational qualification. The participants in the sample were predominantly black African married males, aged between 36 and 55 years, mostly in the establishment stage of their careers. The majority of the participants were also permanently employed, with administrative officer being the most predominant employment level. The largest generational group was Generation X (aged between 37 and 51 years), with most employees working for the institution for two years to 10 years. Finally, the majority participants in the sample have a degree (including a bachelors’ degree, postgraduate degree, Master’s and Doctorate degree). Table 4.10 reflects the main characteristics of the sample profile.
Table 4.10

The Main Characteristics of the Sample Profile

<table>
<thead>
<tr>
<th>Biographical variable</th>
<th>Predominant characteristic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Males</td>
<td>63%</td>
</tr>
<tr>
<td>Race</td>
<td>Black African</td>
<td>52%</td>
</tr>
<tr>
<td>Age</td>
<td>Between 36 and 45 years</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>Between 46 and 55 years</td>
<td>28%</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>59%</td>
</tr>
<tr>
<td>Employment status</td>
<td>Permanent</td>
<td>83%</td>
</tr>
<tr>
<td>Job level</td>
<td>Administrative officer</td>
<td>27%</td>
</tr>
<tr>
<td>Generational groups</td>
<td>Generation X</td>
<td>44%</td>
</tr>
<tr>
<td>Tenure</td>
<td>More than two year but fewer than five years</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td>More than five years but fewer than 10 years</td>
<td>29%</td>
</tr>
<tr>
<td>Educational qualification</td>
<td>Master’s degree (NQF level 9)</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>Post-graduate diploma (NQF level 8)</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>Doctoral degree (NQF level 10)</td>
<td>16%</td>
</tr>
</tbody>
</table>

Notes: N = 579

4.2 SELECTING AND MOTIVATING THE PSYCHOMETRIC BATTERY

The literature review informed the selection of the psychometric battery; the measuring instruments were selected based on their applicability to the theories and models of this research study. The literature review can be regarded as exploratory research, wherein applicable models and theories of the psychological career-related construct variables and the retention factors construct variables were presented in an integrated manner. Measuring instruments were selected on their validity, reliability, cost effectiveness and suitability in evaluating these constructs.

The selected measuring instruments are discussed in the following sections.

- A biographical information questionnaire
- The PSYCONES Questionnaire (PQ) (Psycones, 2006)
- The Psychosocial Career Preoccupations Scale (PCPS) (Coetze, 2014)
- The Retention Factor Measurement Scale (RFMS) (Döckel, 2003)
4.2.1 The PSYCONES Questionnaire (PQ)

The following section explores the rationale, purpose, administration, interpretation, validity, reliability and reasons for selecting the PQ.

4.2.1.1 Rationale and purpose

The PQ (Psycones, 2006) is a self-rating measure, comprising multifactors such as employer obligations, employee obligations and satisfaction with the psychological contract and state of the psychological contract. The purpose of this measuring instrument is to determine whether an individual evaluates their psychological contract positively.

4.2.1.2 Dimensions of the PQ

The questionnaire comprises 44 questions, divided into four subscales. The following provides a detailed description of the four dimensions:

- **Employer obligations**

  The employer obligations subscale relates to an individual’s perception of promises made by the organisation and consists of 15 questions, including for example the following questions: “Has your organisation promised or committed itself to providing you with a job that is challenging?” and “Has your organisation promised or committed itself to allowing you to participate in decision-making?”

- **Employee obligations**

  The employee obligations subscale relates to an individual's perception of his/her promises made to the organisation and consists of 16 questions, including questions such as “Have you promised or committed yourself to showing loyalty to your organisation?” and “Have you promised or committed yourself to being a good team player?”
• **Satisfaction with psychological contract**

The satisfaction with the psychological contract subscale measures an individual’s satisfaction with the psychological contract and contains six statements to determine the emotions associated with this contract. Statements include: “I feel happy”, “I feel sad”, “I feel pleased”. Participants must state the extent to which they agree with a statement.

• **State of the psychological contract**

Finally, the state of the psychological contract subscale consists of seven statements, including: “Do you feel that organisational changes are implemented fairly in your organisation?” and “Do you feel fairly treated by managers and supervisors?”

4.2.1.3 Administration

The PQ is a self-administered questionnaire. Participants are given clear instructions on how to complete it. The questionnaire takes between 10 and 15 minutes to complete. This psychological contract measure was developed for the purpose of the PSYCONES project (de Cuyper, Van der Heijden, & de Witte, 2011).

4.2.1.4 Interpretation

Each subscale (employer obligations, employee obligations, satisfaction with psychological contract and state of the psychological contract) is measured separately and reflects a participant’s perceptions and feelings with regard to these dimensions. In this way, the researcher is able to determine whether the dimensions are regarded as true or not by the participants. These subscales are discussed below.

• **Employer and employee obligations**

Both these subscales use a 6-point Likert-type scale. Participants are provided with a list of promises and commitments. The participants are asked to consider whether their organisation has made such a promise to them or whether they have made such a promise to their organisation. They also rate the extent to which such a promise has been fulfilled, using the following scale:
0 = No, the promise has not been made
1 = Yes, but promise has not been kept at all
2 = Yes, but promise only kept a little
3 = Yes, promise half-kept
4 = Yes, promise largely kept
5 = Yes, promise fully kept

Therefore, 0 (No) and 1–5 (Yes), refers to the content of the psychological contract. The scale from 1 to 5 refers to the degree of fulfilment of the psychological contract. The higher the score, the higher the degree of fulfilment of the psychological contract will be.

- **Satisfaction with psychological contract and state of the psychological contract**

Both these subscales are answered on a 5-point Likert-type scale. Participants are asked to rate the extent to which they agree or disagree with a specific statement, using the following scale:

1 = Strongly agree
2 = Disagree
3 = Neither disagree nor agree
4 = Agree
5 = Strongly agree

The scale from 1 to 5 refers to the degree of satisfaction with the psychological contract and the state of the psychological contract. Therefore, the higher the score, the higher the satisfaction with the psychological contract and the state of the psychological contract will be.

**4.2.1.5 Reliability and validity of the PQ**

Van der Vaart, Linde, and Cockeran (2013) found high reliability for three of the subscales, with Cronbach’s alpha coefficients for employer obligations (α = .94), employee obligations (α = .93), state of the psychological contract (α = .90). Previous research has found a relatively high Cronbach’s alpha coefficient for the satisfaction with the psychological contract subscale (α = .70) (Snyman, 2014).
4.2.1.6 Motivation for using the PQ

The PQ was designed for the measurement of employees’ psychological contract and is relevant to this study. The purpose of this research study was to investigate various trends and relationships between variables but not to make individual predictions based on the PQ. Therefore, the PQ had the potential of offer greater insights into the construct of the psychological contract in this research study.

4.2.2 The Psychosocial Career Preoccupations Scale (PCPS)

This section explores the rationale, purpose, administration, interpretation, validity, reliability and reasons for selecting the PCPS.

4.2.2.1 Rationale and purpose

The PCPS (Coetzee, 2014) is a self-rating measure. It consists of multifactors, including career establishment preoccupations, career adaptation preoccupations, and work/life adjustment preoccupations. The purpose of the PCPS is to measure participants’ career preoccupations and concerns.

4.2.2.2 Dimensions of the PCPS

The PCPS contains 24 items and consists of three subscales:

- Career establishment preoccupations

The career establishment preoccupations subscale measures concerns of fitting into a group, establishing opportunities for self-expression and advancing in one’s career (Coetzee, 2014). The subscale comprises 13 items including, for example, the following question: “To what extent are you concerned about having a full-time job?”

- Career adaptation preoccupations

The career adaptation preoccupations subscale covers employability-related concerns such as adapting to changing contexts that might involve career changes and adjusting one’s interests, talents and capabilities to fit the opportunities in the employment market (Coetzee, 2014). The subscale consists of five items, for example: “To what extent are you concerned
about how your concept of your interests, talents and capabilities fits with the changes in the employment market?"

- **Work/life adjustment preoccupations**

The work/life adjustment preoccupations subscale measures concerns about settling down, reducing one’s workload and achieving greater harmony between one’s work and personal life, which might also involve withdrawing from paid employment altogether. The subscale consists of six items including, for example: “To what extent are you concerned about withdrawing from paid employment altogether?”

4.2.2.3 Administration

The PCPS is a self-administered instrument. Participants are given clear instructions to complete the questionnaire. The questionnaire takes between 10 and 15 minutes to complete. Participants respond to statements by indicating the extent to which they feel concerned about certain career needs/preoccupations on a 5-point Likert-type scale.

4.2.2.4 Interpretation

All three subscales (career establishment preoccupations, career adaptation preoccupations and work/life adjustment preoccupations) are measured separately and reveal the participants’ career stage preoccupations. Consequently it is possible for the researcher to analyse whether the dimensions are regarded as true or not by participants. A higher score indicates that the statement is truer for that particular participant. The subscale with the highest mean scores indicates the participant’s dominant career stage preoccupation. The ratings are defined as follow:

1 = Not concerned  
2 = Somewhat concerned  
3 = Much concerned  
4 = Highly concerned  
5 = Extremely concerned

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4.2.2.5 Reliability and validity of the PCPS

An exploratory factor analysis (EFA) by Coetzee (2014) indicated high internal consistency reliability in the PCPS, with Cronbach alpha coefficients ranging between .72 and .95. Bivariate correlations ranged between $r \geq .53 \leq .66$ ($p = .00$), an EFA confirmed the construct validity of the PCPS.

4.2.2.6 Motivation for using PCPS

The PCPS was designed to measure the career preoccupations of individuals in an organisational context and was therefore relevant to this research study. The purpose of this study was to investigate various trends and relationships between variables, not to make individual predictions based on the PCPS. Therefore, the inclusion of the PCPS had the potential to provide greater insights into the construct of career preoccupations.

4.2.3 The Retention Factor Measurement Scale (RFMS)

The following section explores the rationale, purpose, administration, interpretation, validity, reliability and reasons for selecting the RFMS.

4.2.3.1 Rationale and purpose

The RFMS (Döckel, 2003) is a self-rating measure. It consists of multifactors including compensation, job satisfaction, training, supervisor support, career opportunities, work/life balance and commitment. The purpose of the RFMS is to determine participants’ satisfaction with certain retention factors within an organisation.

4.2.3.2 Dimensions of the RFMS

The RFMS consists of 35 items grouped into seven subscales:

- **Compensation**

  The compensation subscale measures participants’ views regarding the importance of compensation. The compensation subscale consists of 13 items and includes, for example, the following statements: “My benefits package” and “My most recent raise”.

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• **Job satisfaction**

The job satisfaction subscale measures participants’ views about the importance of job satisfaction. The job satisfaction subscale consists of four items and includes the following statements: “The job requires me to use a number of complex or high level skills” and “The job is quite simple and repetitive”.

• **Training**

The training subscale measures participants’ views on the importance of training. The training subscale consists of six items such as: “This company provides me with job-specific training” and “Sufficient time is allocated for training”.

• **Supervisor support**

The supervisor support subscale measures participants’ views regarding the importance of supervisor support. It comprises six items, including: “I feel undervalued by my supervisor” and “My supervisor seldom recognises an employee for work done well”.

• **Career opportunities**

The career opportunities subscale measures participants’ views on the importance of career opportunities. The subscale consists of six items, such as: “My chances for being promoted are good” and “It would be easy to find a job in another department”.

• **Work/life balance**

The work/life balance subscale measures participants’ views on the importance of a work/life balance. The work/life balance subscale is made up of four items such as: “I often feel that there is too much work to do” and “My work schedule is often in conflict with my personal life”.

• **Commitment**
The commitment subscale measures participants’ views with regard to their commitment to the organisation. The subscale contains three questions, for example: "How would you rate your chances of still working at this company a year from now?"

4.2.3.3 Administration

The RFMS is a self-administered instrument. Participants are given clear instructions on how to complete the questionnaire. The questionnaire takes between 10 and 15 minutes to complete. Participants respond on a 6-point Likert-type scale to statements pertaining to the extent to which they feel satisfied or dissatisfied about certain retention constructs.

4.2.3.4 Interpretation

The seven subscales (compensation, training, supervisor support, career opportunities, work/life balance and commitment) are measured separately and reveal the participants’ satisfaction with the retention factors. This allows the researcher to determine whether the dimensions are regarded as true or not by the participants. The higher the score given to a statement, the truer it is for the participant. The subscale with the highest mean scores indicates the retention factor that is most valued by the participants. The ratings for the first six subscales are defined as follow:

1 = Strongly dissatisfied
2 = Moderately dissatisfied
3 = Slightly dissatisfied
4 = Slightly satisfied
5 = Moderately satisfied
6 = Strongly satisfied

The last subscale, commitment, consists of three items. The first question’s ratings are defined as follow:

1 = Chances are very low
2 = Chances are low
3 = Chances are slightly low
4 = Chances are slightly good
5 = Chances are good
6 = Chance are very good

The second question’s ratings are defined as follow:

1 = Strong intention to leave
2 = Moderate intention to leave
3 = Slight intention to leave
4 = Slight intention to stay
5 = Moderate intention to stay
6 = Strong intention to stay.

The third question’s ratings are defined as follow:

1 = Intention to leave as soon as possible
2 = Intention to leave if something better turns up
3 = Intention to leave only if something considerably better turns up
4 = Slight intention to stay
5 = Moderate intention to stay
6 = Intention to stay until retirement

4.2.3.5 Reliability and validity of the RFMS

Construct validity of the RFMS was confirmed through a factor analysis conducted by Döckel (2003). Döckel et al. (2006) reported on the internal consistency reliability using the Cronbach alpha coefficients for each of the subscales: compensation (.90), job satisfaction (.41), training (.83), supervisor support (.90), career opportunities (.76), work/life balance (.87), and commitment (.89).

4.2.3.6 Motivation for using the RFMS

The RFMS was designed to measure participants’ satisfaction with seven retention factors provided by their organisation and was therefore relevant to this study. The purpose of this study was to investigate various trends and relationships between variables, not to make individual predictions based on the RFMS. Including the RFMS offered greater insight into the retention factors construct in this research study.

4.2.4 Limitations of the psychometric battery
The research instruments used in this study were all self-report instruments. Self-reports examine a participant's perceptive experience of his/her personal behaviour through questionnaires, surveys or interviews (Kormos & Gifford, 2014). Self-reporting instruments can pose disadvantages. For instance, self-reporting instruments are by nature subjective and prone to exaggeration (Kormos & Gifford, 2014). Stangor (2014) argues that self-reporting instruments make the assumption that participants are capable and keen to answer accurately direct questions regarding their personal beliefs, outlook and behaviour. However, participants may respond differently to questions if they know their responses are being recorded – a phenomenon known as reactivity (Stangor, 2014). Another aspect, social desirability, refers to the propensity of participants to respond in such a manner that makes them look good or desirable (Kormos & Gifford, 2014; Stangor 2014).

To conclude, after an extensive analysis of several research instruments designed to measure the psychological career-related construct variables and the retention factors construct variables, three instruments, namely the PQ, PCPS and RFMS, were selected. Limitations of the three research instruments were taken into consideration during the interpretation of the findings derived from the research results.

4.3 ETHICAL CONSIDERATIONS IN ADMINISTRATION OF THE PSYCHOMETRIC BATTERY

This step describes the collection of data from the sample:

Ethical clearance was obtained from the University Research Ethics Committee (refer to Appendix A). The researcher adhered to the moral principles of ethics as outlined in the UNISA Research Ethics Policy, which are the following (UNISA, 2013):

- Autonomy (the research will respect the autonomy, rights and dignity of the participants)
- Beneficence (the research should make a positive contribution towards the welfare of people)
- Non-maleficence (the research will not cause harm to the participants specifically or to people in general)
- Justice (the benefits and risks of research should be fairly distributed among people).

The researcher also obtained permission from the higher educational institution involved in this study. Once permission had been obtained, an online survey was distributed to employees
in order to elicit the relevant data for the purpose of this study. The employees were invited to take part in this research study in a letter that was emailed to every employee. The email included the following information: the aim of the research study; the role of participants; the estimated time necessary for completion of the questionnaire; the researcher’s personal information and contact details; an explanation and guarantee of their privacy, anonymity and confidentiality; an explanation of future use of the information; and an explanation of voluntary participation in this research study. Completion of the online survey was regarded as informed consent from participants.

Anonymity of participants was ensured, during both data collection and analysis, as participants were not required to provide any information that would identify them. Names of participants were not recorded and participants could not be connected to their answers. Participants’ responses were codified and are referred to in this manner in the data, publications and in any future conference proceedings. The researcher received the completed questionnaire through the external mail system to guarantee confidentiality.

Ethical concerns related to employment equity were also considered. The Employment Equity Act 55 of 1998 necessitates that all psychological tests and other related assessments are to be fair, valid, reliable, and free from prejudice against any employee or any particular group of employees. In order to comply with this legislation, research instruments included in the psychometric test battery were scientifically valid and reliable, cautiously administered to participants and free from prejudice. The process of data collection was reliable and the data were analysed, reported and interpreted in a fair, valid and reliable manner.

4.4 CAPTURING OF CRITERION DATA

The responses of participants to each item on the three questionnaires were captured on a Microsoft Excel spreadsheet. Each row represented a participant and each column, a question. This spreadsheet containing data from the completed questionnaires was scored by an independent statistician. Statistical programs Statistical Package for Social Sciences (SPSS) Version 23 (SPSS Inc., 2015), PROCESS Procedure for SPSS Release 2.15 (Hayes (2013) and SAS version 9.4 (SAS, 2013) were used to import and analyse the data.

4.5 FORMULATION OF THE RESEARCH HYPOTHESES
The research hypotheses were formulated to achieve the objectives of this research study. A research hypothesis refers to a logical construct that is interjected between a problem and a solution and epitomises a suggested answer to a research question (Supino & Borer, 2012). It is thus a rational but cautious suggestion of a relation between variables (Supino & Borer, 2012).

The research hypotheses were formulated and are listed below in Table 4.11:
### Table 4.11

*Research Hypotheses*

<table>
<thead>
<tr>
<th>Research aim</th>
<th>Research hypothesis</th>
<th>Statistical procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research aim 1:</strong> To assess the statistically interrelationship between the career-related construct variables (psychological contract and psychosocial career preoccupations), the biographical characteristics (generational cohorts, gender, race, marital status, job level and employment status) variables and the retention factors construct variables.</td>
<td><strong>H1:</strong> There is a statistically positive interrelationship between the psychological career-related construct variables (psychological contract and psychosocial career preoccupations), the biographical characteristics (generational cohorts, gender, race, marital status, job level and employment status) variables and the retention factors construct variables.</td>
<td>Correlation analysis</td>
</tr>
<tr>
<td><strong>Research aim 2:</strong> To empirically investigate whether the psychological career-related construct variables (psychological contract and psychosocial career preoccupations) positively and significantly predict the retention factors construct variables.</td>
<td><strong>H2:</strong> The psychological career-related construct variables (psychological contract and psychosocial career preoccupations) positively and significantly predict the retention factors construct variables.</td>
<td>Canonical correlation</td>
</tr>
<tr>
<td><strong>Research aim 3:</strong> Given the statistical relationship between the psychological career-related construct variables and the retention factors construct variables, to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.</td>
<td><strong>H3:</strong> The theoretical hypothesised psychological profile has a good fit with the empirically manifested structural model.</td>
<td>Structural Equation Modelling (SEM)</td>
</tr>
<tr>
<td>Research aim</td>
<td>Research hypothesis</td>
<td>Statistical procedures</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td><strong>Research aim 4:</strong> To assess the interaction effect between (1) individuals' psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in predicting satisfaction with retention factors.</td>
<td><strong>H4:</strong> There is a significant interaction effect between (1) individuals' psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in predicting satisfaction with retention factors.</td>
<td>Hierarchical moderated regression analysis</td>
</tr>
<tr>
<td><strong>Research aim 5:</strong> To assess whether the effects of (a) employer obligations and (b) state of the psychological contract on retention factors satisfaction is moderated by (1) employees' psychosocial career preoccupations, such that stronger effects are associated with stronger career preoccupations, and (2) by generational cohorts, such that stronger effects are evident in certain generational cohorts.</td>
<td><strong>H5:</strong> The effects of (a) employer obligations and (b) state of the psychological contract on retention factors satisfaction are moderated by (1) employees' psychosocial career preoccupations, such that stronger effects are associated with stronger career preoccupations, and (2) by generational cohorts, such that stronger effects are evident for certain generational cohorts.</td>
<td>Moderated-mediation modelling</td>
</tr>
<tr>
<td><strong>Research aim 6:</strong> To empirically investigate whether individuals from the various generational cohorts, gender, race, marital status, job level and employment status sub-groups differ significantly with regards to the psychological career-related construct (psychological contract and psychosocial career preoccupations) and the retention factors construct variables.</td>
<td><strong>H6:</strong> Individuals from various generational cohorts, gender, race, marital status, job level and employment status sub-groups differ significantly with regard to the psychological career-related construct (psychological contract and psychosocial career preoccupations) and the retention factors construct variables.</td>
<td>Tests for significant mean differences</td>
</tr>
</tbody>
</table>
4.6  STATISTICAL PROCESSING OF THE DATA

The statistical procedures followed in this research study included a preliminary statistical analysis (common method variance, measurement model validity and internal consistency reliabilities), descriptive statistical analysis (means, standard deviations, kurtosis, and skewness and frequency data); correlation analysis (Pearson product-moment correlation coefficients and Spearman correlations); and inferential and multivariate statistics (canonical correlation analysis, structural equation modelling, hierarchical moderating regression analysis, moderated mediation modelling and test for significant mean differences).

The data analysis process consisted of three stages described below in Figure 1.4. This process is discussed in more detail in Chapter 4.

![Figure 4.10 Overview of the data analysis process and statistical procedures](image)

4.6.1  Stage 1: Preliminary statistical analysis

Preliminary statistical analysis was performed in order to determine the common method variance, measurement model validity and internal consistency reliabilities of the data.

4.6.1.1 Step 1: Common method variance and measurement model validity

Common method variance refers to an inconsistency in observed measures which might be due to the specific measure used (Little, 2014). The common method variance can be regarded as a confusing variable that may have an impact on both independent and dependent variables in a systematic manner (Jakobsen & Jensen, 2015). The occurrence of
a common method variance can be attributed to the use of the same survey participant (common source) to provide responses to the questionnaires for both the independent and dependent variables (Jakobsen & Jensen, 2015; Podsakoff, MacKenzie, Jeong-Yeon, & Podsakoff, 2003).

In order to test the model fit data for each of the measurements scales, the Harman’s one factor test and confirmatory factor analysis (CFA) (one factor solution) were used. The Harman’s single-factor test uses an explorative factor analysis by loading all the items assumed to be affected by the common method bias in order to determine whether a single factor occurs or a general factor contributes to the majority of the covariance amongst the measurements (Jakobsen & Jensen, 2015). Confirmatory factor analysis (CFA) can also be used to test for common method bias (Jakobsen & Jensen, 2015). All the items of the research constructs were loaded into the factor analysis to determine whether a general factor was the cause of the main variance (Podsakoff et al., 2003).

4.6.1.2 Step 2: Internal consistency reliability

Internal consistency reliability refers to the degree of homogeneity between items on a scale that is intended to measure the same construct (Rose, Spinks, & Canhoto, 2014; Supino & Borer, 2012). Simply put, all the items on a scale should show a high and positive correlation; when a certain item is responded to in a certain manner, other related items should be responded to in a similar manner (Supino & Borer, 2012). The Cronbach alpha coefficient is often used to measure internal consistency reliability (Rose et al., 2014).

Cronbach alpha coefficients were used in this study to determine the internal consistency reliability of the three research instruments as well as the average interrelatedness between the various test items. The Cronbach’s alpha coefficient is a score between 0 and 1; where a higher score indicates a more reliable item or scale (Rose et al., 2014). A Cronbach alpha coefficient of .70 is an acceptable threshold to show a reliable scale (Rose et al., 2014).

The average variances extracted (AVE) were calculated to determine the convergent validity of the scales. AVE determines the total amount of variance that can be ascribed to the construct relative to the amount of variance ascribed to measurement error (Fornell & Larcker, 1981; Teo, 2011). AVE ≥ .50 are regarded as adequate for convergent validity (Teo, 2011).
Hair et al. (2016) believe that composite reliabilities should also be calculated as the Cronbach’s alpha has a propensity to understate reliability. Composite reliabilities were therefore also calculated. Composite reliabilities ≥ .70 were deemed adequate (Teo, 2011).

4.6.2 Stage 2: Preliminary descriptive statistical analysis

Descriptive statistical analysis refers to the use of statistical techniques to summarise random variables obtained from a sample (Supino & Borer, 2012). The objective of descriptive statistics is to summarise and present data in a significant manner (Nestor & Schutt, 2014). This research study applied descriptive statistics in order to explain those aspects of the data which related to the research constructs, namely psychological contract, psychosocial career preoccupations, generational cohorts and retention factors.

This stage consisted of the following two steps:

(1) determining the means and standard deviations, kurtosis and skewness of the categorical and frequency data; and
(2) testing assumptions (correlational analysis, canonical correlation analysis, multiple regression analysis and tests for significant mean differences).

4.6.2.1 Step 1: Means and standard deviations, kurtosis and skewness and frequency data

The means and standard deviations for all the dimensions of the psychological career-related construct variables (psychological contract, psychosocial career preoccupations, generational cohorts) and the retention factors construct variables (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment) were calculated. The mean score is determined through the calculation of the sum of the tested values divided by the total number of values in a group (Flick, 2015). The main objective of calculating the mean score is to determine the central tendency of the sample (Flick, 2015). In order to calculate the variability of the sample responses, the standard deviation is calculated (Gravetter & Wallnau, 2013). The standard deviation indicates the variability through the measurement of the distance from the mean score (Gravetter & Wallnau, 2013). A higher standard deviation indicates that there are more differences in opinion within the sample (Jex & Britt, 2014).

Skewness can be referred to as the degree of variation of a distribution of scores from perfect symmetry (Hahs-Vaughn & Lomax, 2013). The data of a sample group is symmetrical if it is
parallel on both sides of the middle perspective (Salkind, 2012). Distributions that are skewed to the left are referred to as negatively skewed distributions while those that are skewed to the right are referred to as positively skewed distributions (Hahs-Vaughn & Lomax, 2013). Kurtosis refers to the “peakedness” of a distribution (Hahs-Vaughn & Lomax, 2013). The measure of kurtosis indicates the degree to which a distribution is flat or peaked in relation to the normal curve (Jain, Aggarwal, & Rana, 2011).

4.6.2.2 Step 2: Test for assumptions

Generally, the objective of research is to make valid inferences from a sample of data obtained from a population. However, difficulties may arise when using random samples from a larger population to deliver precise values applicable to the entire population. Therefore, statistical methods were used to determine the level of confidence at which inferences could be made.

The following assumptions underly the multivariate procedures and tests for significant mean differences that were used in this research study:

(a) the accuracy of data entered into the data file and missing values;
(b) the ratio of cases to independent variables;
(c) outliers (univariate and multivariate);
(d) normality, linearity and homoscedasticity;
(e) multicollinearity and singularity; and

(a) The accuracy of data entered into the data file and missing values

In order to avoid miscoding and to ensure the accuracy of the data, the dataset was screened. Frequency statistics for each of the items were requested (by means of SAS version 9.4 [2013]). The minimum and maximum values and the means and standard deviations were examined. All items fell within the possible range of values, hence the data were considered acceptable for additional analysis. Only completed questionnaires were accepted; therefore no missing values were detected.

(b) Ratio of cases to independent variables

Determining the sample size is a very important aspect that has to be taken into consideration in order to ensure sufficient statistical power. The size of a sample has an impact on how precisely the sample is a representation of the population (Gravetter & Wallnau, 2013). When
determining whether a sample is of adequate size for testing a multiple correlation coefficient, the general rule of thumb is \( N \geq 50 + 8m \) (where \( m \) is the number of independent variables) (De Vaus, 2004). In this case the required sample size was \( N = 74 \), based on the aforementioned equation. Thus the sample size of \( N = 597 \) in this study was considered sufficient to achieve acceptable statistical power. This was necessary for the identification of effects through correlation and regression analysis.

\[(c)\] **Outliers**

Gravetter and Wallnau (2013) explain that an outlier refers to an individual value that is significantly different from other individual values in the dataset. It is an indication that a value is noticeably different to the other values in the data set (Ellison, Farrant, & Barwick, 2009). The objective of an outlier test is to determine whether an outlier value has occurred owing to chance or whether it is so extreme that it indicates some other cause such as a faulty instrument (Ellison et al., 2009).

Graphing methods for residuals are valuable in the identification of possible outliers in one variable (De Muth, 2014). For the purposes of this study, outliers were identified by examining the graphic boxplots of each variable’s standardised normal scores.

\[(d)\] **Normality, linearity and homoscedasticity**

The multivariate normality assumption refers to the notion that every individual variable must have a normal distribution in order to follow a multivariate normal distribution (Pituch & Stevens, 2016). This study made use of skewness and kurtosis, as well as the Kolmogorov-Smirnov test to test for multivariate normality as this is considered the most appropriate test for examining multivariate normality (Pituch & Stevens, 2016).

The assumption of linearity proposes that there exists a linear relationship between all dependent variable pairs and all covariate pairs across all groups (Salkind, 2010). In order to determine linearity, scatterplots of dependent variables’ pairs for each group are examined (Salkind, 2010). If the assumption of linearity holds true, then the scatterplot will display an elliptical shape that is an indication of a linear relationship (Salkind, 2010).

The homoscedasticity assumption proposes that the levels of variability among quantitative dependent variables should be equal across a series of independent variables (Salkind, 2010). In order to determine homoscedasticity violations, a graphical method such as scatterplots is
very useful (Salkind, 2010). To test for both linearity and homoscedasticity in this study, bivariate scatterplots were generated for all potential variable pairs. These scatterplots indicated no problems.

(e) Multicollinearity and singularity

Multicollinearity occurs when variables (two or more) correlate strongly with each other ($r \geq .80$) (Rovai, Baker, & Ponton, 2013). Multicollinearity refers to a situation where there is excessive redundancy between the variables (Salkind, 2010). Singularity, on the other hand, occurs when there is a perfect correlation among variables ($r = 1.00$).

Multicollinearity and singularity assumptions were tested in this study by means of the variance inflation factor (VIF), tolerance, eigen-values and condition indices. These tests indicated no anomalies.

4.6.3 Stage 3: Correlation analysis

Correlation analysis can be referred to as statistical methods used to measure and describe the relationship that exists between variables (Rovai et al., 2013). A relationship exists between variables when a change in one variable accompanied by a constant and foreseeable change in another variable. In this study, correlation analysis methods were used to test the strength and direction of the relationship between the psychological career-related construct variables (psychological contract, psychosocial career preoccupations, generational cohorts) and the retention factors construct variables (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment).

More specifically, the Pearson’s product moment correlation coefficient ($r$) was used to determine the strength and direction of the relationship between the variables. The Pearson’s product moment correlation coefficient is a bivariate correlation coefficient employed to define the linear relationship between two interval/ratio scale variables (Rovai et al., 2013). Characteristics of the $r$ are (Rovai et al., 2013):

- Its values range from -1 (relationship with a perfect inverse), to 0 (no relationship), to +1 (perfect direct relationship);
- Scatterplots with values grouped around a straight line are used to depict linear relationships; and
• A tighter grouping around the straight line represents a higher linear correlation; whereas weak relationships are shown by widely spread values.

In order to define the practical significance of correlation coefficients, the cut-off point or $r \geq .30$ (medium effect) at $p \leq .05$ was used for the purpose of this study (Rovai et al., 2013).

4.6.4 Stage 4: Inferential and multivariate statistical analysis

In order to make inferences from the data, inferential and multivariate statistics were used. This stage entailed the following six steps:

1. Canonical correlation analysis was used to examine the overall statistical relationship of the psychological career-related construct variables (psychological contract, psychosocial career preoccupations, generational cohorts) as the set of independent latent variables, and the retention factors construct variables (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment) as the set of dependent latent variables;

2. Structural equation modelling (SEM) was performed to examine the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model;

3. Hierarchical moderated regression analysis was performed to examine whether the generational cohorts variable and psychosocial career preoccupations variable moderated the relationship between the psychological contract variable and the retention factors construct variables;

4. Moderated mediation modelling was performed to determine whether the effects of (a) employer obligations and (b) state of the psychological contract on retention factors satisfaction were moderated by (1) employees’ psychosocial career preoccupations, such that stronger effects were associated with stronger career preoccupations, and (2) by generational cohorts, such that stronger effects were evident for certain generational cohorts;

5. Tests for significant mean differences were performed to determine whether significant differences existed between the groups of biographical variables (generational cohorts, gender, race, marital status, job level and employment status) that acted as significant moderators of the independent psychological career-related construct variables (psychological contract, psychosocial career preoccupations, and generational cohorts) and the dependent retention factors variables.
4.6.4.1 Step 1: Canonical correlation analysis

Canonical correlation analysis (CCA) was conducted to test the overall relationship between the two independent multivariate sets and to calculate the strength of the relationship between the two sets of canonical variates or the weighted summation of the variables in the analysis (the psychological career-related construct variables of psychological contract, generational cohorts and psychosocial career preoccupations as the set of latent independent variables, and the retention factors construct variables of compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment as the set of dependent latent variables). A canonical correlation coefficient has a value in the range of -1 to +1; it is, however, customary to report on the absolute value (Gittins, 2012). Helio plots were used to determine the overall canonical correlation between the independent and dependent canonical variates.

Effect sizes for the $r^2$ metric are:
- $>.01 < .09$ = small practical effect size
- $>.09$ to $< .25$ = moderate practical effect size
- $>.25$ = large practical effect size

CCA refers to a multivariate statistical process that examines the relationship between two sets of variables, where each set consists of at least two variables (Salkind, 2010). The objective of CCA is to determine the arrangement of variables that can be combined to deliver the maximum predictive value for both sets (Salkind, 2010). Canonical variates are produced through CCA, which is based on linear combinations of measured variables and relates one set of variables to another set (Rovia et al., 2013; Salkind, 2010).

An advantage of canonical correlation analysis is that it can limit the probability of committing Type I errors. Type I errors refer to the likelihood of concluding that a significant effect exists when it does not – the possibility of rejecting a true null hypothesis (Rovia et al., 2013).

The canonical correlation analysis method was deemed acceptable to determine the direction and strength of the correlations between the variable sets when addressing research aim 2 of the empirical study.

| Research aim 2: To empirically investigate whether the psychological career-related construct variables (psychological contract and psychosocial career preoccupations) positively and |
significantly predict the retention factors construct variables. (This research aim relates to research hypothesis H2.)

4.6.4.2 Step 2: Structural equation modelling (SEM)

Structural equation modelling refers to a statistical method that is superior to other methods, including multiple and multivariate regression (Moutinho & Hutcheson, 2011). The main objective of SEM is to describe the relationships between latent and observed variables in various types of theoretical models (Schumacker & Lomax, 2016). In other words, SEM’s goal is to determine whether the sample data supports the theoretical model (Schumacker & Lomax, 2016). SEM is usually performed in either one- or two-stage methods (Moutinho & Hutcheson, 2011):

- One-stage method: to process the statistical analysis with concurrent estimates of both measurement and structural models.
- Two-stage method: to begin with the development of the measurement model and then to amend it in order to estimate the structural model.

In the present study, SEM analysis was conducted to test the relationship between the composite canonical variables resulting from the canonical correlation analysis model. Schumacker and Lomax (2016) argue that there are several reasons why the use of SEM is so popular:

- SEM allows for associations between multiple variables which have to be modelled and tested statistically;
- When data is statistically analysed, SEM unequivocally takes into account the measurement error;
- Improved SEM software has made it possible for researchers to analyse sophisticated theoretical models of multifaceted occurrences with increased capability; and
- SEM software programs have evolved into very user-friendly programs.

For the purpose of this study, a structural model was developed in order to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model that was based on the statistical relationship between the psychological career-related construct variables (psychological contract and psychosocial career preoccupations) and the retention factors construct variables (compensation, job
characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment).

Structural equation modelling (SEM) was therefore conducted in order to test research aim 3.

Research aim 3: Based on the statistical relationship between the psychological career-related construct variables (psychological contract, psychosocial career preoccupations, generational cohorts) and the retention factors construct variables (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment) to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model. (This research aim relates to research hypothesis H3.)

4.6.4.3 Step 3: Hierarchical moderated regression analysis

A moderating effect occurs when a third variable (say, M) has an influence or impact on the strength of the relationship between two variables (say, X and Y) (Gaol, Kadry Taylor, & Li, 2014). Hierarchical multiple regressions are the recommended approach to use to test for moderated multiple regressions (Cave & Jolliffe, 2013). Hierarchical regression analysis is performed to examine whether the relationship between a predictor and a criterion will be moderated by another predictor (the moderator or moderating variable) (Cramer & Howitt, 2004). Hierarchical multiple regression is valuable when the order of entry of the predictor is guided by the theory and when there is a need to determine how much a variable(s) contributes to a predictor (Harlow, 2014).

Thus in this study, generational cohorts and psychosocial career preoccupations were moderators and moderating variables respectively in determining the relationship between the psychological contract variable and the retention factors construct variables.

Hierarchical moderated regression analysis was performed in order to test research aim 4.

Research aim 4: To assess the interaction effect between (1) individuals’ psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in
4.6.4.4 Step 4: Moderated mediation modelling

Moderated mediation refers to a situation where an indirect effect of A on B through C is moderated by D (Hayes, 2013). Hayes (2013) developed a procedure in SPSS to conduct regression-based moderated mediation analysis. Through moderated mediation modelling, the hypothesis was proposed that the strength and direction of the mediation effect, which created the effect of the independent variable on the dependent variable, was subject to the level of the moderator (Wu & Zumbo, 2008).

In this study, regression-based moderated mediation analysis was used to determine whether the path from employer obligations to retention factor satisfaction through state of the psychological contract was moderated by different levels of psychosocial career preoccupations and the different generational cohorts.

Moderated mediation modelling was performed to test research aim 5:

Research aim 5: To assess whether the effects of (a) employer obligations and (b) state of the psychological contract on retention factors satisfaction are moderated by (1) employees’ psychosocial career preoccupations, such that stronger effects are associated with stronger career preoccupations, and (2) by generational cohorts, such that stronger effects are evident for certain generational cohorts. (This research aim relates to research hypothesis H5.)

4.6.4.5 Step 5: Test for significant mean differences

The Kolmogorov-Smirnov (KS) test was used to determine whether the data were normally distributed and revealed that non-parametric tests should be used in order to determine the significant mean differences. Significant mean differences between the sub-groups of the generational cohorts (Baby Boomers, generation X and generation Y) and psychosocial career preoccupations (career establishment preoccupations, career adaptation preoccupations, work/life adjustment preoccupations) were determined by using the Kruskal-Wallis test. The Kruskal-Wallis H test is a non-parametric method that is performed when the dependant
variable is either interval/ratio scale or ordinal (Rovia et al., 2013). The Kruskal-Wallis $H$ test is performed by comparing the rank totals of multiple independent groups (Rovia et al., 2013).

Tests for significant mean differences, and more specifically, Kruskal-Wallis $H$ tests, were applied for gender, race, generational cohorts, job level and employment status to identify the differences between the mean scores. The Kruskal-Wallis test was thus used to address research aim 6.

**Research aim 6:** To empirically investigate whether individuals from the various gender, race, marital status, job level and employment status sub-groups differ significantly with regard to the psychological career-related construct (psychological contract, psychosocial career preoccupations, and generational cohorts) and retention factors variables. (This research aim relates to research hypothesis H6.)

### 4.6.5 Statistical significance level

The level of significance refers to the possibility of making a Type I error (Rovai et al., 2013). As mentioned above, a Type I error refers to the rejection of a true null hypothesis whereas Type II constitutes the failure to reject a false null hypothesis (Gravetter & Wallnau, 2013). For the purposes of this study, the statistically significant level of $p \leq .05$ was selected. This provided a 95% confidence level in the results of the research. Selecting a significance level of $p \leq .05$ indicates that if the null hypothesis is rejected, there is only a 5% chance of being incorrect (Rovia et al., 2013).

In research relating to the social sciences, the significance level is usually set at either .05 or .01 (Rovia et al., 2013). In the event that the test for significance indicates a $p \geq .05$ value, the conclusion can be drawn that the results are not statistically significant (Rovia et al., 2013). Results indicating a $p$-value less than 0.5 will result in the rejection of the null hypothesis and therefore the results will be statistically significant.

#### 4.6.5.1 Level of significance: correlational statistical analysis

The effect size is normally taken into account when determining practical significance, which is to determine whether an outcome is useful in the actual world (Rovai et al., 2013). Generally, the Pearson Product moment Correlation Coefficient ($r$) can be used to measure the effect size (Rovia et al., 2013), where $r \leq .20$ represents a small effect, $r \geq .30 \leq .49$ represents a
medium effect and \( r \geq .50 \) represents a large effect. For the purpose of this study, the significance levels of \( p \leq .50 \) and \( r \geq .30 \) (medium practical effect size) were selected as the limit for rejecting the null hypotheses (Cohen et al., 2013; Cohen, 1992).

4.6.5.2 Level of significance: canonical correlation analysis

In addition to testing each canonical function separately, a multivariate test for all canonical roots was performed. This can assist in the determination of the significance of discriminant functions and includes Wilks’ lambda, Hotelling’s trace, Pillai’s trace and Roy’s greatest characteristic root (gcr). The practical significance of the canonical functions is determined by the size of the canonical correlation, which should be taken into account when determining which functions to interpret. It is generally accepted that an adequate size for the canonical correlations is set at \( R_c \) loading \( \geq .30 \). For the current study the significant cut-off levels for rejecting the null hypothesis were determined at \( p \leq .05 \) and \( R_c \geq .30 \) (Hair et al., 2016).

4.6.5.3 Level of significance: structural equation modelling (SEM)

When conducting SEM analysis, the first thing to look out for is the output related to “goodness of fit” (Bowen & Guo, 2012). Goodness-of-fit Index (GFI) is a term that refers to the level of similarity between two matrices and whether the similarity is enough to support the hypothesised model (Bowen & Guo, 2012). The comparative fit index (CFI) refers to a measure for improvement of non-centrality in moving from the hypothesised model to the baseline model (Hoyle, 2012; Schumacker & Lomax, 2015). The non-normed index (NNI) has also been suggested as an appropriate goodness-of-fit measure that is not influenced by the size of the sample (Bentler & Bonnet, 1980). The AIC (Akaike Information Criterion) is a measure that compares models with different numbers of latent variables and depicts model fit as well as model parsimony (Schumacker & Lomax, 2015). A smaller value is an indication of reasonable fit (Kline, 2011). CFI and NNI values should meet the criterion of \( \geq .90 \) for an acceptable model fit (Moutinho & Hutcheson, 2011).

The Root Mean Square Error of Approximation (RMSEA) refers to a measure of closeness between the implied matrix and the observed variance-covariance matrix (Bowen & Guo, 2012). Moutinho and Hutcheson (2011) provide the following characteristics of RMSEA:

- Most explanatory criteria in SEM
- Generally, a good model fit is indicated if the RMSEA \( \leq .05 \) and an adequate fit exists if the RMSEA \( \leq .08 \)
The RMSEA index is not much affected by the size of the sample but a small sample size may overestimate the goodness of fit. The RMSEA adjusts for model complexity indicated through the degrees of freedom in its denominator; the $df$ is a vital measure of model complexity, however.

The root mean square residual (RMR) refers to the square root of the average of the squared residuals (Hoyle, 2012). Whereas the abovementioned indexes referred to goodness-of-fit models, the RMR is rather a badness-of-fit index (Hoyle, 2012). The closer the RMR value to 0, the better the fit of the model (Hoyle, 2012). For covariance matrices with greater elements, the RMR will tend to be larger; however, for matrices with smaller elements it will be smaller – thus preventing comparisons through data sets (Hoyle, 2012).

In order to address this comparison issue, the standardised root mean square residual (SRMR) was introduced. The SRMR transforms the residuals into a standardised metric where every standardised residual that is included in the calculation of the SRMR refers to the raw residual as a percentage of the element of S being determined (Hoyle, 2012). The SRMR is also a badness-of-fit index, where a minimum of 0 reflects a flawlessly fitting model (Hoyle, 2012). A SRMR value ≤ .05 reflects a good fit and ≤ .08 reflects an adequate fit.

4.6.5.4 Level of significance: hierarchical moderated regression

In order to examine the effect size of moderated multiple regressions, the effect-size metric $f^2$ is used (Aguinis, Beaty, Boik, & Pierce, 2005). More specifically, $f^2$ indicates the proportion of systematic variance attributable to the moderating variable in relation to the unexplained variance in the criterion (Aguinis & Pierce, 2006). The effect sizes of $f^2$ are suggested as follows (Aguinis & Pierce, 2006; Cohen, 1992):

$f^2 = .02$ (small effect size)

$f^2 = .15$ (medium effect size)

$f^2 = .35$ (large effect size)

4.6.5.5 Level of significance: moderated mediation modelling

Hayes (2015) suggests making use of the bootstrapping confidence interval when making inferences about the product of regression coefficients. Bootstrapping can be defined as a process that randomly chooses individuals from the initial dataset and then develops a new
dataset consisting of the same number of individuals (Jose, 2013). In order to produce a bootstrap confidence interval for moderated mediation, a bootstrap sample from the initial data is produced, where the regression coefficients of the statistical model are predicted in this bootstrap sample, and therefore the index of moderated mediation is computed (Hayes, 2015). This is done multiple times and, through the combination of all the computed outputs, more dependable estimates of the analytical outputs are achieved (Jose, 2013).

For the purpose of this study, bootstrapping was done with 1000 bootstrap samples to investigate the moderated mediation effects of H5. Following the guidelines of Preacher, Rucker, and Hayes (2007), the bootstrapping procedure was done three times: firstly, at the respective mean values of the moderator; secondly with the value one standard deviation above (+1 SD); and thirdly with the value one standard deviation below (-1 SD) the mean. The main and interaction effects were interpreted using the more reliable bootstrapping bias-corrected 95% lower level (LLCI) and upper level (ULCI) confidence levels, excluding zero (Shrout & Bolger, 2002).

4.6.5.6 Level of significance: tests for significant mean differences

A significance level of $p \leq .05$ indicates that the tests of mean differences are significant and valid. In order to examine the effect size of the mean differences Cohen’s $d$ is used. The effect sizes of Cohen’s $d$ are suggested as follow (Gravetter, Wallnau, & Forzano, 2016):

\[
\begin{align*}
    d &= .02 \quad \text{small effect} \\
    d &= .05 \quad \text{medium effect} \\
    d &= .08 \quad \text{large effect}
\end{align*}
\]

4.7 CHAPTER SUMMARY

The objective of this chapter was to discuss the empirical investigation. Included in the discussion were the population and description of the sample; the selection of and motivation for using the psychometric battery; the administration and scoring of the psychometric battery; ethical considerations; capturing of criterion data; the formulation of the research hypotheses;
the statistical processing of the data, including the three stages (descriptive, correlational and inferential statistical analysis) conducted during the empirical investigation; and the statistical significance levels which were used to interpret the data.

The empirical research aims highlighted in Table 4.11 are addressed in chapter 5.
CHAPTER 5: RESEARCH RESULTS

The purpose of this chapter is to discuss the results of the various statistical analyses that were executed. The statistical analyses were performed in order to test the formulated hypotheses. The statistical results of the empirical study are reported in terms of descriptive statistics, correlations and inferential statistics and are presented in tables and figures. The empirical results are integrated in the discussion session.

5.1 PRELIMINARY DESCRIPTIVE STATISTICAL ANALYSIS

This section reports on the common method variance, measurement model validity and the scale reliabilities.

5.1.1 Common method variance

Due to the cross-sectional research design approach and self-report measures used in this research, common method variance was tested. Common method variance refers to the systematic variance resulting from the specific data collection method, such as self-reporting surveys (Simmering, Fuller, Richardson, Ocal, & Atinc, 2015). Common method variance occurs when a single factor surfaces from the analysis or if one overall factor explains the majority of the variance (Kiazad, 2010; Podsakoff et al., 2003). The Harman's one factor test and Confirmatory factor analysis (one factor solution) were applied to test for common method variance. The results of these tests are summarised in Table 5.1. Goodness-of-fit is indicated where RMSEA and SRMR are ≤ .08 and CFI and NNI ≥ .90 or higher (Bentler & Bonett, 1980; Brown & Cudeck, 1993; Kiazad, 2010). The analyses were done using SAS version 9.4 (SAS, 2013).
Table 5.1

*Testing for Common Method Variance: Factor Solutions*

<table>
<thead>
<tr>
<th>Measurement instrument</th>
<th>Harman’s one factor test: Percentage variance explained by a single factor</th>
<th>One factor solution (Confirmatory Factor Analysis)</th>
</tr>
</thead>
</table>
| The PSYCONES Questionnaire (PQ) | 12.58% | Chi-Square/df = 10.37***  
RMSEA = .13  
SRMR = .14  
CFI = .48  
NNI = .45  
AIC = 9533.6817 |
| The Psychosocial Career Preoccupations Scale (PCPS) | 11.70% | Chi-Square/df = 10.55***  
RMSEA = .14  
SRMR = .07  
CFI = .83  
NNI = .81  
AIC = 1009.8724 |
| The Retention Factor Measurement Scale (RFMS) | 10.26% | Chi-Square/df = 10.88***  
RMSEA = .13  
SRMR = .14  
CFI = .46  
NNI = .41  
AIC = 9077.2991 |

Notes: N = 579; *** p ≤ .000

The one-factor solution for the PQ indicated that loading all the items of the PQ onto one single factor accounted for only 12.58% of the covariance among the scale variables. When the PQ variables were loaded onto a single construct in the CFA model, the fit indices indicated that the single factor did not fit the model well, with a CFI value of well below .90 and RMSEA and SRMR values above .10 (Chi-square/df ratio = 10.37***; p < .000; RMSEA = .13; SRMR = .14; CFI = .48; NNI = .45).

The one-factor solution for the PCPS indicated that loading all the items onto a single factor accounted for only 11.70% of the covariance among the scale variables. When the PCPS variables were loaded onto a single construct in the CFA model, the fit indices indicated that
the single factor did not fit the model well, with a RMSEA value > .10 and CFI value below .90 (Chi-square/df ratio = 10.55***; p < .000; RMSEA = .14; SRMR = .07; CFI = .83; NNI = .81).

In the case of the RFMS, the one-factor solution indicated that loading all its items onto a single factor accounted for only 10.26% of the covariance among the scale variables. When the RFMS variables were loaded onto a single construct in the CFA model, the fit indices indicated that the single factor did not fit the model well, with a CFI value well below .90 and RMSEA and SRMR values above .10 (Chi-square/df ratio = 10.88***; p < .000; RMSEA = .13; SRMR = .14; CFI = .46; NNI = .41).

It was thus evident that the one-factor results for the various scales were in line with the guidelines of Podsakoff et al. (2003), which suggests that common method variance was not a potential threat to the research findings.

5.1.2 Measurement model validity

Confirmatory factor analysis (CFA), using SAS version 9.4 (SAS, 2013), was used to determine the structural (construct) validity of the measurement scales. No valid conclusions could be made without measuring the validity of the measurement model, which is ultimately the main concern in CFA (Baron & Ashman, 2016; Hair et al., 2016). The results of the CFA are summarised in Table 5.2 below. Goodness-of-fit were indicated if RMSEA and SRMR values were ≤ .08 and NNI and CFI values ≥ .90 or higher (Bentler & Bonett, 1980; Brown & Cudeck, 1993; Kiazad, 2010).
Table 5.2
Confirmatory Factor Analysis: Construct Validity

<table>
<thead>
<tr>
<th>Measurement instrument</th>
<th>Confirmatory factor analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The PSYCONES Questionnaire (PQ)</strong></td>
<td></td>
</tr>
<tr>
<td>Employer obligations</td>
<td>Chi-Square/df = 2.63***</td>
</tr>
<tr>
<td>Employee obligations</td>
<td>RMSEA = .06</td>
</tr>
<tr>
<td>Satisfaction with psychological contract</td>
<td>SRMR = .06</td>
</tr>
<tr>
<td>State of the psychological contract</td>
<td>CFI = .91</td>
</tr>
<tr>
<td></td>
<td>NNI = .90</td>
</tr>
<tr>
<td></td>
<td>AIC = 2520.4436</td>
</tr>
<tr>
<td><strong>The Psychosocial Career Preoccupations Scale (PCPS)</strong></td>
<td></td>
</tr>
<tr>
<td>Career establishment preoccupations</td>
<td>Chi-Square/df = 3.54***</td>
</tr>
<tr>
<td>Career adaptation preoccupations</td>
<td>RMSEA = .07</td>
</tr>
<tr>
<td>Work/life adjustment preoccupations</td>
<td>SRMR = .04</td>
</tr>
<tr>
<td></td>
<td>CFI = .95</td>
</tr>
<tr>
<td></td>
<td>NNI = .94</td>
</tr>
<tr>
<td></td>
<td>AIC = 917.5798</td>
</tr>
<tr>
<td><strong>The Retention Factor Measurement Scale (RFMS)</strong></td>
<td></td>
</tr>
<tr>
<td>Compensation</td>
<td>Chi-Square/df = 2.69***</td>
</tr>
<tr>
<td>Job characteristics</td>
<td>RMSEA = .06</td>
</tr>
<tr>
<td>Training and development opportunities</td>
<td>SRMR = .07</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>CFI = .91</td>
</tr>
<tr>
<td>Career opportunities</td>
<td>NNI = .90</td>
</tr>
<tr>
<td>Work/life balance</td>
<td>AIC = 2352.9415</td>
</tr>
<tr>
<td>Commitment</td>
<td></td>
</tr>
</tbody>
</table>

Notes: N = 579; ***p ≤ .000

The CFA for the PQ showed overall construct validity of the subscales (original four subscale measurement model), with the fit indices indicating RMSEA and SRMR of below .08 and a CFI and NNI > .90. (Chi-square/df ratio = 2.63***; p < .000; RMSEA = .06; SRMR = .06; CFI = .91; NNI = .90; AIC = 2520.4436).

The CFA for the PCPS showed overall construct validity of the subscales (original three subscale measurement model), with the fit indices indicating an RMSEA and SRMR below .08 and CFI and NNI > .90 (Chi-square/df ratio = 3.54***; p < .000; RMSEA = .07; SRMR = .04; CFI = .95; NNI = .94; AIC = 917.5798).
In the case of the RFMS, the CFA showed overall construct validity of the subscales (original seven subscale measurement model), with the fit indices indicating an RMSEA and SRMR below .08 and CFI and NNI > .90 (Chi-square/df ratio = 2.69***; \( p < .000; \) RMSEA = .06; SRMR = .07; CFI = .91; NNI = .90; AIC = 2352.9415).

The CFA results therefore provided evidence of the structural (construct) validity of the three measurement scales and justified proceeding with the testing of the research hypotheses.

### 5.1.3 Reporting and interpretation of scale reliabilities

In this section the internal consistency reliability of the following measuring instruments is reported: the PSYCONES Questionnaire (PQ) (Psycones, 2006); the Psychosocial Career Preoccupations Scale (PCPS) (Coetzee, 2014); and The Retention Factor Measurement Scale (RFMS) (Döckel, 2003). The average variances extracted (AVEs) and the composite reliabilities were calculated as were the Cronbach’s alpha coefficients (internal consistency reliability) because structural equation modelling was appropriate to this study. Composite reliability is a less biased estimate of reliability than the Cronbach’s alpha coefficient. A composite reliability coefficient of ≥ .70 is considered acceptable (Alarcó & Sánchez, 2015). AVE measures the level of variance captured by a construct versus the level owing to measurement error. Measurement error refers to the variance between the value measured through data collection and the correct value of a variable (Melnyk & Morrison-Beedy, 2012). Melnyk and Morrison-Beedy (2012) note that factors that may contribute to measurement error include participants’ reactions to the researcher, instrument errors such as ambivalent questions, environmental influences such as noisy areas, and factors particular to the participant such pain or fatigue. AVE values above >.70 are considered very good and values at the level of ≥.50 are acceptable, indicating construct reliability and convergent validity (Alarcó & Sánchez, 2015).

#### 5.1.3.1 Reporting on scale reliability: PSYCONES Questionnaire (PQ)

The PQ was used to measure employer obligations, employee obligations, and satisfaction with the psychological contract and state of the psychological contract. Table 5.3 reports the Cronbach alpha coefficient values together with the AVEs and composite reliabilities for each of the four subscales of the PQ.
Table 5.3

*Internal Consistency Reliability Coefficients for the PQ*

<table>
<thead>
<tr>
<th>Scale dimension</th>
<th>Alpha α</th>
<th>Composite reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer obligations</td>
<td>.93</td>
<td>.93</td>
<td>.47</td>
</tr>
<tr>
<td>Employee obligations</td>
<td>.91</td>
<td>.93</td>
<td>.47</td>
</tr>
<tr>
<td>Satisfaction with psychological contract</td>
<td>-.25</td>
<td>.01</td>
<td>.57</td>
</tr>
<tr>
<td>State of psychological contract</td>
<td>.89</td>
<td>.88</td>
<td>.54</td>
</tr>
</tbody>
</table>

*Notes: N = 579*

Overall, the subscales for the PQ showed high reliability (> .80). However, the scale dimension for satisfaction with the psychological contract obtained a very low reliability coefficient. However, the AVE was > .50 (indicating acceptable convergent validity). This outcome was taken into consideration when computing alternative measurement models. Table 5.3 indicates acceptable Cronbach alpha coefficients for the PQ subscales ranging from α = .88 to α = .93. Constructs are reliable when AVEs > .50 (Skerlavaj & Dimovski, 2009). The AVEs ranged between .47 (close to .50) and .57. Employer obligations and employee obligations just fell short of the threshold of .50. Overall, the coefficients indicated acceptable convergent validity.

5.1.3.2 Reporting on scale reliability: The Psychosocial Career Preoccupations Scale (PCPS)

The PCPS was used to measure career establishment preoccupations, career adaptation preoccupations and work/life adjustment preoccupations. Table 5.4 indicates the Cronbach alpha coefficient values, the AVEs and the composite reliabilities for each of the three subscales of the PCPS.

Table 5.4
### Internal Consistency Reliability Coefficients for the PCPS

<table>
<thead>
<tr>
<th>Scale dimension</th>
<th>Alpha α</th>
<th>Composite reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career establishment preoccupations</td>
<td>.94</td>
<td>.94</td>
<td>.57</td>
</tr>
<tr>
<td>Career adaptation preoccupations</td>
<td>.90</td>
<td>.90</td>
<td>.66</td>
</tr>
<tr>
<td>Work/life adjustment preoccupations</td>
<td>.78</td>
<td>.77</td>
<td>.38</td>
</tr>
</tbody>
</table>

Notes: N = 579

Generally, all the subscales of the PCPS obtained high reliabilities (> .70). Table 5.4 showed acceptable Cronbach alpha coefficients for the PCPS subscales, ranging from $\alpha = .78$ to $\alpha = .94$. The AVEs ranged between .38 and .66. The work/life adjustment preoccupations subscale fell short of the threshold of .50 and the AVEs for career establishment preoccupations (.57) and career adaptation preoccupations (.66) were acceptable.

5.1.3.3 Reporting on scale reliability: The Retention Factor Measurement Scale (RFMS)

The RFMS was used to measure compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life balance and commitment. Table 5.5 reports the Cronbach alpha coefficient values together with the AVEs and composite reliabilities for each of the subscales of the RFMS.
### Internal Consistency Reliability Coefficients for the RFMS

<table>
<thead>
<tr>
<th>Scale dimension</th>
<th>Alpha α</th>
<th>Composite reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation</td>
<td>.95</td>
<td>.95</td>
<td>.62</td>
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<tr>
<td>Job characteristics</td>
<td>.51</td>
<td>.47</td>
<td>.22</td>
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<tr>
<td>Training and development opportunities</td>
<td>.89</td>
<td>.87</td>
<td>.54</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>.79</td>
<td>.77</td>
<td>.41</td>
</tr>
<tr>
<td>Career opportunities</td>
<td>.73</td>
<td>.74</td>
<td>.35</td>
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<tr>
<td>Work/life balance</td>
<td>.90</td>
<td>.89</td>
<td>.69</td>
</tr>
<tr>
<td>Commitment</td>
<td>.84</td>
<td>.85</td>
<td>.67</td>
</tr>
</tbody>
</table>

**Notes:** N = 579

Overall, the subscales of the RFMS obtained high reliabilities (α > .70). Table 5.5 reports acceptable Cronbach alpha coefficients for the RFMS subscales, ranging from α = .73 to α = .95. The Cronbach alpha coefficient for the job characteristics was considered adequate for the purpose of this study (α = .51); however, the low reliability coefficient was taken into consideration in the interpretation of the findings. The AVEs ranged from .22 to .69. The AVE for job characteristics (.22), career opportunities (.35) and supervisor support (.41) fell short of the threshold of .50. The AVEs for compensation (.62), training and development (.54), work/life balance (.69) and commitment (.67) were acceptable.

In summary, the following core conclusions were drawn from the above results:

- In the case of the PSYCONES Questionnaire (PQ) (Psycones, 2006), the scale as a whole obtained overall construct validity and the subscales obtained high reliabilities overall except the state of the psychological contract which obtained a very low reliability coefficient. The AVE constructs indicated construct reliability.
- The scale of the Psychosocial Career Preoccupations Scale (PCPS) (Coetzee, 2014), as a whole obtained overall construct validity, while the subscales obtained high reliabilities.
- As a whole, the Retention Factor Measurement Scale (RFMS) (Döckel, 2003) obtained construct validity, and the subscales obtained high reliabilities except for the job characteristics subscale. The AVEs for job characteristics, career opportunities and supervisor support fell short of the threshold of .50.
In conclusion, all the measurement scales achieved construct validity; some, however, indicated problematic reliability coefficients. It was nonetheless decided to include the problematic subscales –state of the psychological contract, work/life adjustment, job characteristics, career opportunities, and supervisor support (low internal consistency reliability) – in the statistical analysis as this was an exploratory study. The CFA analysis resulted in acceptable construct validity for each scale when the relevant problematic subscales were included in the scales; low internal consistency reliabilities were taken into consideration in the interpretation of the findings, however.

5.2 DESCRIPTIVE STATISTICS

Descriptive statistics involve organising and summarising data obtained from populations or samples (Holcomb, 2016). In this section, the means and standard deviations as well as the kurtosis and skewness for each of the measuring instruments (PQ, PCPS and RFMS) are discussed.

5.2.1 PSYCONES Questionnaire (PQ)

The PQ scores were determined by calculating the mean scores for all the items relating to employer obligations, employee obligations, satisfaction with the psychological contract and the state of the psychological contract. A mean score is determined by calculating the sum of all the individual scores for each sub-scale and then dividing the total score by the number of scores in each sub-scale. The employer obligations and employee obligations subscales were measured on a 6-point Likert-type scale where 0 indicated that promises had not been made and 5 indicated that promises had been made and fully kept; the higher the score, the higher the degree of fulfilment of the psychological contract. The satisfaction with the psychological contract and state of the psychological contract subscales were measured on a 5-point Likert-type scale. Again, the higher the score, the higher the satisfaction with the psychological contract and the state of the psychological contract was deemed to be. Table 5.6 provides the descriptive information on the PQ subscales.
### Descriptive Statistics: Mean Scores, Standard Deviations, Skewness and Kurtosis for the PSYCONES Questionnaire (PQ)

<table>
<thead>
<tr>
<th>Psychological contract</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer obligations</td>
<td>1.00</td>
<td>5.00</td>
<td>2.97</td>
<td>1.00</td>
<td>-.06</td>
<td>-.77</td>
</tr>
<tr>
<td>Employee obligations</td>
<td>1.00</td>
<td>6.00</td>
<td>5.07</td>
<td>.82</td>
<td>-1.86</td>
<td>5.24</td>
</tr>
<tr>
<td>Satisfaction with psychological contract</td>
<td>1.00</td>
<td>5.00</td>
<td>3.05</td>
<td>.46</td>
<td>-.58</td>
<td>3.58</td>
</tr>
<tr>
<td>State of the psychological contract</td>
<td>1.00</td>
<td>5.00</td>
<td>2.96</td>
<td>1.00</td>
<td>-.04</td>
<td>-.68</td>
</tr>
</tbody>
</table>

Notes: N = 579

The mean scores ranged from 2.97 to 5.07. The participants scored the employee obligations subscale highest (M = 5.07; SD = .82), and the employer obligations subscale the lowest (M = 2.97; SD = 1.00). The standard deviations for the subscales were fairly similar, in the range of .46 and 1.00. All the means for the PQ indicated a distribution skewed to the right (skewness < 0). The skewness values ranged from -1.86 to -0.04, which is an indication of a flatter than normal distribution with a wider peak. The kurtosis values ranged from -0.77 to 5.24. A Kurtosis > 3 is referred to as more peaked, heavy tailed with weak shoulders (leptokurtic) (Ho & Yu, 2015). This may have been an indication of non-normality and was taken into account in further analysis.

### 5.2.2 Psychosocial Career Preoccupations Scale (PCPS)

The PCPS is scored by attaining a mean score across all three subscales. Participants have to respond to statements on the extent to which they feel concerned about certain career needs/preoccupations on a 5-point Likert-type scale. Each subscale can range between one and five. A higher score indicates that the statement is truer for the participant. The subscale with the highest mean score indicates the participant’s dominant career stage preoccupation. The descriptive information from the three construct variables on the PCPS scale in this study is summarised below in Table 5.7. The minimum score, maximum score, mean, standard deviation, skewness and kurtosis are included in the descriptive information.
Table 5.7

**Descriptive Statistics: Mean Scores, Standard Deviations, Skewness and Kurtosis for the Psychosocial Career Preoccupations Scale (PCPS)**

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCPS</td>
<td>1.00</td>
<td>5.00</td>
<td>3.27</td>
<td>.97</td>
<td>-.41</td>
<td>-.70</td>
</tr>
<tr>
<td>Career establishment</td>
<td>1.00</td>
<td>5.00</td>
<td>3.54</td>
<td>1.07</td>
<td>-.60</td>
<td>-.66</td>
</tr>
<tr>
<td>preoccupations</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career adaptation</td>
<td>1.00</td>
<td>5.00</td>
<td>2.83</td>
<td>1.19</td>
<td>.20</td>
<td>-.93</td>
</tr>
<tr>
<td>preoccupations</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Work/life</td>
<td>1.00</td>
<td>5.00</td>
<td>3.05</td>
<td>.97</td>
<td>-.12</td>
<td>-.60</td>
</tr>
<tr>
<td>adjustment</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>preoccupations</td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** N = 579

The mean scores varied in the range of 2.83 to 3.54. The sample of participants gave the highest ratings to career establishment preoccupations subscale (M = 3.54; SD = 1.07), and the lowest to the career adaptation preoccupation subscale (M = 2.83; SD = 1.19). The standard deviations of the subscales were fairly similar, ranging from .97 to 1.19. The skewness values for the PCPS varied between -.60 and .20, indicating that the distribution was flatter than a normal distribution with a wider peak. The kurtosis values ranged from -.93 to -.60, which is an indication that the possibility for extreme values was lower than in a normal distribution, and the values were more widely spread around the mean.

### 5.2.3 Retention Factor Measurement Scale (RFMS)

The RFMS scores were determined by calculating the mean scores for all the items relating to the subscales of compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life balance and commitment. Participants responded to statements with regard to the extent to which they felt satisfied or dissatisfied with certain retention constructs, on a 6-point Likert-type scale. The subscale with the highest mean scores indicated the retention factors most valued by the participants. Table 5.8 provides the descriptive information for the RFMS subscales.

Table 5.8
Descriptive Statistics: Mean Scores, Standard Deviations, Skewness and Kurtosis for the Retention Factor Measurement Scale (RFMS)

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFMS</td>
<td>1.67</td>
<td>5.76</td>
<td>3.95</td>
<td>.79</td>
<td>-.21</td>
<td>-.41</td>
</tr>
<tr>
<td>Compensation</td>
<td>1.00</td>
<td>6.00</td>
<td>4.08</td>
<td>1.27</td>
<td>-.61</td>
<td>-.47</td>
</tr>
<tr>
<td>Job characteristics</td>
<td>1.25</td>
<td>6.00</td>
<td>4.35</td>
<td>.99</td>
<td>-.24</td>
<td>-.38</td>
</tr>
<tr>
<td>Training and development</td>
<td>1.00</td>
<td>6.00</td>
<td>3.94</td>
<td>1.34</td>
<td>-.44</td>
<td>-.66</td>
</tr>
<tr>
<td>opportunities</td>
<td></td>
<td></td>
<td>3.88</td>
<td>1.24</td>
<td>-.23</td>
<td>-.35</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>1.00</td>
<td>6.00</td>
<td>3.88</td>
<td>1.24</td>
<td>-.23</td>
<td>-.35</td>
</tr>
<tr>
<td>Career</td>
<td></td>
<td></td>
<td>3.30</td>
<td>1.12</td>
<td>.02</td>
<td>-.67</td>
</tr>
<tr>
<td>opportunities</td>
<td></td>
<td></td>
<td>3.62</td>
<td>1.58</td>
<td>-.16</td>
<td>-1.16</td>
</tr>
<tr>
<td>Work/life balance</td>
<td>1.00</td>
<td>6.00</td>
<td>4.70</td>
<td>1.39</td>
<td>-1.02</td>
<td>.07</td>
</tr>
</tbody>
</table>

Notes: N = 579

The mean scores were in the range 3.30 to 4.70. Participants awarded the highest score to the organisational commitment subscale (M = 4.70; SD = 1.39), and the lowest to the career opportunities subscale (M = 3.30; SD = 1.12). The standard deviations of the subscales were fairly similar, in the range of .99 to 1.39. The skewness values for the RFMS varied from -.102 to .02, indicating that the distribution was flatter than a normal distribution and had a wider peak. The kurtosis values ranged from -1.16 to -.35, indicating that the possibility for extreme values was lower than for a normal distribution, and the values were more widely spread around the mean.

The following core conclusions were drawn from these results:

- The highest score on PSYCONES Questionnaire (PQ) (Psycones, 2006) was for employee obligations, indicating that respondents felt that they had made and kept most of their promises to their employer. The score for employer obligations (2.97) was an indication that respondents felt that the organisation had made promises but had not kept all of them. The score on state of the psychological contract (2.96) indicated that respondents were neither satisfied nor dissatisfied with the state of their psychological contract.
Overall, the scores on the Psychosocial Career Preoccupations Scale (PCPS) (Coetzee, 2014) were mid-range, which might be an indication that participants did not have strong concerns about their specific career needs or preoccupations. However, moderate concerns about career establishment preoccupations were predominant in the sample.

The respondents gave moderate scores on most of the subscales of the Retention Factor Measurement Scale (RFMS) (Döckel, 2003), indicating that they were slightly satisfied with these retention factors. Work/life balance and career opportunities were rated lowest, suggesting that respondents felt somewhat dissatisfied about these two retention factors. The scores revealed that the sample was moderately satisfied with organisational commitment and job characteristics.

5.3 CORRELATIONAL STATISTICS

Correlations were performed to determine the magnitude and direction of the relationship between the research variables. In addition, they were used to assess whether the results delivered significant evidence in support of research hypothesis H1.

There is a statistically positive interrelationship between the psychological career-related construct variables (psychological contract and psychosocial career preoccupations), the biographical characteristics variables (generational cohorts, gender, race, marital status, job level and employment status) and the retention factors construct variables.

5.3.1 Relationship between the independent variables and the dependent construct variables

Pearson product-moment correlations were performed to determine the relationship between the research variables. Table 5.9 reports the results of these correlations.
Table 5.9
Bivariate Correlations of the Independent and Dependent Variables

<table>
<thead>
<tr>
<th>Variables</th>
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<tr>
<td>RFMS Overall scale</td>
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<td>.78***</td>
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<td>-.02</td>
<td>.04</td>
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<td>-.03*</td>
<td>-.06</td>
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<td>Career adaptation preoccupations</td>
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<td>-1.0***</td>
<td>-.13**</td>
<td>-.09*</td>
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<td>-.19***</td>
<td>.70***</td>
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<td>-.10*</td>
<td>-.03</td>
<td>-.04</td>
<td>.02</td>
<td></td>
<td>-.08</td>
<td>-.10**</td>
</tr>
<tr>
<td>PCPS Overall scale</td>
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Notes: N=579. ***p ≤ .001 **p ≤ .01 *p ≤ .05
5.3.1.1 Bivariate correlations among the scale variables

As indicated in Table 5.9, the results showed that there were significant bivariate correlations between the seven subscale dimensions of the RFMS, in the range of $r \geq -.10$ to $\leq .48$ (small to medium practical effect size; $p \leq .05$). Compensation and job characteristics ($r = .08$), compensation and work/life balance ($r = .06$), and job characteristics and work/life balance ($r = -.00$) did not correlate significantly. The low reliability coefficient ($\alpha = .51$) for job characteristics may have contributed to this result. The seven subscale dimensions also had significant and positive correlations with the overall construct ($r \geq .32 \leq .78$; medium to large practical effect; $p \leq .001$), implying construct validity of the overall construct of retention factors.

The values of the significant bivariate correlations among the three subscale dimensions of the PCPS ranged from $r \geq .66$ to $\leq .74$ ($r \geq .50$; $p \leq .001$; large practical effect). These values suggested that there was construct validity between the three subscales of career establishment preoccupations, career adaptation preoccupations and work/life adjustment preoccupations. The three subscale dimensions subsequently showed significant and positive correlations with the overall construct ($r \geq .84$; $p < .001$; large practical effect), which is an indication of construct validity for the construct of career preoccupations as a whole.

In the case of the PQ, the values of the significant bivariate correlations among the four subscale dimensions of the PQ ranged from $r \geq .18$ to $\leq .64$ (small to large practical effect; $p < .05$). Employer obligations and satisfaction with the psychological contract ($r = .03$) and state of the psychological contract and satisfaction with the psychological contract ($r = -.01$) did not correlate significantly. The state of the psychological contract subscale obtained a very low reliability coefficient ($\alpha = -.25$), which may have contributed to the low correlation. The four subscale dimensions also had significant and positive correlations with the overall construct $r \geq .19 \leq .84$ (small to large effect; $p < .001$), implying construct validity for the construct of the psychological contract as a whole.

Overall, the results indicated significant correlations between the variables on the RFMS scale, the PCPS scale and the PQ scale, with values varying from small to large practical effect size.

5.3.1.2 Bivariate correlations between the three scale variables
(a) Bivariate correlations between RFMS subscales and PCPS subscales

The results for the compensation subscale indicated significant negative bivariate correlations with the three subscales of the PCPS, with career establishment preoccupations ($r = -.12$; small practical effect; $p < .01$), career adaptation preoccupations ($r = -.15$; small practical effect; $p < .001$) and work/life adjustment preoccupations ($r = -.10$; small practical effect $p < .05$) and with the overall PCPS scale ($r = -.14$; small practical effect; $p < .001$). In the case of job characteristics, the results indicated significant bivariate correlations with the PCSP career adaptation preoccupations subscale ($r = .21$; small practical effect; $p < .001$). The results for the training and development subscale showed a significant negative bivariate correlation with the PCSP career adaptation preoccupations subscale ($r = -.10$; small practical effect; $p < .01$), while results for the supervisor support subscale reflected a significant negative bivariate correlation with the PCSP career adaptation preoccupations subscale ($r = -.13$; small practical effect; $p < .01$).

In terms of the career opportunities subscale showed no significant bivariate correlations with the subscales of the PCSP or the PCSP scale as a whole. In the case of the work/life balance subscale, the results indicated a significant negative bivariate correlation with the work/life adjustment preoccupations subscale of the PCSP ($r = -.16$; small practical effect; $p < .001$). The results of the organisational commitment subscale reflected a significant bivariate correlation with the career adaptation preoccupations subscale of the PCSP ($r = .19$; small practical effect; $p < .001$). The results of the overall RFMS scale indicated significant negative bivariate correlations with the career adaptation preoccupations subscale ($r = -.19$; small practical effect; $p < .001$), the work/life adjustment subscale ($r = -.10$; small practical effect; $p < .01$) and the PCPS scale overall ($r = -.11$; small practical effect; $p < .01$). The $r$-values were below the threshold value ($r > .85$) for multi-collinearity concerns (Hair et al., 2016).

(b) Bivariate correlations between the RFMS subscales and the PQ subscales

In terms of the compensation subscale, the results indicated significant positive bivariate correlations with the employer obligations subscale ($r = .43$; medium practical effect; $p < .001$), the state of the psychological contract subscale ($r = .57$; large practical effect; $p < .001$) and the PQ scale overall ($r = .41$; medium practical effect; $p < .001$). As to the job characteristics subscale, the results indicated significant bivariate correlations with the employer obligations subscale ($r = .33$; medium practical effect; $p < .001$), the employee obligations subscale ($r = .21$; small practical effect; $p < .001$), the state of the psychological contract subscale ($r = .20$; small practical effect; $p < .001$) and the overall PQ scale ($r = .32$; medium practical effect; $p < .001$). In terms of the training and development opportunities subscale, the results indicated
significant bivariate correlations with the employer obligations subscale \((r = .47; \text{medium practical effect}; p < .001)\), the employee obligations subscale \((r = .18; \text{small practical effect}; p < .001)\), the state of the psychological contract subscale \((r = .50; \text{large practical effect}; p < .001)\) and the overall PQ scale \((r = .47; \text{medium practical effect}; p < .001)\). As to the supervisor support subscale, the results showed significant bivariate correlations with all the subscales of the PQ scale, and the PQ scale as a whole, and correlation values ranged from \(r \geq -.15\) and \(\leq .52\) (small to large practical effect; \(p < .01\)). The results of the career opportunities subscale reflected significant bivariate correlations with the employer obligations subscale \((r = .49; \text{medium practical effect}; p < .001)\), the employee obligations subscale \((r = .12; \text{small practical effect}; p < .01)\), the state of the psychological contract subscale \((r = .57; \text{large practical effect}; p < .001)\), and the overall PQ scale \((r = .46; \text{medium practical effect}; p < .001)\).

The results of the work/life balance subscale indicated significant bivariate correlations with the employer obligations subscale \((r = .12; \text{small practical effect}; p < .01)\), the state of the psychological contract subscale \((r = .26; \text{small practical effect}; p < .001)\), and the overall PQ scale \((r = .13; \text{small practical effect}; p < .001)\). In terms of the organisational commitment subscale, the results showed significant bivariate correlations with the employer obligations subscale \((r = .45; \text{medium practical effect}; p < .001)\), the employee obligations subscale \((r = .21; \text{small practical effect}; p < .001)\), the state of the psychological contract subscale \((r = .46; \text{medium practical effect}; p < .001)\), and the overall PQ scale \((r = .46; \text{medium practical effect}; p < .001)\). As to the overall RFMS scale, the results showed significant bivariate correlations with the employer obligations subscale \((r = .64; \text{large practical effect}; p < .001)\), the employee obligations subscale \((r = .18; \text{small practical effect}; p < .001)\), the state of the psychological contract subscale \((r = .77; \text{large practical effect}; p < .001)\), and the overall PQ scale \((r = .63; \text{large practical effect}; p < .001)\). The \(r\)-values were below the threshold value \((r > .85)\) for multicollinearity concerns (Hair et al., 2016).

(c) Bivariate correlations between the PQ subscales and the PCPS subscales
In terms of the employer obligations subscale, there were no significant bivariate correlations between any of the subscales from the PCPS scale. In the case of the employee obligations subscale, the results showed significant bivariate correlations with the career establishment preoccupations subscale \((r = .21; \text{small practical effect}; p < .001)\), the career adaptation preoccupations subscale \((r = .10; \text{small practical effect}; p < .01)\), the work/life adjustment preoccupations subscale \((r = .17; \text{small practical effect}; p < .001)\), and the overall PCPS scale \((r = .19; \text{small practical effect}; p < .001)\).
In the case of the satisfaction with the psychological contract subscale, there were no significant bivariate correlations with any of the subscales from the PCPS scale. The results of the state of the psychological contract indicated significant bivariate correlations with the career adaptation preoccupations subscale ($r = -.13$; small practical effect; $p < .01$). In terms of the overall PQ scale, the results indicated significant bivariate correlations with the career establishment preoccupations ($r = .13$; small practical effect; $p < .01$), the work/life adjustment subscale ($r = .11$; small practical effect, $p < .01$), and the overall PCPS scale ($r = .10$; small practical effect; $p < .05$). The $r$-values were below the threshold value ($r > .85$) for multicollinearity concerns (Hair et al., 2016).

Overall, these results showed significant correlations between the subscales of the RFMS scale, the PCPS scale and the PQ scale, where the practical effect sizes ranged from small, medium to large.

5.3.2 Relationship between the biographical, independent and dependent variables

The relationship between the research variables was calculated by means of Pearson product-moment correlations. Table 5.10 reports the correlations between the biographical, independent and dependent variables.

Table 5.10

| Bivariate Correlations of the Biographical, Independent and Dependent Variables |

175
<table>
<thead>
<tr>
<th>Variables</th>
<th>Age</th>
<th>Generational cohorts</th>
<th>Gender</th>
<th>Race</th>
<th>Marital status</th>
<th>Job level</th>
<th>Employment status</th>
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<td>-.11**</td>
<td>.06</td>
<td>.05</td>
<td>.01**</td>
<td>-.22***</td>
</tr>
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<td>.06</td>
<td>.07</td>
<td>.04</td>
<td>.03</td>
<td>.12**</td>
<td>.14***</td>
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<td>-.00</td>
<td>-.02</td>
<td>-.05</td>
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<td>.02</td>
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<td>.03</td>
<td>-.08</td>
<td>-.01</td>
<td>.04</td>
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<td>-.16***</td>
<td>.02</td>
<td>-.30***</td>
<td>-.12**</td>
<td>-.12**</td>
<td>.09*</td>
</tr>
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<td>-.17***</td>
<td>-.01</td>
<td>-.37***</td>
<td>-.14***</td>
<td>-.18***</td>
<td>.14***</td>
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<td>.13**</td>
<td>-.10*</td>
<td>.07</td>
<td>.04</td>
<td>.04</td>
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<td>-.03</td>
<td>-.05</td>
<td>-.11*</td>
<td>-.03</td>
<td>.03</td>
<td>-.01</td>
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<td>-.29***</td>
<td>-.08*</td>
<td>-.29***</td>
<td>-.06</td>
<td>-.18***</td>
<td>.14***</td>
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<td>-.33***</td>
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<td>-.29***</td>
<td>-.08*</td>
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<td>-.07</td>
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<td>-.01</td>
<td>-.03</td>
<td>-.09*</td>
<td>-.00</td>
<td>.07</td>
<td>.03</td>
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</table>

Notes: N=579. ***p ≤ .001 **p ≤ .01 *p ≤ .05

5.3.2.1 Age

As shown in Table 5.10, the results indicated significant negative bivariate correlations between age and the career opportunities subscale ($r = -.14$; small practical effect; $p < .001$) and the work/life balance subscale ($r = -.18$; small practical effect; $p < .001$) and significant positive bivariate correlations between age and organisational commitment ($r = .12$; small practical effect; $p < .01$) as subscales from the RFMS scale. The results also showed significant negative bivariate correlations between age and the career establishment preoccupations subscale ($r = -.27$; small practical effect; $p < .001$), the career adaptation preoccupations subscale ($r = -.27$; small practical effect; $p < .001$), the work/life adjustment preoccupations subscale ($r = -.17$; small practical effect; $p < .001$), and the overall PCPS scale ($r = -.27$; small practical effect; $p < .001$). There were no significant bivariate correlations with any of the subscales of the PQ scale.
5.3.2.2 Generational cohorts

In terms of generational cohorts and the RFMS subscales, Table 5.10 showed significant negative bivariate correlations between generational cohorts and the career opportunities subscale ($r = -0.16$; small practical effect; $p < .001$) and the work/life balance subscale ($r = -0.17$; small practical effect; $p < .001$). There were also significant positive bivariate correlations between generational cohorts and the organisational commitment subscale ($r = 0.13$; small practical effect; $p < .01$). In addition, there were significant negative bivariate correlations between generational cohorts and the career establishment preoccupations subscale ($r = -0.29$; small practical effect; $p < .001$), the career adaptation preoccupations subscale ($r = -0.29$; small practical effect; $p < .001$), the work/life adjustment preoccupations subscale ($r = -0.19$; small practical effect; $p < .001$), and the overall PCPS scale ($r = -0.29$; small practical effect; $p < .001$). There were no significant bivariate correlations between generational cohorts and any of the subscales of the PQ scale.

5.3.2.3 Gender

As for gender and the RFMS subscales, the results indicated significant negative bivariate correlations with the compensation subscale ($r = -0.11$, small practical effect; $p < .01$) and the organisational commitment subscale ($r = -0.10$; small practical effect; $p < .05$). In terms of the PCPS and PQ subscales, the results showed no significant bivariate correlations for any of the subscales.

5.3.2.4 Race

The results indicated significant negative bivariate correlations between race and the subscales of the RFMS scale in terms of the career opportunities subscale ($r = -0.30$; medium practical effect; $p < .001$), the work/life balance subscale ($r = -0.37$; medium practical effect; $p < .001$) and the overall RFMS scale ($r = -0.11$; small practical effect; $p < .05$). As to the PCPS subscales, the results indicated significant negative bivariate correlations between race and the career establishment preoccupations subscale ($r = -0.29$; small practical effect; $p < .001$), the career adaptation preoccupations subscale ($r = -0.33$; medium practical effect; $p < .001$), the work/life adjustment preoccupations subscale ($r = -0.17$; small practical effect; $p < .001$), and the overall PCPS scale ($r = -0.30$; medium practical effect; $p < .001$). In terms of the PQ subscales, the results indicated a significant negative bivariate correlation only with the state of the psychological contract subscale ($r = -0.16$; small practical effect; $p < .001$).
5.3.2.5 Marital status

Results for marital status and the subscales for the RFMS scale indicated significant negative bivariate correlations for the career opportunities subscale \((r = -.12; \text{small practical effect}; p < .01)\) and the work/life balance subscale \((r = -.14; \text{small practical effect}; p < .001)\). The Furthermore, there was a significant negative bivariate correlation with the career adaptation preoccupations subscale \((r = -.12; \text{small practical effect}; p < .01)\). The results showed no significant bivariate correlations between marital status and the subscales for the PQ scale.

5.3.2.6 Job level

In terms of job level and the subscales for the RFMS scale, a significant positive bivariate correlation existed between job level and the job characteristics subscale \((r = .12; \text{small practical effect}; p < .01)\). There were also significant negative bivariate correlations with the career opportunities subscale \((r = -.12; \text{small practical effect}; p < .01)\) and the work/life balance subscale \((r = -.18; \text{small practical effect}; p < .001)\). In the case of the PCPS subscales, the results indicated significant negative bivariate correlations with the career establishment preoccupations subscale \((r = -.18; \text{small practical effect}; p < .001)\), the career adaptation preoccupations subscale \((r = -.19; \text{small practical effect}; p < .001)\), and the overall PCPS scale \((r = -.18; \text{small practical effect}; p < .001)\). The results showed no significant bivariate correlations between job level and the subscales for the PQ scale.

5.3.2.7 Employment status

Of the results for employment status and the subscales of the RFMS scale showed a significant negative bivariate correlation with the compensation subscale \((r = -.22; \text{small practical effect}; p < .001)\) and significant positive bivariate correlations with the job characteristics subscale \((r = .14; \text{small practical effect}; p < .001)\), the supervisor support subscale \((r = .15; \text{small practical effect}; p < .001)\) and the work/life balance subscale \((r = .14; \text{small practical effect}; p < .001)\). In terms of the PCPS scale, the results showed significant positive bivariate correlations with the career establishment preoccupations subscale \((r = .14; \text{small practical effect}; p < .001)\) and the overall PCPS scale \((r = .11; \text{small practical effect}; p < .001)\). For the PQ subscales, the results indicated a significant positive bivariate correlation with the state of the psychological contract subscale \((r = .12; \text{small practical effect}; p < .01)\).
Overall, the results showed significant correlations between the biographical variables and the subscales of the RFMS scale, the PCPS scale and the PQ scale, all of which were small to medium in practical effect size.

These results provided supportive evidence for research hypothesis H1:

| H1: There is a statistically positive interrelationship between the psychological career-related construct variables (psychological contract and psychosocial career preoccupations), the biographical characteristics (generational cohorts, gender, race, marital status, job level and employment status) variables and the retention factors construct variables. |

In summary, the following core conclusions were reached:

**Independent and dependent variables**

- There were significant positive bivariate correlations between the subscales for the psychological career-related construct variables (psychological contract and psychosocial career preoccupations) and the retention factors construct variables.
- However, there were no significant bivariate correlations between the compensation and job characteristics subscale, the compensation and work/life balance subscale and the job characteristics and work/life balance subscale.
- There were also no significant bivariate correlations between the employer obligations and satisfaction with the psychological contract subscales or the satisfaction with the psychological contract and state of the psychological contract subscales.
- Overall, the results indicated that the significant bivariate correlations between the subscales were small to large in practical effect size.
- There were significant negative correlations between compensation and the subscales of the PCPS and the overall PCPS; however, significant positive correlations were found between the employer obligations, the state of the psychological contract and the overall PQ scale.
- Job characteristics were correlated significantly with the career adaptation preoccupations subscale and the employer obligations, employee obligations and state of the psychological contract subscales as well as with the overall PQ scale.
- There were significant negative correlations between training and development and the career adaptation preoccupations subscale and positive correlations with the employer
obligations, employee obligations and state of the psychological contract subscales, as well as the overall PQ scale.

- There was a significant negative correlation between supervisor support and the career adaptation preoccupations subscale, and positive correlations between all the subscales of the PQ as well as the PQ scale as a whole.
- No significant bivariate correlations existed between career opportunities and any of the PCPS subscales, but significant bivariate correlations did exist between this variable and employer obligations, employee obligations and state of the psychological contract subscales, as well as the PQ scale overall.
- There was a significant negative correlation between work/life balance and the work/life adjustment preoccupations subscale, and a significant positive correlation between work/life balance and the employer obligations, state of the psychological contract subscales and the PQ scale overall.
- Organisational commitment was correlated positively and significantly with the career adaptation preoccupation and the employer obligations, employee obligations and state of the psychological contract subscales as well as with the overall PQ scale.
- Employer obligations and satisfaction with the psychological contract indicated no significant correlations with any of the subscales of the PCPS.
- Employee obligations were correlated significantly with the all the subscales of the PCPS and with the PCPS as a whole.
- There was a significant correlation between state of the psychological contract and the career adaptation preoccupation.

Biographical and independent and dependent variables

- Age was correlated negatively with career opportunities and work/life balance; however, it was positively correlated with organisational commitment. Negative correlations were found between age and all the subscales for the PCPS scale.
- There were no significant correlations between age and any of the subscales on the PQ scale.
- Generational cohorts were correlated negatively with career opportunities and work/life balance; however generational cohorts were correlated positively with organisational commitment. Negative correlations were also found between generational cohorts and all the subscales for the PCPS scale.
- Generational cohorts indicated no significant correlations with the subscales of the PQ scale.
- Gender was correlated negatively with compensation and organisational commitment.
Three were no significant correlations between gender and the PCPS or the PQ scale.

Race was correlated negatively with career opportunities and work/life balance, as well as with all the subscales on the PCPS scale, and with the state of the psychological contract subscale.

Job level was positively correlated with job characteristics and negatively with career opportunities and work/life balance. Job level was negatively correlated with career establishment preoccupations, career adaptation preoccupations and the overall PCPS scale.

Job level indicated no significant correlations with the subscales of the PQ.

There was a negative correlation between employment status and compensation; however, there were positive correlations with job characteristics, supervisor support, and work/life balance. Employment status was also correlated positively with career establishment preoccupations and the overall PCPS scale, as well as with the state of the psychological contract.

5.4 INFERENTIAL (MULTIVARIATE) STATISTICAL ANALYSIS

Inferential statistics were used to draw conclusions from the population and were reported and interpreted in the following five stages:

Stage 1: Canonical correlation
Stage 2: Structural Equation Modelling
Stage 3: Multiple regression analysis
Stage 4: Moderated mediation modelling
Stage 5: Tests for significant mean differences

5.4.1 Canonical correlations

The canonical correlation analysis was used to test research hypothesis H2:

The psychological career-related construct variables (psychological contract and psychosocial career preoccupations) significantly and positively predict the retention factor construct variables.

Canonical correlation analysis involves the examining of relationships between two composite sets of multiple variables and limits the probability of committing Type 1 errors – the possibility
of rejecting a true null hypothesis (Rovai et al., 2013). It was therefore considered appropriate and suitable for the purposes of this research study. The CANCORR procedure in SAS version 9.4 (SAS, 2013) was used to conduct the analysis.

In order to test for the significance of the overall canonical correlation between the independent variables (psychological contract and psychosocial career preoccupations) and the dependent variables (compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life balance and commitment) of a canonical function, the Wilks’ lambda chi square test was applied. The Wilk’s multivariate criterion lambda (λ) was used because it allows researchers to assess the practical significance (1 - λ = r²-type metric of effect size) of the full canonical model (Sheryl & Hanson, 2005).

Effect sizes for the r² metric are:
> .01 < .09 = small practical effect size
> .09 to < .25 = moderate practical effect size
> .25 = large practical effect size

The cut-off criteria for the canonical correlations are generally accepted and set at Rc loading ≥ .30. The squared canonical correlation (Rc²) values of ≤ .12 (small practical effect), ≥ .13 ≤ .25 (medium practical effect) and ≥ .26 (large practical effect) (Cohen, 1992) were taken into consideration in the interpretation of the strength and practical significance of the results.

Table 5.11 reports seven canonical functions for the model from the canonical correlation analysis. Four of the seven canonical functions were significant. The full canonical model was statistically significant across the four functions, with a Wilk’s lambda (λ) of .222, F = 20.25, p = < .0001. The r² metric of effect size of 1 - λ (1 - .222) was .78 (large practical effect), which indicates that the full model explained a substantial proportion (about 78%) of the variance shared between the two sets of variables. The canonical correlation of the first function was .82 and contributed 67% (Rc² = .67) of the explained variance relative to the four functions. The first function was therefore regarded as being practically sufficient for interpreting the links between the two sets of variables. The second canonical function explained only a further 21% of the variance shared between the two canonical variate sets, and the third function a mere 9%.

Table 5.11
**Canonical Correlation Analysis Relating Psychological Contract and Psychosocial Career Preoccupations (Independent Variables) to Retention Factors (Dependent Variables) (n = 579)**

<table>
<thead>
<tr>
<th>Canonical function</th>
<th>Overall canonical correlation $(Rc)$</th>
<th>Overall squared canonical correlation $(Rc^2)$</th>
<th>Eigenvalue</th>
<th>$F$ statistics</th>
<th>Probability $(p)$</th>
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<td>1</td>
<td>.817</td>
<td>.67</td>
<td>2.00</td>
<td>20.25</td>
<td>&lt; .0001***</td>
</tr>
<tr>
<td>2</td>
<td>.455</td>
<td>.21</td>
<td>.26</td>
<td>6.70</td>
<td>&lt; .0001***</td>
</tr>
<tr>
<td>3</td>
<td>.302</td>
<td>.09</td>
<td>.10</td>
<td>4.06</td>
<td>&lt; .0001***</td>
</tr>
<tr>
<td>4</td>
<td>.225</td>
<td>.05</td>
<td>.05</td>
<td>2.84</td>
<td>&lt; .0001***</td>
</tr>
<tr>
<td>5</td>
<td>.129</td>
<td>.02</td>
<td>.02</td>
<td>1.73</td>
<td>.08</td>
</tr>
<tr>
<td>6</td>
<td>.081</td>
<td>.01</td>
<td>.01</td>
<td>1.48</td>
<td>.20</td>
</tr>
<tr>
<td>7</td>
<td>.062</td>
<td>.00</td>
<td>.00</td>
<td>2.19</td>
<td>.14</td>
</tr>
</tbody>
</table>

**Multivariate tests of significance**

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Value</th>
<th>Approximate $F$ statistic</th>
<th>Probability $(p)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilks’ Lambda</td>
<td>.222</td>
<td>20.25</td>
<td>&lt; .0001***</td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td>1.043</td>
<td>14.28</td>
<td>&lt; .0001***</td>
</tr>
<tr>
<td>Hotelling-Lawley Trace</td>
<td>2.445</td>
<td>28.12</td>
<td>&lt; .0001***</td>
</tr>
<tr>
<td>Roy’s Greatest Root</td>
<td>2.003</td>
<td>163.38</td>
<td>&lt; .0001***</td>
</tr>
</tbody>
</table>

Notes: $N = 579$; ***$p \leq .001$; **$p \leq .01$; *$p \leq .05$

$Rc^2 \leq .12$ (small practical effect size); $Rc^2 \geq .13 \leq .25$ (moderate practical effect size); $Rc^2 \geq .26$ (large practical effect size)

As mentioned above, the cut-off criteria for factorial loadings $(Rc \geq .30)$ were used to determine the significance of the canonical structure correlations (Hair et al., 2016). For the purpose of this study, only the singular canonical structure loadings and the squared canonical structure loadings were considered in the interpretation of the importance and practical significance of the derivation of the two canonical variate constructs.

The independent canonical construct variate (the composite set of psychological career-related variables) contributed significantly $(Rc^2 = .67$; large practical effect) to explaining the variance in the retention factors variables, as indicated in Table 5.11. Table 5.12 indicates that state of the psychological contract $(Rc = .79$; $Rc^2 = .62$; large practical effect) and employer obligations $(Rc = .65$; $Rc^2 = .42$; large practical effect) contributed most to the explanation of the variance in the retention factors canonical variate variables.
In terms of the retention factors variables, Table 5.12 shows that the state of the psychological contract and employer obligations explained a large practical effect of variance in compensation ($R_c = .57; 33\%;$ large effect), training and development ($R_c = .53; 28\%;$ large effect), supervisor support ($R_c = .53; 28\%;$ large effect), career opportunities ($R_c = .59; 35\%;$ large effect), and organisational commitment ($R_c = .51; 26\%;$ large effect). These results are an indication of a significant relationship between these two sets of canonical variate construct variables. Career opportunities ($R_c = .72$) and compensation ($R_c = .70$) contributed most to explaining the retention factors canonical variate construct.

Table 5.12

Results of the Standardised Canonical Correlation Analysis for the First Canonical Function

<table>
<thead>
<tr>
<th>Variate/variables</th>
<th>Canonical coefficient (Weight)</th>
<th>Structure coefficient</th>
<th>Canonical cross-loadings ($R_c$)</th>
<th>Squared multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological career-related canonical variate (composite set of latent independent variables)</td>
<td>(Canonical Loading) ((R_c))</td>
<td>correlation ((R_c^2))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career establishment preoccupation</td>
<td>.04</td>
<td>-.06</td>
<td>-.05</td>
<td>.00</td>
</tr>
<tr>
<td>Career adaptation preoccupation</td>
<td>-.11</td>
<td>-.23</td>
<td>-.19</td>
<td>.04</td>
</tr>
<tr>
<td>Work/life adjustment preoccupation</td>
<td>-.06</td>
<td>-.11</td>
<td>-.09</td>
<td>.01</td>
</tr>
<tr>
<td>Employer obligations</td>
<td>.31</td>
<td>.79</td>
<td>.65</td>
<td>.42</td>
</tr>
<tr>
<td>Employee obligations</td>
<td>.02</td>
<td>.23</td>
<td>.19</td>
<td>.04</td>
</tr>
<tr>
<td>Satisfaction with psychological contract</td>
<td>-.03</td>
<td>-.03</td>
<td>-.02</td>
<td>.00</td>
</tr>
<tr>
<td>State of psychological contract</td>
<td>.75</td>
<td>.96</td>
<td>.79</td>
<td>.62</td>
</tr>
</tbody>
</table>

Percentage of overall variance of variables explained by their own canonical variables: .24

<table>
<thead>
<tr>
<th>Retention factors canonical variate (composite set of latent dependent variables)</th>
<th>(Canonical Loading) ((R_c))</th>
<th>correlation ((R_c^2))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation</td>
<td>.39</td>
<td>.70</td>
</tr>
<tr>
<td>Job characteristics</td>
<td>.06</td>
<td>.35</td>
</tr>
<tr>
<td>Training and development opportunities</td>
<td>.14</td>
<td>.65</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>.33</td>
<td>.65</td>
</tr>
<tr>
<td>Career opportunities</td>
<td>.31</td>
<td>.72</td>
</tr>
<tr>
<td>Work/life balance</td>
<td>.15</td>
<td>.30</td>
</tr>
<tr>
<td>Organisational commitment</td>
<td>.22</td>
<td>.62</td>
</tr>
</tbody>
</table>

Percentage of overall variance of variables explained by their own canonical variables: .35

Note: \(N = 579\)

Figure 5.1 is a graphical representation of the canonical relationships between the independent and dependent variables as discussed above.
In conclusion, the results of the canonical correlation analysis indicated that the state of the psychological contract and employer obligations were the strongest psychological career-related variables in predicting the retention factor variables of compensation, training and development opportunities, supervisor support, career opportunities and organisational commitment. These results provided support for research hypothesis H2 in terms of the predictive role of the psychological contract variables only:

| The psychological career-related construct variables (psychological contract and psychosocial career preoccupations) significantly and positively predict the retention factors construct variables. |

5.4.2 Structural equation modelling (SEM)

In the following section, two structural equation models, based on the significant relationships found between the independent and dependent canonical construct variates are investigated. The framework of SEM was used as a baseline and covariance structural analysis was conducted to assess research hypothesis H3 empirically:
The theoretical hypothesised psychological profile has a good fit with the empirically manifested structural model.

5.4.2.1 Structural model for the psychological retention profile

The results of the canonical correlation analysis were used as a framework to test two SEM models in SAS version 9.4 (SAS, 2013). The first model included career opportunities, compensation, organisational commitment, supervisor support and training and development opportunities as endogenous variables, and employer obligations and state of the psychological contract as exogenous variables. Table 5.13 indicated a marginal fit to the data for model 1 as a result of the low CFI and poor RMSEA and SRMR fit statistics (CFI ≤ .90), with a chi-square of 268.16 (11 df); CMIN/df = 24.38; p = .000; NNI = .81; RMSEA = .20; SRMR = .15; CFI = .82.

These results made it necessary to test a second model with only compensation, training and development opportunities, career opportunities and supervisor support as endogenous variables and employer obligations and state of the psychological contract as exogenous variables. The second model showed that the NNI had improved to .85 (3%) and the model indicated a very good fit to the data with a chi-square = 3382.32 (1272 df); CMIN/df = 2.67; p = .000; RMSEA = .05; SRMR = .08; CFI = .90, as indicated in Table 5.13.

Table 5.13

Model Fit Statistics: Competing Structural Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Chi-square/df</th>
<th>P</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>CFI</th>
<th>NNI</th>
<th>AIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24.38</td>
<td>.000***</td>
<td>.20</td>
<td>.15</td>
<td>.82</td>
<td>.81</td>
<td>302.16</td>
</tr>
<tr>
<td>2</td>
<td>2.67</td>
<td>.000***</td>
<td>.05</td>
<td>.08</td>
<td>.90</td>
<td>.85</td>
<td>3700.32</td>
</tr>
</tbody>
</table>

*Note: ***p < .001

Although the AIC value for model 1 was considerably lower than that of model 2, the decision was made to retain model 2 as the measurement model with the best fit because of the better fit indices.
5.4.2.1 Best fit structural model for the psychological retention profile

Once the structural model with the best fit had been identified, standardised path coefficients were evaluated in order to determine the convergent validity for the structural model’s factor structure. A significant standardised path coefficient of .30 or more is an indication that a variable contributes effectively to the construct it was intended to measure (Kline, 2005). The results of the standardised path coefficients of the final best fit structural equation model are reported in Table 5.14.

Table 5.14

<table>
<thead>
<tr>
<th>Observed variables</th>
<th>Latent variables</th>
<th>Estimate</th>
<th>Standard error</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer obligations</td>
<td>Compensation</td>
<td>.76</td>
<td>.03</td>
<td>22.70**</td>
</tr>
<tr>
<td>Employer obligations</td>
<td>Training and development opportunities</td>
<td>.53</td>
<td>.03</td>
<td>16.14**</td>
</tr>
<tr>
<td>Employer obligations</td>
<td>Career opportunities</td>
<td>.25</td>
<td>.07</td>
<td>3.81**</td>
</tr>
<tr>
<td>State of the psychological contract</td>
<td>Training and development opportunities</td>
<td>.07</td>
<td>.01</td>
<td>12.35**</td>
</tr>
<tr>
<td>State of the psychological contract</td>
<td>Supervisor support</td>
<td>.64</td>
<td>.03</td>
<td>20.74**</td>
</tr>
<tr>
<td>State of the psychological contract</td>
<td>Career opportunities</td>
<td>.52</td>
<td>.06</td>
<td>8.11**</td>
</tr>
</tbody>
</table>

Notes: N = 579; **t-values > 2.56 (p < .01); *t-values > 1.96 (p < .05).

Table 5.14 indicates that the factor loadings (path coefficients) for compensation (.76) and training and development opportunities (.53) were greater than the threshold value of .50, and therefore adequately converged on employer obligations. Career opportunities (.25) failed to converge adequately on employer obligations. Supervisor support (.64) and career opportunities (.52) converged adequately on state of the psychological contract. Training and development opportunities (.07) failed to converge adequately on state of the psychological contract.
Figure 5.2 Final structural model linking the psychological career-related construct variables to the retention factors construct variables. Note: All standardised path coefficient estimates ** p ≤ .01.

In conclusion, the path coefficients showed that employer obligations were significant predictors of compensation and training and development opportunities, while state of the psychological contract was a significant predictor of supervisor support and career opportunities, as indicated in Figure 5.2. These variables were considered in the development of the psychological profile for retention. These results provided supportive evidence for H3:

The theoretical hypothesised psychological profile has a good fit with the empirically manifested structural model.

Preliminary analysis 1: Constructing an overall psychological retention profile
The results of the canonical correlation analysis were valuable in determining which variables contributed most to explaining the individual and organisational behavioural elements that formed the predominant elements of the psychological retention profile of the group of participants. Table 5.15 provides an overview of this psychological retention profile that was developed from the canonical correlation analysis and the structural equation modelling.

The canonical correlation analysis and structural equation modelling revealed that the variables that were most prominent in the psychological retention profile of the participants related to employer obligations and state of the psychological contract. More specifically, the
structural equation modelling revealed that employer obligations significantly predicted compensation and training and development opportunities, while state of the psychological contract significantly predicted supervisor support and career opportunities.
Table 5.15  
*Behavioural Elements of the Empirically Manifested Psychological Retention Profile (Preliminary Analysis 1)*

<table>
<thead>
<tr>
<th>Behavioural element</th>
<th>Variable</th>
<th>Description</th>
<th>Predictive influence on employee retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer obligations</td>
<td>Promises or inducements made by the organisation (Rousseau, 1995)</td>
<td>Employees who are satisfied with their compensation and training and development opportunities will regard employer obligations as fulfilled.</td>
<td></td>
</tr>
</tbody>
</table>

| State of the psychological contract | Relates to the fairness of the promises made and the effects it has on trust (Guest, 2004) | Employees who are satisfied with their supervisor support and career opportunities will experience the state of the psychological contract as fair. |

| Employer obligations | Promises or inducements made by the organisation (Rousseau, 1995) | Organisations that provide satisfactory compensation and training and development opportunities will fulfil their employer obligations, which will improve retention. |

| State of the psychological contract | Relates to the fairness of the promises made and the effects it has on trust (Guest, 2004) | If organisations provide satisfactory supervisor support and career opportunities, this will result in employees who experience a satisfactory state of the psychological contract and therefore stay in the organisation. |
5.4.3 Hierarchical moderated regression analysis

Hierarchical moderated analysis was performed to assess the role of generational cohorts and psychosocial preoccupations in constructing the psychological profile for retention. This step involved testing research hypothesis H4:

There is a significant interaction effect between (1) individuals’ psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in predicting satisfaction with retention factors.

The retention factors that were used as dependent variables were the dominant variables that emerged from the best fit model SEM analysis: compensation, training and development opportunities, supervisor support and career opportunities. The psychosocial career preoccupations variables and the generational cohorts variables were used as the moderating variables and the psychological contract variables were used as the independent variables. The demographic characteristics were used as control variables.

5.4.3.1 Main and interaction effects: Psychological contract and psychosocial career preoccupations

Table 5.16 encapsulates the results of the moderated regression analysis that was performed to determine the main and interaction effects of the psychological contract and psychosocial career preoccupations on the satisfaction with the retention factors compensation, training and development, supervisor support and career opportunities.
Table 5.16

Moderated Regression Analysis Examining the Effects of the Psychological Contract and Psychosocial Career Preoccupations on Retention Factors

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>Compensation Model 1</th>
<th>Training and Development opportunities Model 2</th>
<th>Supervisor support Model 3</th>
<th>Career opportunities Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>t</td>
<td>β</td>
<td>t</td>
</tr>
<tr>
<td>Generational cohorts</td>
<td>-.04</td>
<td>-.86</td>
<td>-.00</td>
<td>-.09</td>
</tr>
<tr>
<td>Gender</td>
<td>-.09</td>
<td>-1.99*</td>
<td>-.02</td>
<td>-1.42</td>
</tr>
<tr>
<td>Race</td>
<td>.05</td>
<td>.98</td>
<td>-.02</td>
<td>-.47</td>
</tr>
<tr>
<td>Marital status</td>
<td>-.03</td>
<td>-.73</td>
<td>-.00</td>
<td>-.06</td>
</tr>
<tr>
<td>Job level</td>
<td>-.02</td>
<td>-.34</td>
<td>.06</td>
<td>1.32</td>
</tr>
<tr>
<td>Employment status</td>
<td>-.26</td>
<td>-5.98***</td>
<td>.00</td>
<td>.02</td>
</tr>
<tr>
<td>Psychological contract (A)</td>
<td>.47</td>
<td>10.87***</td>
<td>.49</td>
<td>11.10***</td>
</tr>
<tr>
<td>Psychosocial career preoccupations (B)</td>
<td>-.17</td>
<td>-3.70***</td>
<td>-.07</td>
<td>-1.41</td>
</tr>
<tr>
<td>Interaction term: A x B</td>
<td>.01</td>
<td>.19</td>
<td>.09</td>
<td>1.97*</td>
</tr>
</tbody>
</table>

Model info

| FP | ΔFp | R² | ΔR² | f² |

Note: N = 579. ***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)

Table 5.16 indicates that all four regression models were significant (FP ≤ .001). Furthermore, these results indicated that generational cohorts, gender, race, marital status, job level, employment status, psychological contract and psychosocial career preoccupations explained a medium to large (R² ≥ .21 [21%] to R² ≥ .32 [32%]) practical percentage of variance in the retention factor construct variables.
(i) **Compensation (model 1)**

Table 5.16 also shows that gender ($\beta = -0.09; t = -1.99; p < .05$), employment status ($\beta = -0.26; t = -5.98; p < .001$) and psychosocial career preoccupations ($\beta = -0.17; t = -3.70; p < .001$) were significant negative predictors of compensation as a retention factor construct variable. The psychological contract ($\beta = 0.47; t = 10.87; p < .001$) was a significant positive predictor of compensation as a retention factor construct variable. In terms of the interaction effects in model 1, psychosocial career preoccupations had no significant moderating effect on the relationship between the psychological contract variable and the retention factor variable of compensation.

(ii) **Training and development opportunities (model 2)**

The psychological contract ($\beta = .49; t = 11.10; p < .001$) was also a significant positive predictor of training and development opportunities as a retention factor construct variable. In terms of the interaction effects in model 2, psychosocial career preoccupations were found to have a significant moderating effect on the relationship between the psychological contract variable and the retention factor variable of training and development opportunities ($\beta = .09; t = 1.97; p \leq .05; f^2 = .35$, large practical effect). Table 5.16 indicates that psychosocial career preoccupations significantly and positively moderated the relationship between the psychological contract variable (as predictor variable) and the retention factors variable training and development (as criterion variable). In order to examine the nature of the significant interactions, a slope test was conducted. As shown in Figure 5.3, participants who were highly preoccupied with their career development were also highly satisfied with their training and development opportunities and more satisfied with the psychological contract relative to those who were less concerned about their career development. Those participants who had low preoccupations about their career development were also less satisfied with the psychological contract and less satisfied with training and development opportunities offered by their organisation.
Figure 5.3 Interaction effect between psychological contract and psychosocial career preoccupations in predicting satisfaction with training and development.

(iii) Supervisor support (model 3)

As shown in Table 5.16, employment status ($\beta = .15; t = 3.13; p < .01$) and the psychological contract ($\beta = .41; t = 8.91; p < .001$) acted as significant positive predictors of supervisor support as a retention factors construct variable. Psychosocial career preoccupations ($\beta = -.16; t = -3.31; p < .001$) was a significant negative predictor of supervisor support as a retention factor construct variable. In terms of the interaction effects in model 3, psychosocial career preoccupations had no significant moderating effect on the relationship between the psychological contract variable and the retention factor variable of supervisor support.

(iv) Career opportunities (model 4)

Race ($\beta = -.26; t = -5.43; p < .001$), marital status ($\beta = -.09; t = -2.17; p < .05$) and psychosocial career preoccupations ($\beta = -.11; t = -2.39; p < .05$) were significant negative predictors of career opportunities as a retention factors construct variable. Psychological contract ($\beta = .46; t = 10.77; p < .001$) acted as significant positive predictor of career opportunities as a retention factors construct variable. In terms of the interaction effects in model 4, psychosocial career preoccupations had no significant moderating effect on the relationship between the psychological contract variable and the retention factor variable of career opportunities.
5.4.3.2 Main and interaction effects: Psychological contract and generational cohorts

Table 5.17 summarises the results of the moderated regression analysis that was performed to determine the main and interaction effects of the psychological contract and generational cohorts on the satisfaction with the retention factors compensation, training and development, supervisor support and career opportunities.

Table 5.17
Moderated Regression Analysis Examining the Effects of the Psychological Contract and Generational Cohort on Retention Factors

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>Compensation Model 1</th>
<th>Training and Development opportunities Model 2</th>
<th>Supervisor support Model 3</th>
<th>Career opportunities Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>t</td>
<td>β</td>
<td>t</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.07</td>
<td>-1.66</td>
<td>-0.02</td>
<td>-0.46</td>
</tr>
<tr>
<td>Race</td>
<td>0.08</td>
<td>1.66</td>
<td>-0.01</td>
<td>-0.20</td>
</tr>
<tr>
<td>Marital status</td>
<td>-0.02</td>
<td>-0.44</td>
<td>0.00</td>
<td>0.09</td>
</tr>
<tr>
<td>Job level</td>
<td>-0.01</td>
<td>-0.21</td>
<td>0.07</td>
<td>1.38</td>
</tr>
<tr>
<td>Employment status</td>
<td>-0.27</td>
<td>-5.97***</td>
<td>0.00</td>
<td>0.02</td>
</tr>
<tr>
<td>Psychological contract (A)</td>
<td>0.40</td>
<td>5.31***</td>
<td>0.54</td>
<td>6.97***</td>
</tr>
<tr>
<td>Generational cohort (B)</td>
<td>-0.00</td>
<td>-0.07</td>
<td>0.01</td>
<td>0.20</td>
</tr>
<tr>
<td>Interaction term: A x B</td>
<td>0.05</td>
<td>0.72</td>
<td>0.06</td>
<td>-0.80</td>
</tr>
</tbody>
</table>

Model info

\[ F_p \]
\[ \Delta F_p \]
\[ R^2 \]
\[ \Delta R^2 \]
\[ f^2 \]

Note: N = 579. ***p ≤ .001 **p ≤ .01 *p ≤ .05. The final step is reported. 

+ \[ R^2 \leq .12 \] (small practical effect size)  
++ \[ R^2 \geq .13 \leq .25 \] (medium practical effect size)  
+++ \[ R^2 \geq .26 \] (large practical effect size)
Table 5.17 indicates that all four regression models were significant \( (F_p \leq .001) \). Furthermore, the results indicated that gender, race, marital status, job level, employment status, psychological contract and generational cohorts explained a medium to large \( (R^2 \geq .18 \ [18\%] \) to \( R^2 \geq .30 \ [30\%] \) ) practical percentage of variance in the retention factors construct variables.

(i) Compensation (model 1)

Table 5.17 also indicates that employment status \( (\beta = -.27; \ t = -5.97; \ p < .001) \) acted as a significant negative predictor of compensation as a retention factors construct variable. Psychological contract \( (\beta = .40; \ t = 5.31; \ p < .001) \) was a significant positive predictor of compensation as a retention factors construct variable. In terms of the interaction effects in model 1, generational cohorts had no significant moderating effect on the relationship between the psychological contract variable and the retention factor variable of compensation.

(ii) Training and development opportunities (model 2)

The psychological contract \( (\beta = .54; \ t = 6.97; \ p < .001) \) was the only significant positive predictor of training and development opportunities as a retention factors construct variable. In terms of the interaction effects in model 2, generational cohorts had no significant moderating effect on the relationship between the psychological contract variable and the retention factor variable of training and development opportunities.

(iii) Supervisor support (model 3)

Employment status \( (\beta = .14; \ t = 2.99; \ p < .01) \) and the state of the psychological contract \( (\beta = .44; \ t = 5.48; \ p < .001) \) acted as significant positive predictors of supervisor support as a retention factors construct variable. In terms of the interaction effects in model 3, generational cohorts had no significant moderating effect on the relationship between the psychological contract variable and the retention factor variable of supervisor support.

(iv) Career opportunities (model 4)

Race \( (\beta = -.24; \ t = -4.97; \ p < .001) \) was a significant negative predictor of career opportunities as a retention factors construct variable and the psychological contract \( (\beta = .47; \ t = 6.44; \ p < .001) \) acted as a significant positive predictor of career opportunities as a retention factors construct variable. In terms of the interaction effects in model 4, generational cohorts had no
significant moderating effect on the relationship between the psychological contract variable and the retention factor variable of career opportunities.

Table 5.17 also shows that there were no significant interaction effects between the psychological contract and generational cohorts on the retention factors construct variables.

In conclusion, the empirical results obtained from the regression analysis provided supportive evidence for accepting research hypothesis H4:

There is a significant interaction effect between (1) individuals’ psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in predicting satisfaction with retention factors.

As can be seen in Table 5.18, the hierarchical moderation regression analysis indicated that the biographical variables (gender, race, marital status, and employment status) significantly predicted compensation, supervisor support and career opportunities. Overall, the biographical variable job level indicated no significant regression on any of the retention factors variables.

Table 5.18
Summary of the Influence of Biographical Variables on the Research Constructs

<table>
<thead>
<tr>
<th>Biographical variable</th>
<th>Predicted research variable</th>
<th>Practical significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Compensation</td>
<td>Large</td>
</tr>
<tr>
<td>Race</td>
<td>Career opportunities</td>
<td>Large</td>
</tr>
<tr>
<td>Marital status</td>
<td>Career opportunities</td>
<td>Large</td>
</tr>
<tr>
<td>Employment status</td>
<td>Compensation</td>
<td>Large</td>
</tr>
<tr>
<td></td>
<td>Supervisor support</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

Preliminary analysis 2: Constructing an overall psychological retention profile

The results of the hierarchical moderated regression analysis further assisted in the process of constructing the core elements of the psychological retention profile. These results revealed that the psychosocial career preoccupations acted as a significant moderator between the psychological contract and training and development opportunities as a retention factors construct, as indicated in Figure 5.3 and 5.4. This implies that employees who were highly
concerned or interested in their career development (high psychosocial career preoccupations) and who were also more highly satisfied with the psychological contract were also more highly satisfied with their training and development opportunities relatively to those who had low concerns about their career development within the organisation.

Figure 5.4 Moderation effect of psychosocial career preoccupations on the psychological contract and training and development opportunities

The results added certain person-centred characteristics that assisted in the construction of a psychological retention profile. Gender and employment status acted as significant predictors of compensation. Race and marital status acted as predictors of career opportunities. Employment status also acted as predictor of supervisor support. Contrary to what was expected, the results indicated that generational cohorts did not predict any of the retention factors and did not act as a moderator between the psychological contract and training and development as retention factor.

5.4.4 Moderated mediation regression analysis

Moderated mediation was conducted in order to further investigate the dynamics of the manifested psychological retention profile. The core psychological contract constructs (employer obligations and state of the psychological contract) derived from the canonical correlation and SEM best model fit analyses were utilised in the moderated mediation analysis. This step involved testing research hypothesis H5:

The effects of (a) employer obligations and (b) state of the psychological contract on satisfaction with retention factors are moderated by (1) employees’ psychosocial career
Regression-based moderated mediation analysis using the SPSS procedure developed by Hayes (2013) was conducted to determine the psychological mechanisms that contribute to satisfaction with retention factors. The moderated mediation model, which conformed to the guiding principles set by Wu and Zumbo (2008), hypothesised that the strength and direction of the mediation effect (i.e. state of the psychological contract), which created the effect of the independent variable (i.e. employer obligations) on the dependent variable (overall retention factors satisfaction) was subject to the level (value) of the moderator (psychosocial career preoccupations and generational cohorts).

Firstly, in order to determine the mediational pathway from employer obligations to state of the psychological contract on retention factors satisfaction, a simple mediation model was tested. This was followed by the testing of a moderated mediation model by adding the proposed moderator variable (psychosocial career preoccupations and generational cohorts) to the model. This was followed by regression analysis to determine whether the path from employer obligations to retention factor satisfaction through state of the psychological contract was moderated by different levels of psychosocial career preoccupations as well as by the different generational cohorts.

As a result of the cross-sectional research design of this study, which does not permit causal interferences from the data analysis (Wu & Zumbo, 2008), the main aim of this hypothesis was to determine the magnitude of the direct, indirect and interaction effects among the variables. In order to decrease multicollinearity among main and interaction effects, all continuous variables were mean centred before analysis (Aiken & West, 1991). The significance of the main and interaction effects, together with the conditional secondary effects at differing values of the moderator variable, was interpreted using the more reliable bootstrapping bias-corrected 95% lower level (LLCI) and upper level (ULCI) confidence levels, excluding zero (Shrout & Bolger, 2002).

The next section reports on the moderated mediation results for the two models.

**Model 1:** Tested (1) the pathway from employer obligations to state of psychological contract to overall retention factors satisfaction, (2) the indirect (mediating) effect of state of psychological contract on the link between employer obligation and retention factors.
satisfaction, and (3) whether the mediating effect of state of psychological contract was conditional on the values of psychosocial career preoccupations.

**Model 2:** Tested (1) the pathway from employer obligations to state of psychological contract to overall retention factors satisfaction, (2) the indirect (mediating) effect of state of psychological contract on the link between employer obligation and retention factors satisfaction, and (3) whether the mediating effect of state of psychological contract was conditional on the values of generational cohorts.

5.4.4.1 Model 1: Moderator – Overall psychosocial career preoccupations

Research hypothesis H5 assumed that the magnitude and strength of the effect of employer obligations on retention factors satisfaction through the state of the psychological contract would depend (conditional indirect effect) in turn on the levels of psychosocial career preoccupations.

Table 5.19 shows that employer obligations had a significant positive direct pathway to state of psychological contract ($\beta = .50; p \leq .001$; LLCI – ULCI range did not include zero: .48 to .53) and to retention factors satisfaction ($\beta = .27; p \leq .001$; LLCI – ULCI range did not include zero: .18 to .36). State of psychological contract had a significant direct positive pathway to retention factors satisfaction ($\beta = .46; p \leq .001$; LLCI – ULCI range did not include zero: .31 to .61). This implies that positive perceptions of employer obligations relate to positive perceptions of state of psychological contract, which in turn relate to satisfaction with retention factors.

Psychosocial career preoccupations had a main significant positive effect on state of psychological contract ($\beta = .05; p \leq .001$; LLCI – ULCI range did not include zero: .02 to .07), and a main significant negative effect on retention factors satisfaction ($\beta = -.13; p \leq .001$; LLCI – ULCI range did not include zero: -.17 to -.08). This implies that high levels of psychosocial career preoccupations (high concerns about career development) relate to positive perceptions of state of psychological contract and to lower levels of overall satisfaction with retention factors. There was no significant interaction effect between employer obligations and psychosocial career preoccupations in predicting state of psychological contract. There was a significant effect between state of the psychological contract and psychosocial career preoccupations in predicting overall satisfaction with retention factors.

Table 5.19
### Regression Coefficients, Standard Errors, Significance Tests for the Regression Model and Indirect Mediation Effect of State of the Psychological Contract

<table>
<thead>
<tr>
<th>Model: State of psychological contract</th>
<th>$\beta$</th>
<th>SE</th>
<th>t</th>
<th>95% Bootstrap bias-corrected LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>constant</td>
<td>.00</td>
<td>.01</td>
<td>0.015</td>
<td>-0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>Employer obligations (A)</td>
<td>.50</td>
<td>.01</td>
<td>38.03***</td>
<td>.48</td>
<td>.53</td>
</tr>
<tr>
<td>Overall psychosocial career preoccupations (B)</td>
<td>.05</td>
<td>.01</td>
<td>3.50***</td>
<td>.02</td>
<td>.07</td>
</tr>
<tr>
<td>Interaction term: A x B</td>
<td>-.00</td>
<td>.01</td>
<td>.06</td>
<td>-0.03</td>
<td>0.02</td>
</tr>
</tbody>
</table>

**Model info**

- $F_p = 490.16^{***}$
- $R^2 = .72$

<table>
<thead>
<tr>
<th>Model: Overall retention factors satisfaction</th>
<th>$\beta$</th>
<th>SE</th>
<th>t</th>
<th>95% Bootstrap bias-corrected LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>constant</td>
<td>3.94</td>
<td>.02</td>
<td>162.91***</td>
<td>3.89</td>
<td>3.99</td>
</tr>
<tr>
<td>Employer obligations</td>
<td>.27</td>
<td>.05</td>
<td>5.99***</td>
<td>.18</td>
<td>.36</td>
</tr>
<tr>
<td>State of psychological contract (A)</td>
<td>.46</td>
<td>.08</td>
<td>6.03***</td>
<td>.31</td>
<td>.61</td>
</tr>
<tr>
<td>Overall psychosocial career preoccupations (B)</td>
<td>-.13</td>
<td>.03</td>
<td>-4.99***</td>
<td>-.17</td>
<td>-.08</td>
</tr>
<tr>
<td>Interaction term: A x B</td>
<td>.07</td>
<td>.04</td>
<td>1.99*</td>
<td>.001</td>
<td>.143</td>
</tr>
</tbody>
</table>

**Direct effect**

- Employer obligations – retention factors satisfaction
  - $F_p = 122.87^{***}$
  - $R^2 = .46$

Note: $N = 579$. *** $p \leq .001$ ** $p \leq .01$ * $p \leq .05$

The direct and conditional indirect effects were analysed when the scores of psychosocial career preoccupations were the sample mean and $\pm$ 1 SD. The mean of psychosocial career preoccupations was zero because the score was mean-centred. Table 5.20 reveals that all three of the conditional indirect effects of the state of psychological contract were significantly positive as supported by the bias-corrected bootstrap lower level and upper level confidence intervals (LLCI and ULCI) not including zero in the values range. The results indicated that the effect of positive perceptions of employer obligations on high levels of retention factors satisfaction through positive state of psychological contract increased when the scores on psychosocial career preoccupations were high (i.e. strong concerns about career development). In other words, overall psychosocial career preoccupations functioned as a direct and conditional indirect moderating mechanism when observing the mediating effect of state of the psychological contract on the link between employer obligations and retention factors satisfaction.

Table 5.20

*Conditional Indirect Effect at the Values of the Moderator (Psychosocial Career Preoccupations)*
Table 5.21 shows that employer obligations had a significant positive direct pathway to state of psychological contract ($\beta = .50; p \leq .001; \text{LLCI} – \text{ULCI} \text{ range did not include zero: .48 to .53}$) and to retention factors satisfaction ($\beta = .31; p \leq .001; \text{LLCI} – \text{ULCI} \text{ range did not include zero: .22 to .39}$). State of psychological contract had a significant direct positive pathway to retention factors satisfaction ($\beta = .39; p \leq .001; \text{LLCI} – \text{ULCI} \text{ range did not include zero: .24 to .55}$). This implies that positive perceptions of employer obligations relate to positive retention factors satisfaction.
The direct and conditional indirect effects were analysed when the scores of generational cohorts were the sample mean and ± 1 SD. The mean of generational cohorts was zero because the score was mean-centred. Table 5.22 reveals that all three of the conditional indirect effects of the state of psychological contract were significantly positive, as supported by the bias-corrected bootstrap lower level and upper level confidence intervals (LLCI and ULCI) not including zero in the values range. These results indicated that the effect of positive perceptions of employer obligations on high levels of retention factors satisfaction through positive state of psychological contract increased when the age group of participants was
lower (i.e. younger generations). In other words, the younger the generation, the greater the effect of positive perceptions of employer obligations on high levels of retention factors satisfaction through a positive state of psychological contract. In other words, although generational cohorts had no direct moderating effect, it did function as a conditional indirect mechanism when observing the mediating effect of state of the psychological contract on the link between the employer obligations and overall retention factors satisfaction.

Table 5.22
Conditional Indirect Effect at the Values of the Moderator (Generational cohorts)

<table>
<thead>
<tr>
<th>Values of moderator</th>
<th>β</th>
<th>SE</th>
<th>95% Bootstrap bias-corrected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower level confidence interval</td>
</tr>
<tr>
<td>-1SD</td>
<td>-10.52</td>
<td>.20</td>
<td>.05</td>
</tr>
<tr>
<td>Mean</td>
<td>.00</td>
<td>.20</td>
<td>.04</td>
</tr>
<tr>
<td>+1SD</td>
<td>10.52</td>
<td>.19</td>
<td>.05</td>
</tr>
</tbody>
</table>

Note: N = 579. *p ≤ .05. LLCI: Lower level confidence interval. ULCI: Upper level confidence interval

In conclusion, the empirical results obtained from the moderated mediation modelling provided supportive evidence for accepting research hypothesis H5:

The effects of (a) employer obligations and (b) state of the psychological contract on retention factors satisfaction are moderated by (1) employees’ psychosocial career preoccupations, such that stronger effects are associated with stronger career preoccupations, and (2) by generational cohorts, such that stronger effects are evident for certain generational cohorts.

Preliminary analysis 3: Constructing an overall psychological retention profile

The results from the moderated mediation modelling could be used in adding elements comprising the empirically manifested psychological retention profile. The results revealed that high levels of psychosocial career preoccupations (high concerns about career development) related to positive perceptions of the state of the psychological contract and to lower levels of overall satisfaction with retention factors. This implies that participants who experienced their psychological contract as fair and just were more likely to experience greater concerns or interests with regard to their career development and would therefore be likely to be less satisfied with the retention factors overall.
In addition, the results indicated that the effect of positive perceptions of employer obligations on high levels of retention factors satisfaction through the state of the psychological contract increased when the scores on psychosocial career preoccupations were high.

The results also indicated that the effect of positive perceptions of employer obligations on high levels of retention factors satisfaction through positive state of psychological contract increased when the age group of participants was lower (i.e. younger generations).

5.4.5 Test for significant mean differences

Stage 4 of the inferential statistical analysis addressed research hypotheses H6.

| Individuals from various generational cohorts, gender, race, marital status, job level and employment status sub-groups differ significantly with regard to the psychological career-related construct (psychological contract, psychosocial career preoccupations) and the retention factors construct variables. |

The Kolmogorov-Smirnov (KS) test was used to test for normality of data distribution. The test was significant in terms of all biographical variables indicating that the non-parametric test should be used. The Kruskal-Wallis $H$ test is a non-parametric method that is performed when the dependant variable is either interval/ratio scale or ordinal (Rovia et al., 2013). The Kruskal-Wallis $H$ test is performed by comparing the rank totals of multiple independent groups (Rovia et al., 2013). Significant mean differences between the sub-groups of the generational cohorts (Baby Boomers, generation X and generation Y) and psychosocial career preoccupations (career establishment preoccupations, career adaptation preoccupations, work/life adjustment preoccupations) were determined by using the Kruskal-Wallis test.

- Gender (females or males)
- Race (white or black African)
- Generational cohorts (Baby Boomers, Generation X or Generation Y)
- Marital status (married or single/divorced)
- Job level (academic or administrative)
- Employment status (contract or permanent)
5.4.5.1 Reporting differences in mean scores for gender groups (PQ, PCPS & RFMS)

The results of the Kruskal-Wallis test and mean scores investigating the relationship between the psychological career-related variables (PQ & PCPS) and the retention-related construct variables (RFMS) and the biographical variable of gender are provided in Table 5.23.

Table 5.23
Kruskal-Wallis Test for Gender: Psychological Career-Related Variables (PQ & PCPS) and Retention-Related Construct Variables (RFMS)

<table>
<thead>
<tr>
<th></th>
<th>Females</th>
<th>Males</th>
<th>Chi-square</th>
<th>Cohen d</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention-related construct variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compensation</td>
<td>216</td>
<td>363</td>
<td>6.45</td>
<td>.21</td>
<td>.01**</td>
</tr>
<tr>
<td>Organisational commitment</td>
<td>216</td>
<td>363</td>
<td>7.91</td>
<td>.24</td>
<td>.01**</td>
</tr>
</tbody>
</table>

Notes: N = 579. ***p ≤ .001 **p ≤ .01 *p ≤ .05

Table 5.23 indicates the results for the pairwise comparison test. Significant differences in terms of compensation and organisational commitment across females and males were found.

In terms of compensation, females (M = 3.90; SD = 1.29) scored significantly lower than their male counterparts (M = 4.18; SD = 1.25; d = .21, small practical effect size); in terms of organisational commitment, females (M = 4.52; SD = 1.40) scored significantly lower than males (M = 4.80; SD = 1.37; d = .24, small practical effect).

No significant differences were observed between the career preoccupations variables and the psychological contract variables.

5.4.5.2 Reporting differences in mean scores for race groups (PQ, PCPS & RFMS)

The results of the Kruskal-Wallis test and mean scores investigating the relationship between the psychological career-related variables (PQ & PCPS) and the retention-related construct variables (RFMS) and the biographical variable of race are provided in Table 5.24.
Table 5.24

*Kruskal-Wallis Test for Race:*

*Psychological Career-Related Variables (PQ & PCPS) and Retention-Related Construct Variables (RFMS)*

<table>
<thead>
<tr>
<th>Mean scores for White and Black (African, coloured, Indian)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
</tr>
</tbody>
</table>

208
<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Chi-square</th>
<th>Cohen d</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retention-related construct variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career opportunities</td>
<td>221</td>
<td>2.90</td>
<td>.89</td>
<td>348</td>
<td>3.55</td>
<td>1.18</td>
<td>48.61</td>
<td>.61</td>
<td>.001***</td>
</tr>
<tr>
<td>Work/life balance</td>
<td>221</td>
<td>2.96</td>
<td>1.52</td>
<td>348</td>
<td>4.07</td>
<td>1.45</td>
<td>66.59</td>
<td>.73</td>
<td>.001***</td>
</tr>
<tr>
<td>Organisational commitment</td>
<td>221</td>
<td>4.87</td>
<td>1.33</td>
<td>348</td>
<td>4.58</td>
<td>1.42</td>
<td>7.68</td>
<td>.24</td>
<td>.01**</td>
</tr>
<tr>
<td><strong>Career preoccupations variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career establishment preoccupations</td>
<td>221</td>
<td>3.20</td>
<td>1.01</td>
<td>348</td>
<td>3.78</td>
<td>1.04</td>
<td>49.89</td>
<td>.62</td>
<td>.001***</td>
</tr>
<tr>
<td>Career adaptation preoccupations</td>
<td>221</td>
<td>2.36</td>
<td>1.02</td>
<td>348</td>
<td>3.15</td>
<td>1.19</td>
<td>58.88</td>
<td>.68</td>
<td>.001***</td>
</tr>
<tr>
<td>Work/life adjustment preoccupations</td>
<td>221</td>
<td>2.86</td>
<td>.94</td>
<td>348</td>
<td>3.19</td>
<td>.97</td>
<td>16.55</td>
<td>.35</td>
<td>.001***</td>
</tr>
<tr>
<td><strong>Psychological contract variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with psychological contract</td>
<td>221</td>
<td>3.12</td>
<td>.43</td>
<td>348</td>
<td>3.01</td>
<td>.48</td>
<td>9.98</td>
<td>.27</td>
<td>.01**</td>
</tr>
<tr>
<td>State of psychological contract</td>
<td>221</td>
<td>2.79</td>
<td>.89</td>
<td>348</td>
<td>3.07</td>
<td>1.05</td>
<td>12.36</td>
<td>.30</td>
<td>.001***</td>
</tr>
</tbody>
</table>

*Notes: N = 569. ***p ≤ .001 **p ≤ .01 *p ≤ .05*

Table 5.24 reflects the results for the pairwise comparison test. Significant differences in terms race as a biographical variable were found.

According to the results reported in Table 5.24, Whites ($M = 2.09; SD = .89$) scored significantly lower than Blacks ($M = 3.55; SD = 1.18; d = .61$, moderate practical effect) in terms of career opportunities. In terms of work/life balance, Whites ($M = 2.96; SD = 1.52$) scored significantly lower than Blacks ($M = 4.07; SD = 1.45; d = .73$, moderate practical effect whereas for
organisational commitment, Whites ($M = 4.87; SD = 1.33$) scored significantly higher than Blacks ($M = 4.58; SD = 1.42; d = .24$, small practical effect).

In the case of the career preoccupations variables, Table 5.24 reflects that Whites scored significantly lower than Blacks on all three variables: career establishment preoccupation (Whites: $M = 3.20; SD = 1.01$; Blacks: $M = 3.78; SD = 1.04; d = .62$, moderate practical effect); career adaptation preoccupation (Whites: $M = 2.36; SD = 1.02$; Blacks: $M = 3.15; SD = 1.19; d = .68$, moderate practical effect); and work/life adjustment preoccupation (Whites: $M = 2.86; SD = .94$; Blacks: $M = 3.19; SD = .97; d = .35$, small practical effect size).

With regard to the psychological contract variables, Whites ($M = 3.12; SD = .43$) scored significantly higher than Blacks ($M = 3.01; SD = .48; d = .27$, small practical effect size) on satisfaction with the psychological contract whereas Blacks ($M = 3.07; SD = 1.05$) scored significantly higher than Whites ($M = 2.79; SD = .89; d = .30$, small practical effect size) on state of the psychological contract.

5.4.5.3 Reporting differences in mean scores for generational cohorts (PQ, PCPS & RFMS)

The results of the Kruskal-Wallis test and mean scores investigating the relationship between the psychological career-related variables (PQ & PCPS) and the retention-related construct variables (RFMS) and the biographical variable of generational cohorts are provided in Table 5.25.

<table>
<thead>
<tr>
<th>Variable Category</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Chi-square</th>
<th>Cohen d</th>
<th>p value</th>
</tr>
</thead>
</table>

Table 5.25

Kruskal-Wallis Test for Generational Cohorts:

Psychological Career-Related Variables (PQ & PCPS) and Retention-Related Construct Variables (RFMS)
<table>
<thead>
<tr>
<th>Generational cohort:</th>
<th>Baby Boomers</th>
<th>Generation X</th>
<th>Generation Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career opportunities</td>
<td>199 3.02 1.06 22.20 .40 .001***</td>
<td>253 3.40 1.16</td>
<td>125 3.56 1.05</td>
</tr>
<tr>
<td>Work/life balance</td>
<td>199 3.28 1.62 15.85 .34 .001***</td>
<td>253 3.72 1.58</td>
<td>125 3.98 1.42</td>
</tr>
<tr>
<td>Organisational commitment</td>
<td>199 4.90 1.36 17.31 .35 .001***</td>
<td>253 4.71 1.37</td>
<td>125 4.36 1.44</td>
</tr>
<tr>
<td>Career establishment preoccupation</td>
<td>199 3.11 1.06 51.20 .62 .001***</td>
<td>253 3.76 .98</td>
<td>125 3.77 1.06</td>
</tr>
<tr>
<td>Career adaptation preoccupation</td>
<td>199 2.37 1.10 47.45 .60 .001***</td>
<td>253 3.07 1.20</td>
<td>125 3.07 1.20</td>
</tr>
<tr>
<td>Work/life adjustment preoccupation</td>
<td>199 2.76 .98 25.16 .43 .001***</td>
<td>253 3.20 .93</td>
<td>125 3.20 .96</td>
</tr>
</tbody>
</table>
Table 5.25 indicate the results for the pairwise comparison test. Significant differences in terms of career opportunities, work/life balance, and organisational commitment (retention factors variables), the career preoccupations variables and employee obligations (psychological contract variable) in terms of generational cohorts were reported.

In terms of the career opportunities, Table 5.25 reported that Generation Y ($M = 3.56; SD = 1.05; d = .40$, small practical effect) scored significantly higher than Generation X ($M = 3.40; SD = 1.16$) and Baby Boomers ($M = 3.02; SD = 1.06$). Generation Y ($M = 3.98; SD = 1.42; d = .34$, small practical effect) also scored significantly higher than Generation X ($M = 3.72; SD = 1.58$) and Baby Boomers ($M = 3.28; SD = 1.62$) in terms of work/life balance. However, in terms of organisational commitment, Baby Boomers ($M = 4.90; SD = 1.36; d = .35$, small practical effect) scored significantly higher than Generation X ($M = 4.71; SD = 1.37$) and Generation Y ($M = 4.36; SD = 1.44$).

In the case of the career preoccupations scale, Generation Y ($M = 3.77; SD = 1.06; .62$, moderate practical effect) scored significantly higher than Generation X ($M = 3.76; SD = .98$) and the Baby Boomers ($M = 3.11; SD = 1.06$) in terms of the career establishment preoccupation. Generation Y ($M = 3.07; SD = 1.20$) and Generation X ($M = 3.07; SD = 1.20$) scored significantly higher than the Baby Boomers ($M = 2.37; SD = 1.10; d = .60$, moderate practical effect) on the career adaptation preoccupation. Likewise, Generation Y ($M = 3.20; SD = .96$) and Generation X ($M = 3.20; SD = .93$) scored significantly higher than the Baby Boomers ($M = 2.76; SD = .98; d = .43$, small practical effect) on the work/life adjustment preoccupation.

Table 5.25 indicates that employee obligations, Generation X ($M = 5.15; SD = .81; d = .28$, small practical effect) scored significantly higher than the Baby Boomers ($M = 5.05; SD = .85$) and Generation Y ($M = 4.92; SD = .80$).
5.4.5.4 Reporting differences in mean scores for marital status (PQ, PCPS & RFMS)

The results of the Kruskal-Wallis test and mean scores investigating the relationship between the psychological career-related variables (PQ & PCPS) and the retention-related construct variables (RFMS), and the biographical variable of marital status are provided in Table 5.26.

Table 5.26
Kruskal-Wallis Test for Marital Status: Psychological Career-Related Variables (PQ & PCPS) and Retention-Related Construct Variables (RFMS)

<table>
<thead>
<tr>
<th>Mean scores for married and single/divorced</th>
<th>Married</th>
<th>Single/Divorced</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------</td>
<td>-----</td>
</tr>
<tr>
<td>Retention-related construct variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career opportunities</td>
<td>340</td>
<td>3.16</td>
</tr>
<tr>
<td>Career establishment preoccupations</td>
<td>340</td>
<td>3.43</td>
</tr>
<tr>
<td>Career adaptation preoccupations</td>
<td>340</td>
<td>2.67</td>
</tr>
<tr>
<td>Work/life adjustment preoccupations</td>
<td>340</td>
<td>2.97</td>
</tr>
</tbody>
</table>

Notes: N = 559. ***p ≤ .001 **p ≤ .01 *p ≤ .05

Table 5.26 shows the results of the pairwise comparison test. Significant differences with regard to career opportunities (for retention factors) and the career preoccupations variables were reported.

In terms of the career opportunities, Table 5.26 shows that married participants ($M = 3.16; SD = 1.09; d = .30$, small practical effect) scored significantly lower than single/divorced participants ($M = 3.52; SD = 1.16$). In terms of career establishment preoccupations, married participants ($M = 3.43; SD = 1.06; d = .27$, small practical effect) scored significantly lower
than single/divorced participants ($M = 3.69; SD = 1.08$). Married participants ($M = 2.67; SD = 1.17; d = .34$, small practical effect) scored significantly lower for career adaptation preoccupations than single/divorced participants ($M = 3.07; SD = 1.19$). As to work/life adjustment preoccupations, married participants ($M = 2.97; SD = .98; d = .18$, small practical effect) scored significantly lower than single/divorced participants.

5.4.5.5 Reporting differences in mean scores for job level (PQ, PCPS & RFMS)

The results of the Kruskal-Wallis test and mean scores investigating the relationship between the psychological career-related variables (PQ & PCPS) and the retention-related construct variables (RFMS), and the biographical variable of job level are provided in Table 5.27.

<table>
<thead>
<tr>
<th>Mean scores for job level</th>
<th>Academic</th>
<th>Administrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>27</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5.27 indicates the results for the pairwise comparison test. Significant differences in job characteristics, career opportunities, and work/life balance (retention factors variables), career establishment preoccupations and career adaptation preoccupations (career preoccupation variables) and employer obligations (psychological contract variable) in terms of job level were reported.

In terms of job characteristics, administrative participants ($M = 4.10; SD = .99$) scored significantly lower than academic participants ($M = 4.61; SD = .93; d = .53$, moderate practical effect). For career opportunities, administrative participants ($M = 3.45; SD = 1.18$) scored significantly higher than academic participants ($M = 3.25; SD = 1.04; d = .19$, small practical effect). Academic participants ($M = 3.04; SD = 1.55$) also scored significantly lower than the administrative participants ($M = 4.15; SD = 1.44; d = .75$, moderate practical effect) on work/life balance.

In the case of career preoccupation variables, administrative participants ($M = 3.74; SD = 1.04$) scored significantly higher on career establishment preoccupations than academic participants ($M = 3.43; SD = 1.02; d = .35$, small practical effect) while the latter ($M = 3.13; SD = 1.02$) scored significantly higher on career adaptation preoccupations than academic participants ($M = 3.25; SD = .98; d = .22$, small practical effect) on work/life balance.

### Retention-related construct variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>t</th>
<th>d</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job characteristics</td>
<td>221</td>
<td>4.61</td>
<td>.93</td>
<td>4.10</td>
<td>.99</td>
<td>28.05</td>
</tr>
<tr>
<td>Career opportunities</td>
<td>221</td>
<td>3.25</td>
<td>1.04</td>
<td>3.45</td>
<td>1.18</td>
<td>3.99</td>
</tr>
<tr>
<td>Work/life balance</td>
<td>221</td>
<td>3.04</td>
<td>1.55</td>
<td>4.15</td>
<td>1.44</td>
<td>53.16</td>
</tr>
</tbody>
</table>

### Career preoccupation variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>t</th>
<th>d</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career establishment preoccupations</td>
<td>221</td>
<td>3.43</td>
<td>1.02</td>
<td>3.74</td>
<td>1.04</td>
<td>13.15</td>
</tr>
<tr>
<td>Career adaptation preoccupations</td>
<td>221</td>
<td>2.56</td>
<td>1.08</td>
<td>3.13</td>
<td>1.22</td>
<td>20.79</td>
</tr>
</tbody>
</table>

### Psychological contract variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>t</th>
<th>d</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer obligations</td>
<td>221</td>
<td>3.05</td>
<td>.98</td>
<td>2.87</td>
<td>1.04</td>
<td>4.02</td>
</tr>
</tbody>
</table>

Notes: N = 435. ***$p \leq .001$ **$p \leq .01$ *$p \leq .05$
= 1.22) also scored significantly higher than academic participants \((M = 2.56; SD = 1.08; d = .45, \text{small practical effect})\) on career adaptation preoccupations.

With regard to employer obligations, academic participants \((M = 3.05; SD = .98)\) scored significantly higher than administrative participants \((M = 2.87; SD = 1.04; d = .19, \text{small practical effect})\).

5.4.5.6 Reporting differences in mean scores for employment status (PQ, PCPS & RFMS)

The results of the Kruskal-Wallis test and mean scores investigating the relationship between the psychological career-related variables (PQ & PCPS) and the retention-related construct variables (RFMS), and the biographical variable of employment status are provided in Table 5.28

<table>
<thead>
<tr>
<th></th>
<th>Mean scores for employment status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contract</td>
</tr>
<tr>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5.28 shows the results for the pairwise comparison test. Significant differences in terms of compensation, job characteristics, supervisor support, career opportunities, and work/life balance (retention factors variables), career establishment preoccupations and work/life adjustment preoccupations (career preoccupations variables) and satisfaction with the psychological contract and state of the psychological contract (psychological contract variable) in terms of employment status were reported.

As far as retention factor variables were concerned, permanent participants scored significantly lower than contract participants on job characteristics (permanent: $M = 4.28$; $SD$
= .99; contract participants: $M = 4.67$; $SD = 1.33$; $d = .30$, small practical effect), supervisor support (permanent: $M = 3.79$; $SD = 1.23$; contract: $M = 4.34$; $SD = 1.19$; $d = .33$, small practical effect), career opportunities (permanent: $M = 3.24$; $SD = 1.11$; contract: $M = 3.59$; $SD = 1.23$; $d = .24$, small practical effect), and work/life balance (permanent: $M = 3.51$; $SD = 1.57$; contract: $M = 4.26$; $SD = 1.45$; $d = .37$, small practical effect). In terms of compensation, permanent participants ($M = 4.21$; $SD = 1.22$) scored significantly higher than contract participants ($M = 3.47$; $SD = 1.33$; $d = .44$, small practical effect).

Furthermore, Table 5.28 illustrates that permanent participants ($M = 3.47$; $SD = 1.05$) scored significantly lower than contract participants ($M = 3.86$; $SD = 1.10$; $d = .33$, small practical effect) on career establishment preoccupations. In addition, permanent participants ($M = 3.01$; $SD = .96$) scored significantly lower than contract participants ($M = 3.22$; $SD = 1.02$; $d = .17$, small practical effect) on work/life adjustment preoccupations.

Permanent participants ($M = 3.07$; $SD = .46$) scored significantly higher than contract participants ($M = 2.96$; $SD = .49$; $d = .21$, small practical effect) in terms of their satisfaction with the psychological contract, whereas contract participants ($M = 3.27$; $SD = 1.02$) scored significantly higher than permanent participants ($M = 2.90$; $SD = .98$; $d = .28$, small practical effect) in terms of the state of the psychological contract.

Table 5.29 provides a summation of the tests for significant mean differences and indicates that there were statistically significant differences in terms of participants from various biographical groups (gender, race, generational cohorts, marital status, job level and employment status) and psychological career-related variables, career preoccupations variables and retention factors variables. It should be noted that there were no significant mean differences between the biographical variables for training and development opportunities as retention factors.

Table 5.29

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source of difference</th>
<th>Lowest mean ranking</th>
<th>Highest mean ranking</th>
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</thead>
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<tr>
<td>Compensation</td>
<td>Gender</td>
<td>Females</td>
<td>Males</td>
</tr>
<tr>
<td></td>
<td>Employment status</td>
<td>Contract</td>
<td>Permanent</td>
</tr>
<tr>
<td>Job characteristics</td>
<td>Job level</td>
<td>Administrative</td>
<td>Academic</td>
</tr>
<tr>
<td></td>
<td>Employment status</td>
<td>Permanent</td>
<td>Contract</td>
</tr>
<tr>
<td>Training and development opportunities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor support</td>
<td>Employment status</td>
<td>Permanent</td>
<td>Contract</td>
</tr>
<tr>
<td>Career opportunities</td>
<td>Race</td>
<td>White</td>
<td>Black</td>
</tr>
<tr>
<td>Generational cohorts</td>
<td>Baby Boomers</td>
<td>Generation Y</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>Single/divorced</td>
<td></td>
</tr>
<tr>
<td>Job level</td>
<td>Academic</td>
<td>Administrative</td>
<td></td>
</tr>
<tr>
<td>Employment status</td>
<td>Permanent</td>
<td>Contract</td>
<td></td>
</tr>
<tr>
<td>Work/life balance</td>
<td>Race</td>
<td>White</td>
<td>Black</td>
</tr>
<tr>
<td>Generational cohorts</td>
<td>Baby Boomers</td>
<td>Generation Y</td>
<td></td>
</tr>
<tr>
<td>Job level</td>
<td>Academic</td>
<td>Administrative</td>
<td></td>
</tr>
<tr>
<td>Employment status</td>
<td>Permanent</td>
<td>Contract</td>
<td></td>
</tr>
<tr>
<td>Organisational commitment</td>
<td>Gender</td>
<td>Females</td>
<td>Males</td>
</tr>
<tr>
<td>Race</td>
<td>Black</td>
<td>White</td>
<td></td>
</tr>
<tr>
<td>Generational cohorts</td>
<td>Generation Y</td>
<td>Baby Boomers</td>
<td></td>
</tr>
<tr>
<td>Career establishment preoccupations</td>
<td>Race</td>
<td>White</td>
<td>Black</td>
</tr>
<tr>
<td>Generational cohorts</td>
<td>Baby Boomers</td>
<td>Generation Y</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>Single/divorced</td>
<td></td>
</tr>
<tr>
<td>Job level</td>
<td>Academic</td>
<td>Administrative</td>
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</tr>
<tr>
<td>Employment status</td>
<td>Permanent</td>
<td>Contract</td>
<td></td>
</tr>
<tr>
<td>Career adaptation preoccupations</td>
<td>Race</td>
<td>White</td>
<td>Black</td>
</tr>
<tr>
<td>Generational cohorts</td>
<td>Baby Boomers</td>
<td>Generation Y and X</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>Single/divorced</td>
<td></td>
</tr>
<tr>
<td>Job level</td>
<td>Academic</td>
<td>Administrative</td>
<td></td>
</tr>
<tr>
<td>Employment status</td>
<td>Permanent</td>
<td>Contract</td>
<td></td>
</tr>
<tr>
<td>Work/life adjustment preoccupations</td>
<td>Race</td>
<td>White</td>
<td>Black</td>
</tr>
<tr>
<td>Generational cohorts</td>
<td>Baby Boomers</td>
<td>Generation Y and X</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>Single/divorced</td>
<td></td>
</tr>
<tr>
<td>Employment status</td>
<td>Permanent</td>
<td>Contract</td>
<td></td>
</tr>
<tr>
<td>Employer obligations</td>
<td>Job level</td>
<td>Administrative</td>
<td>Academic</td>
</tr>
<tr>
<td>Employee obligations</td>
<td>Generational cohorts</td>
<td>Generation X</td>
<td>Baby Boomers</td>
</tr>
<tr>
<td>Satisfaction with psychological contract</td>
<td>Race</td>
<td>Black</td>
<td>White</td>
</tr>
<tr>
<td>Employment status</td>
<td>Contract</td>
<td>Permanent</td>
<td></td>
</tr>
<tr>
<td>State of psychological contract</td>
<td>Race</td>
<td>White</td>
<td>Black</td>
</tr>
<tr>
<td>Employment status</td>
<td>Permanent</td>
<td>Contract</td>
<td></td>
</tr>
</tbody>
</table>
The empirical results obtained from the tests for significant mean differences provided supportive evidence for accepting research hypothesis H6 in terms of gender, race, generational cohorts, marital status, job level and employment status:

| Individuals from various gender, race, generational cohort, marital status, job level and employment status sub-groups differ significantly with regard to psychological career-related construct variables (psychological contract and psychosocial career preoccupations) and retention factor variables. H6 |

Preliminary analysis 4: Constructing an overall psychological retention profile

In conclusion, the dominant variables that constituted the psychological retention profile of the participants related to employer obligations (predicting the satisfaction with compensation and training and development opportunities) and state of the psychological contract (predicting the satisfaction with supervisor support and career opportunities), and to the psychosocial career preoccupations constructs (career establishment preoccupations, career adaptation preoccupations and work/life adjustment preoccupations). This section determined how these variables differed in terms of the biographical variables of the participants. Table 5.30 indicates the biographical variables that differed significantly in terms of the psychological retention profile variables.

Table 5.30

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source of difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer obligations</td>
<td>Job level</td>
</tr>
<tr>
<td>State of the psychological contract</td>
<td>Race</td>
</tr>
<tr>
<td></td>
<td>Employment status</td>
</tr>
<tr>
<td>Compensation</td>
<td>Gender</td>
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</tr>
</tbody>
</table>

220
<table>
<thead>
<tr>
<th>Training and development opportunities</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor support</td>
<td>Employment status</td>
</tr>
<tr>
<td>Career opportunities</td>
<td>Race</td>
</tr>
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<td>Generational cohorts</td>
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<td>Marital status</td>
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<td></td>
<td>Job level</td>
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<tr>
<td>Career establishment preoccupations</td>
<td>Race</td>
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<td>Generational cohorts</td>
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<td>Marital status</td>
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<tr>
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<td>Job level</td>
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<td></td>
<td>Employment status</td>
</tr>
<tr>
<td>Career adaptation preoccupations</td>
<td>Race</td>
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<td>Marital status</td>
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<td>Job level</td>
</tr>
<tr>
<td>Work/life adjustment preoccupations</td>
<td>Race</td>
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<tr>
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<td>Generational cohorts</td>
</tr>
<tr>
<td></td>
<td>Marital status</td>
</tr>
<tr>
<td></td>
<td>Employment status</td>
</tr>
</tbody>
</table>

This section provided the results of the statistical analyses that were performed to test the research hypotheses. These hypotheses were tested and reported by means of descriptive statistics, correlational statistics and inferential and multivariate statistics. The following section entails an integration and discussion of these results.

### 5.5 INTEGRATION AND DISCUSSION

This section provides an integration of the results of the study, a discussion of the results of the biographical profile of participants, the descriptive statistics and the empirical research aims.

#### 5.5.1 Biographical profile of the sample and frequencies
The biographical profile revealed that participants were predominantly black African males between the age of 36 and 55 years. The majority of participants were married and permanently employed at the institution. The generational group best represented by the sample was Generation X (aged 37 to 51). Individuals from the Generation X cohort typically value a work/life balance, and prompt recognition and rewards. They are reactive, they work to live and tend to lack loyalty and seek fulfilling work (Debevec et al., 2013; Dries et al., 2008; Gibson et al., 2009; Rood, 2010; Zemke et al., 2000). Most participants in this study had worked for the institution for more than two years but fewer than 10 years and were on NQF level 8, 9 or 10. Finally, the majority of the sample was either in the establishment career stage with psychological career concerns relating to keeping one’s job, learning the requirements of the job, improving one’s performance and managing new technological developments (Coetzee, 2015b; Sharf, 2010), or in the maintenance career stage with psychological career concerns including advancement in one’s work, experiencing a sense of stability on the job, knowing the rudimentary requirements of the job, and perceiving the job on a long-term basis (Coetzee, 2015b; Sharf, 2010).

Females were underrepresented while most participants were permanently employed. Coloureds and Indians/Asians were also underrepresented in the sample. These aspects were taken into consideration in the interpretation of the results; however, this limits the generalisability of the results to the wider population of South Africa.

5.5.2 Descriptive statistics: Interpretation of the results (mean scores)

The following section includes an interpretation and discussion of the mean scores of the three measurement instruments, PQ, PCPS and RFMS, for the psychological retention profile for diverse generational groups. The results reported in Table 5.6 to 5.8 are relevant to this section.

5.5.2.1 Psychological retention profile of participants: Psychological contract

Table 5.6 is relevant to this section. In terms of the mean scores, the psychological retention profile revealed that participants felt that they have made and kept their promises to the organisation to a large extent. The notion of the psychological contract is based on the motivation of employees to maintain a balance between their contributions or efforts and the outputs they receive in an attempt to find mutual benefits within the employment relationship (Blau, 1964; Rodwell & Ellershaw, 2015; Tekleab & Chiaburu, 2011). In the event that an employee perceives that no attempt has been made to reciprocate his/her contribution, an
imbalance may occur and ultimately a breach of the psychological contract (Bal et al., 2008; Rodwell & Ellershaw, 2015). In this case, the psychological retention profile indeed revealed that there was a perceived imbalance in the contributions made by participants and the contributions from the organisation. Participants indicated that the organisation had made promises to them; however, they felt that the organisation kept its promises only in part. Previous research studies have found that employees who believe that their employers have not fulfilled their promises may hold back on their own contributions to the organisation (Robinson & Morrison, 1995; Rodwell & Ellershaw, 2015).

The psychological retention profile also revealed that participants were neither satisfied nor dissatisfied with their exchange relationship with the organisation. When employees are satisfied with their psychological contract, that is if they are satisfied that their contributions are met with reciprocity, then they are motivated to contribute even more to the exchange relationship (Liu, Hui, Lee, & Chen, 2012; Turnley, Bolino, Lester, & Bloodgood, 2003); however, when reciprocity is absent, and employees become more dissatisfied, they will decrease their contributions and increase their intention to leave (Liu et al., 2012; Maertz & Griffeth, 2004). Together with the fact that participants felt that their organisation had only partly kept its promises, participants may have become more dissatisfied with their exchange relationship with the organisation which may lead to them leaving the organisation in future. O’Meara et al. (2016) found that unfulfilled expectations and breached psychological contracts were the main reasons for higher educational institution employees to leave the institution.

In terms of the mean scores, the psychological retention profile also revealed that participants were neither satisfied nor dissatisfied with the state of the psychological contract. The state of the psychological contract relates to the fairness of the promises made and the consequences this has on trust (Van der Vaart et al., 2013; Guest, 2004). Employees who have positive feelings towards the state of their psychological contract will show higher levels of commitment to the organisation and thus decreased levels of intentions to leave (Van der Vaart et al., 2013). In this case, participants felt neither that the promises made to them were unfair nor that they were fair. However, the results for the state of the psychological contract should be interpreted with caution as low internal reliability values were reported for this subscale.

5.5.2.2 Psychological retention profile of participants: Psychosocial career preoccupations

Table 5.7 is relevant to this section. In terms of the mean scores participants revealed that they were mostly concerned with career establishment preoccupations, followed by work/life adjustment preoccupations. Coetzee (2014) argues that psychosocial career preoccupations
are not linked or associated with age; nonetheless, these findings indicated that the majority of the participants were either in the establishment or maintenance career stage (Super, 1957), aged between 36 and 55. Participants were therefore mostly concerned with fitting into a group, and with security in terms of career and economic stability, the formation of opportunities for self-expression, personal development and growth and the advancement of their careers within their organisation (Coetzee, 2015). Participants indicated that they were not particularly concerned with career adaptation preoccupations, which include concerns relating to employability such as adapting to career changes and the adjustment of interests, abilities and competencies in order to eligible for opportunities in the employment market (Coetzee, 2015).

Overall, participants were not overly concerned with their career development in the organisation. These results could imply that participants were not very concerned about their career development in the organisation or they may indicate that participants were satisfied with the current state of career development in the organisation. Organisations where formal career development programmes are properly planned and managed have significant effects on employee outcomes such as job satisfaction (Ismail, Adnan, & Bakar, 2014; Yu, 2011). Numerous studies have also found that career satisfaction is related to critical employee behavioural outcomes such as the intention to stay (Armstrong-Stassen & Ursel, 2009; Kang, Gatling & Kim, 2015) as well as the intention to leave (Kang et al., 2015; Nauta et al., 2009).

5.5.2.3 Psychological retention profile of participants: Retention factors

Table 5.8 is relevant to this section. In terms of the psychological retention profile indicated that participants were committed to staying in the organisation. This is an interesting finding as the majority of participants were from the Generation X cohort, which generally tends to lack loyalty towards an organisation (Debevec et al., 2013; Dries et al., 2008; Gibson et al., 2009; Rood, 2010; Zemke et al., 2000). However, the second most representative generational cohort group was the Baby Boomers. Baby Boomers, on the other hand, generally tend to be very loyal to the organisation for which they work (Tay, 2011) and this may explain the high levels of commitment from these participants.

In terms of the mean scores, the psychological retention profile furthermore indicated that participants were only somewhat satisfied with their compensation packages. This confirms results from various studies that have found a positive relationship between salary, the fairness of compensation, and commitment (Döckel et al., 2006; Ibidunni et al., 2016; Igbaria & Greenhaus, 1992; Mathieu & Zajac, 1990; Schaubroeck, May, & Brown, 1994). On the other
hand, these findings are contrary to studies that have found that more than 50% of academics staff were not satisfied with their compensation packages (Ng’ethe et al., 2012; Presbitero et al., 2016; Rosser, 2004).

The psychological retention profile also reflected participants’ satisfaction with their job characteristics. Job characteristics comprise job autonomy and skill variation (Spector, 2008; Van Dyk & Coetzee, 2012). This psychological retention profile revealed that participants were satisfied with the degree of autonomy they had in their jobs as well as the variation of skills they could apply.

In terms of the mean scores obtained for training and development opportunities, the psychological retention profile revealed that participants agreed slightly that their organisation provided them with training and development opportunities. Employees who are satisfied with the training and development opportunities within their organisation will feel that their organisation has fulfilled their psychological contract; this will intensify their sense of attachment to their organisation (Bergiel et al., 2009; Van Dyk et al., 2013).

In addition, the psychological retention profile revealed that participants were neither satisfied nor dissatisfied with supervisor support, career opportunities and work/life balance within their organisation. Previous research has shown that supervisor support has a positive effect on the retention of employees (Allen et al., 2003; Bergiel et al., 2009; George, 2015; Van Dyk et al., 2013; Van Dyk & Coetzee, 2012) and organisations that value a work/life balance will experience higher commitment from employees (Presbitero et al., 2016); an absence of career opportunities, on the other hand, may contribute significantly to high employee turnover (Presbitero et al., 2016).

Overall and in conclusion, based on the mean scores, the psychological retention profile indicated an imbalance in the exchange relationship between the participants and their employer. Participants felt that their organisation had promised them certain inducements but had failed to keep these promises. Participants were also not overly satisfied or dissatisfied with their psychological contract with the organisation or with the state of the psychological contract. The psychological retention profile thus highlighted certain risk implications for the organisation. If employees perceive an imbalance in the reciprocity of their contributions made to the employer, they may become dissatisfied and decrease their contributions and increase their intention to leave (Liu et al., 2012; Maertz & Griffeth, 2004). According to O’Meara et al. (2016), unfulfilled promises and expectations is a key factor in the departure of higher educational employees.
Furthermore, based on the mean scores, the psychological retention profile revealed that participants were either not overly concerned with their career development in the organisation or were satisfied with the current state of career development. Employees who are satisfied with their career development are more likely to stay in an organisation (Armstrong-Stassen & Ursel, 2009; Kang et al., 2015) whereas employees who are dissatisfied with their career development will be more likely to leave the organisation (Kang et al., 2015; Nauta et al., 2009). Organisations should therefore ensure that employees are satisfied with their career development plans or programmes and that these are planned and managed properly as this could influence an employee’s intention to stay or leave.

In terms of the retention factors, the psychological retention profile revealed that participants were somewhat satisfied with the compensation they received from the organisation. Participants were also satisfied with their job characteristics and they agreed to some extent that their organisation provided training and development opportunities. In contrast, the psychological retention profile revealed that participants were not overly satisfied or dissatisfied with supervisor support, career opportunities or work/life balance the organisation provided. The profile did, however, reveal that participants were committed to the organisation. Therefore, in terms of compensation, job characteristics, training and development opportunities and commitment, participants were satisfied, therefore posed no risk to the organisation. The views regarding supervisor support, however, suggest that the organisation might struggle to retain employees in the future (Allen et al., 2003; Bergiel et al., 2009; George, 2015; Van Dyk et al., 2013; Van Dyk & Coetzee, 2012). Views on career opportunities or the absence thereof might increase employee turnover, while satisfaction with work/life balance could increase employee commitment to the organisation (Presbitero et al., 2016).

5.5.3 Empirical research aim 1: Interpretation of the correlation results

Research aim 1 was to assess the statistical interrelationship between the career-related construct variables (psychological contract and psychosocial career preoccupations), the biographical characteristic variables (generational cohorts, gender, race, marital status, job level and employment status) and the retention factor construct variables.

5.5.3.1 Relationship between the independent variables and the dependent construct variables
Table 5.9 is relevant to this section. The results revealed that the overall psychological contract construct related significantly and positively to the overall retention factors construct. The overall psychological contract construct significantly and positively predicted the overall retention factors construct as well as each one of the retention factor variables separately (compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life balance and organisational commitment). The results suggest that positive perceptions of an employee’s psychological contract are likely to be related to high levels of satisfaction with the retention factors variables (compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life balance and organisational commitment). This is confirmed by a local study conducted by Dhanpat and Parumasur (2014), which revealed that the fulfilment of employer and employee obligations results in the enhancement of employee retention.

The results of the current study furthermore revealed that there were significant positive relationships between employer obligations, employee obligations and state of the psychological contract and the overall retention factors. These findings corroborate previous research by Van der Vaart et al. (2013), which found that the state of the psychological contract, including the fulfilment of employee and employer obligations, had the ability to predict certain individual outcomes, such as job satisfaction, positive work/home interference, affective well-being, irritation and satisfaction with life. A study conducted by George (2015) revealed that supervisor support, flexibility, career and development opportunities, work/life balance, compensation and job characteristics were all key factors in the retention of employees and that these factors were often related to the reasons for psychological contract breach (George, 2015; Robinson, 1996).

The correlation results of this study revealed also that the overall psychological career preoccupations construct was significantly and negatively related to the overall retention factors construct. High psychosocial career preoccupations implies high concerns or anxieties about and/or interest in current and future career development in the particular organisation (i.e. getting established in one’s career; adapting to change and interest in upskilling; and balancing work/life etc.). The results therefore suggest that if employees were very concerned or interested in their career development, they were more likely to be less satisfied with retention factors (human resource practices) that were shown to support career development and positive career outcomes. These results confirm Coetzee and Stolz’s (2015) findings, which revealed that career concerns, objectives and plans by employees that relate to retention practices will have an impact on the retention of employees.
The results of the present study also revealed that compensation, job characteristics, training and development opportunities, supervisor support and organisational commitment were significantly and negatively related to the career adaptation preoccupations of participants. These results suggest that employees who are concerned about adapting to their careers and upskilling themselves are more likely to be less satisfied with the retention factors of compensation, job characteristics, training and development opportunities, supervisor support and organisational commitment. These results also corroborate findings by Coetzee and Stolz (2015) that employees’ career adaptability significantly predicted their satisfaction levels in terms of their attitudes towards job characteristics, training and development opportunities, career opportunities and work/life balance provided by the organisation.

5.5.3.2 Relationship between the biographical, independent and dependent construct variables

The results (see Table 5.10) revealed that both age and generational cohorts were significantly but negatively related to career opportunities and work/life balance. This implies that older employees were likely to be less concerned with career opportunities and work/life balance. In a study conducted by Shen (2010), older employees were less concerned about promotions and more accepting of heavy workloads. The findings of a survey conducted by the Society of Human Resource Management (SHRM, 2004) also found that younger employees placed more emphasis on a work/life balance than employees from older generations (Buonocore, Russo, & Ferrara, 2015), thus confirming the results of the present study. These results also revealed that age and generational cohorts were significantly related to organisational commitment. This implies that older employees were more likely than younger employees to be committed to the organisation. This result is similar to findings by Hess and Jepson (2009) that revealed that the relationship between fulfilment and commitment was stronger for Baby Boomers than for Generation X employees. In this study, there were no significant relationships between age and generational cohorts and the psychological contract construct variables. This is supported by Finkelstein (2014), who found that age does not determine how older employees perceive mutual obligations or their reaction towards unfulfilled obligations. The results also revealed that age and generational cohorts were significantly and negatively related to all the psychosocial career preoccupations variables.

In the case of gender, the study found that it was significantly but negatively related to compensation and organisational commitment. This suggested that women were more likely to be less concerned about compensation and organisational commitment than men. This is similar to findings from a study conducted by Jena (2015), which revealed that women showed
weaker organisational commitment than men. Previous research has also indicated that men are more concerned about compensation than women (Bellou 2009; Metcalfe, 1993). Furthermore, these results showed no significant relationships between gender and the psychosocial career preoccupations construct variables. Coetzees's (2015) study also found no correlations between gender and the psychosocial career preoccupations. Interestingly, the results from the present study indicated no significant correlations between gender and the psychological contract construct variables, contrary to previous studies. For example, Bellou (2009) found that women were more concerned with all employer obligations except for participation in decision-making.

With regard to race, the results revealed that it had negative correlations with career opportunities and work/life balance. This implied that black participants were more likely to be more concerned with career opportunities (Hofhuis, Van der Zee, & Otten, 2014) and work/life balance (Castaneda et al., 2015) than white participants. The results furthermore revealed that race was significantly negatively related to all the subscales of the psychosocial career preoccupations. This suggested that black participants were more likely to be more concerned about all the psychosocial career preoccupations than white participants (Haynes, Jacobson, & Wald, 2015; McWhirter, 1997). Race was also found to be significantly but negatively related to the state of the psychological contract (Wöcke & Sutherland, 2008).

With regard to job level, the results indicated that this was significantly positively related to job characteristics and negatively to career opportunities and work/life balance (Barkhuizen & Rothmann, 2008). This suggested that administrative participants were more inclined to be concerned about job characteristics, while academic participants were more concerned about career opportunities and work/life balance. Job level was furthermore negatively related to the overall psychosocial career preoccupations; in other words, academic participants were more likely to be concerned about their psychosocial career preoccupations than administrative participants (Renkema, Schaap, & Van Dellen, 2009).

The results for employment status revealed a negative correlation with compensation; however, there was a positively relationship with job characteristics, supervisor support and work/life balance (Jafri, 2014). This implies that permanent participants were more likely to be concerned about compensation than contracted participants, whereas permanent employees were less likely to be concerned about job characteristics, supervisor support and work/life balance. These results also revealed that employment status was positively related to psychosocial career preoccupations overall. This suggested that contracted participants were more likely to be concerned about their psychosocial career preoccupations than permanently
employed participants. The results revealed that there was a positive relationship between employment status and the state of the psychological contract. This implies that contracted participants were more likely to be concerned about the state of the psychological contract than permanently employed participants (de Jong, Schalk & de Cuyppe, 2009).

5.5.3.3 Significant findings: Synthesis

Overall, the correlation analysis delivered significant findings as a positive relationship was observed between the overall psychological contract variables and the overall retention factors construct variables. This suggested that, when employees experience their psychological contract as positive they will also be more likely to be more satisfied with the retention factors of their organisation. Therefore organisations should take cognisance in the expectations that they create with their employees in order to prevent any unfulfilled expectations or promises which could result in dissatisfaction with the retention factors.

Furthermore, in terms of significant findings, a negative relationship was observed between the overall psychosocial career preoccupations variables and the overall retention factors construct variables. This suggested that, when employees become more concerned or interested in their career development or advancement, they will become less satisfied with the retention factors of their organisation and visa verca. It is thus extremely important for organisations to have effective retention strategies in place as this may have an effect on career concerns and interests of employees.

In terms of the biographical variables, significant findings revealed that age and generational cohorts were related to some of the retention factors variables, including career opportunities, work/life balance, and organisational commitment.

5.5.3.4 Counter-intuitive findings

The biographical variables age and generational cohorts significantly correlated with all of the psychosocial career preoccupations variables. This is in contrast with both studies conducted by Coetzee (2015a; 2015b) which found no significant correlations between age and the psychosocial career preoccupations variables. In terms of the psychological contract, no significant correlations were observed with age or generational cohorts. This is in contrast to previous studies that found that various generational mental schemas can consequently influence the psychological contract of individuals from these generations in the following ways: firstly, through the development of perceived employer obligations that are generation-
specific (Lub et al., 2016; Lub, Bal, Blomme, & Schalk, 2014; Lub, Nije Bijvank, Bal, Blomme, & Schalk, 2012); and secondly, through the manner in which various generations respond to fulfilled employer obligations (Lub et al., 2016; Lub et al., 2014).

5.5.4 Empirical research aim 2: Interpretation of the canonical correlation results

Research aim 2 was to empirically investigate whether the psychological career-related construct variables (psychological contract and psychosocial career preoccupations) positively and significantly predict the retention factors construct variables.

In terms of the participants’ psychological contract and retention factors, the results suggested that an individual’s psychological contract, specifically his or her experience of the employer obligations, were important in explaining his or her satisfaction with the retention factors, specifically compensation, training and development opportunities, supervisor support, career opportunities and organisational commitment. An individual’s experience of the fulfilment of the employer’s obligations would therefore significantly and positively predict his or her satisfaction with the retention factors, specifically compensation, training and development opportunities, supervisor support, career opportunities and organisational commitment. The results corroborated the proposal made by Rousseau and Greller (1994) that the psychological contract is affected by factors such as career opportunities, training and development opportunities, performance assessment and compensation policies (Lee & Lin, 2014).

Furthermore, the results suggested that an individual’s state of the psychological contract should be regarded as important in explaining his or her satisfaction with the retention factors, specifically compensation, training and development opportunities, supervisor support, career opportunities and organisational commitment. The state of the psychological contract refers to whether an individual perceives the promises made as fair and the implications this has for trust (Guest, 2004; Van der Vaart et al., 2013). The results implied that employees who viewed their psychological contract as fair and just were more likely to be more satisfied with the retention factors. These results corroborate Guest’s (1998) findings that the state of the psychological contract is a significant precursor to the behaviour and attitudes of employees (Van der Vaart et al., 2013).

5.5.4.1 Main findings: Synthesis

Overall, the results indicated that the state of the psychological contract and employer obligations were the strongest psychological career-related variables in predicting the
retention factor variables of compensation, training and development opportunities, supervisor support, career opportunities and organisational commitment.

These findings suggest that organisations should be careful in terms of the promises they make to their employees in terms of compensation, training and development opportunities, supervisor support, career opportunities and organisational commitment. Organisations should also ensure that the promises they make to their employees in terms of compensation, training and development opportunities, supervisor support, career opportunities and organisational commitment can be regarded as fair as this may have an effect on trust and thereby have an effect on the state of the psychological contract.

5.5.4.2 Counter-intuitive findings

In terms of the psychosocial career preoccupations and the retention factors, the former did not contribute significantly to explaining the participants’ satisfaction with the retention factors. However, previous research has revealed that there are associations between an employee’s need for career opportunities, and job characteristics such as stimulating work, learning and development, and the opportunity to apply new knowledge and skills, and the employee’s retention and organisational commitment (Coetzee, 2015; Döckel et al., 2006; João & Coetzee, 2012; Ng et al., 2006; Wang et al., 2014).

5.5.5 Empirical research aim 3: Interpretation of the SEM results

Research aim 3 was to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.

The structural equation modelling results revealed that the theoretically conceptualised psychological retention profile had a very good fit with the empirically manifested structural model. Two goodness-of-fit models were tested and the best model fit indicated that the psychological contract (employer obligations and state of the psychological contract) contributed most significantly to explaining the retention factors construct variables. The model more specifically indicated that employer obligations contributed significantly to the retention factors construct variables of compensation and training and development. Employer obligations are those obligations that employees perceive that the organisation has made towards them (Persson & Wasieleski, 2015). In this case, this model suggested that participants who regarded the employer obligations to have been fulfilled were more likely to be satisfied with compensation and training and development opportunities as retention
factors. These results also suggested that participants who were satisfied with their compensation and training and development opportunities within the organisation were more likely to feel that the employer’s obligations had been fulfilled.

In addition, the model revealed that the state of the psychological contract contributed significantly to the retention factors construct variables of supervisor support and career opportunities. The state of the psychological contract refers to the perception employees have of the fairness of mutual obligations in terms of the exchange relationship as well as the implications for trust (Guest, 2004). The results suggested that participants who perceived the mutual obligations as fair and just were more likely to be satisfied with supervisor support and career opportunities as retention factors. This could furthermore suggest that participants who were satisfied with the support of their supervisors and the opportunities for career advancement in their organisation were more likely to be satisfied with the state of their psychological contract.

Van der Vaart et al. (2013) found that employees were more committed to the organisation when they had a positive experience of the state of the psychological contract. Garcia et al. (2007) also found that the state of the psychological contract correlated positively with job satisfaction, satisfaction with work/life balance, life-satisfaction and psychological well-being.

5.5.5.1 Main findings: Synthesis

In this study, the results of the SEM suggested that organisations should develop their retention practices in order to ensure that employees were satisfied with their compensation, training and development opportunities, supervisor support and career opportunities. Employees who were satisfied with these retention factors would be more likely to feel satisfied with the state of the psychological contract and the employer obligations and this could have implications for improving the retention of employees.

These results were useful also in determining the individual and organisational behavioural elements that contributed most to explaining the psychological retention profile of the participants. On an individual level, the results suggested that individuals who were satisfied with their compensation and training and development opportunities experienced the employer obligations as fulfilled. Furthermore, individuals who were satisfied with their supervisor support and career opportunities would regard the psychological contract as fair and therefore an enhancement of the state of their psychological contract.
On an organisational level, the results suggest that organisations should focus on compensation and training and development opportunities in order to fulfil their obligations (employer obligations) to the employee. Organisations should furthermore focus on improving supervisor support and their employees’ career opportunities to make sure that employees experience the psychological contract as fair, thereby improving the state of the psychological contract.

The elements shown in Table 5.15 contributed most to the psychological career-related construct variables. The following psychological career-related construct variables were therefore included in the proposed psychological retention profile presented in Table 5.31:

Table 5.31

<table>
<thead>
<tr>
<th>Psychological behavioural dimensions</th>
<th>Psychological career-related variables</th>
<th>Retention factors</th>
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</thead>
<tbody>
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<td></td>
<td>Psychological Contract</td>
<td>Psychosocial Career Preoccupations</td>
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<tr>
<td>Employer Obligations</td>
<td>Negligible role</td>
<td>Non significant</td>
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<tr>
<td>State of psychological contract</td>
<td>Negligible role</td>
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<td>Employer Obligations</td>
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<td>State of psychological contract</td>
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234
5.5.5.2 Counter-intuitive findings

The first SEM model included commitment as retention factor variable which only yielded a marginal fit to the data. The second model omitted commitment which improved the goodness of fit of the model. Therefore commitment did not adequately converge on employer obligations or state of the psychological contract. However, previous research has found that employees will be more committed to their organisation if they experience the state of the psychological contract as positive (Van der Vaart et al., 2013).

5.5.6 Empirical research aim 4: Interpretation of the hierarchical moderated regression results

Research aim 4 was to assess the interaction effect between (1) individuals’ psychosocial career preoccupations and (2) generational cohorts, and the psychological contract variable in predicting satisfaction with retention factors.

The results obtained produced only partial support for the research hypothesis, revealing an interaction effect between the individual's psychosocial career preoccupations and the psychological contract variable in predicting satisfaction with the retention factors and, more specifically, higher levels of satisfaction with training and development practices. This suggests that participants who seemed highly satisfied with training and development opportunities also had positive perceptions of their psychological contract and were very preoccupied with matters relating to career development (i.e. establishing their careers, adjusting to change and upskilling, and adapting to work/life balance). This relates to findings from other studies that employees, who are satisfied with the training and development opportunities within their organisation will experience a positive perception of their psychological contract, which will intensify their sense of attachment to their organisation (Bergiel et al., 2009; Van Dyk et al., 2013). Low et al. (2016) found that the role that an employee fulfils in a specific career stage will have an influence on what workplace contributions and organisational inducements that employee considers important. This result also supported Tladinyane’s (2012) findings of significant relationships between the career-related behaviours of working adults, their inclinations and capabilities and their commitment towards their job and their career (Coetzee, 2015).

The results also suggests that employees who perceive their psychological contract as fair and just and believe that their organisation has fulfilled its promises with regard to training and
development opportunities, will be more likely to be concerned or interested in their career development (i.e. establishing their careers; adapting to change and developing their skills; or finding a work/life balance). Employees have a basic need to advance and grow in their careers and will become dissatisfied when they feel that their career paths are being blocked (João & Coetzee, 2012; Lesabe & Nkosi, 2007).

The results also added certain person-centred characteristics that assisted in the construction of a psychological retention profile. Gender acted as significant predictor of compensation. Pucheta-Martinez and Bel-Oms (2014) observe the compensation for males has been greater than for females for decades and that this has produced a gender gap in compensation. Employment status also acted as a predictor of compensation. There is a perception that contract workers receive lower compensation than permanent workers (Day & Rodgers, 2015), therefore an employee’s employment status might predict his/her satisfaction with compensation as a retention factor. Race and marital status acted as predictors of career opportunities. This corroborates the findings of João & Coetzee (2012) who found that black employees considered career advancement and career opportunities and developmental support to be more important than other racial groups. In addition, employment status acted as predictor of supervisor support; this may reflect the perception that contract workers have fewer career opportunities than permanent workers (Day & Rodgers, 2015).

5.5.6.1 Main findings: Synthesis

The main findings showed that the hierarchical moderated regression analysis contributed to the development of the psychological retention profile through identifying the moderating effect of psychosocial career preoccupations on the relationship between the psychological contract and the retention factors, specifically training and development opportunities.

Organisations should therefore take cognisance of the concerns and interests of employees regarding their career development as this could have an influence on their satisfaction with training and development opportunities provided in the organisation and thereby influencing the how employees perceive their psychological contract. As a result, organisations should focus specifically on training and development opportunities when developing retention strategies.

5.5.5.2 Counter-intuitive findings
The results revealed no interaction effect between generational cohorts and the psychological contract variable in predicting satisfaction with retention factors. This is in contrast to previous studies which have indicated that the mental schemas of employees born in different generational cohorts can influence the development of firstly perceived employer obligations that are generation specific (Lub et al., 2016; Lub et al., 2014; Lub et al, 2012); and secondly, the manner in which various generations respond to fulfilled employer obligations (Lub et al., 2016; Lub et al., 2014). The results did however corroborate the findings of a study conducted by Hess and Jepsen (2008), which revealed that, contrary to the perception that there exist large variances among generational groups there are in fact more similarities than variances among the generational cohorts in terms of employees’ perceptions of the employer obligations of their psychological contract.

5.5.7 Empirical research aim 5: Interpretation of moderated mediation results

Research aim 5 was to assess whether the effects of (a) employer obligations and (b) state of the psychological contract on retention factors satisfaction are moderated by (1) employees’ psychosocial career preoccupations, such that stronger effects are associated with stronger career preoccupations, and (2) by generational cohorts, such that stronger effects are evident for certain generational cohorts.

The results revealed partial support for the research hypothesis. The effect of positive perceptions of employer obligations on high levels of retention factors satisfaction through the state of the psychological contract increased when the scores on psychosocial career preoccupations were high. This suggests that participants who had positive perceptions of the fairness of their psychological contract (i.e. the state of the psychological contract) were more likely to have greater concerns or interests in their career development and would therefore be more likely to be less satisfied with the overall retention factors. Coetzee (2015a) found that organisations will experience challenges in retaining employees if they ignore the concerns of their employees regarding career adaptation, career renewal and employability.

Furthermore, these results indicated that the effect of positive perceptions of employer obligations on high levels of retention factor satisfaction through the state of the psychological contract increased when the scores on psychosocial career preoccupations were high. This implies that employees will become more concerned about or interested in their career development (i.e. establishing their careers, upskilling or adapting to change, and adjusting to work/life balance) when they perceive that their employer has fulfilled its obligations, when they regard their psychological contract as fair and just and when they are satisfied with the
retention factors in the organisation. Employers who fulfil their promises and expectation of their employees will experience employees that are more energised, which result in the enhancement of motivational and well-being processes which positively influence the employees (Parzefall & Hakanen, 2008; Van der Vaart et al., 2013). Furthermore Meyer and Allen (1997) argued that fulfilled promises and expectations and a positive perception of the state of the psychological contract will result in employees providing their services, skills and commitment to the organisation.

The effect of positive perceptions of employer obligations on high levels of retention factors satisfaction through a positive state of psychological contract increased when the age group of participants were lower (i.e. younger generations) in this study. This implies that the effect of employees’ experience of fulfilled promises on the satisfaction of retention factors through a positive experience of the fairness of the state of their psychological contract was greater among the younger generations than in the older generation. Previous studies have found that Generation Y employees have generally high expectations in terms of employer obligations (De Hauw & De Vos, 2010; Smola & Sutton, 2002; Twenge & Campbell, 2008). Organisations should therefore make the different generational preferences a priority in the development of policies and procedures if they want to fulfil the expectations of various generations in the higher educational environment (Kleinhans, Chakradhar, Muller, & Waddill, 2015).

5.5.7.1 Main findings: Synthesis

Overall, the moderated mediation modelling contributed to the construction of the psychological retention profile through establishing that the effect of the state of the psychological contract on retention factors satisfaction was moderated by employees’ psychosocial career preoccupations, such that stronger effects were associated with stronger career preoccupations. Furthermore, the effect of the state of the psychological contract on retention factors satisfaction was moderated by generational cohorts, such that stronger effects were associated with younger generational cohorts.

5.5.7.2 Counter-intuitive findings

No direct effect of generational cohorts was found between employer obligations and retention factors or state of the psychological contract and retention factors satisfaction. Only a direct effect were found as such that the effect of positive perceptions of employer obligations on high levels of retention factors satisfaction through a positive state of the psychological contract increased when the age group of participants were lower (i.e. younger generations).
in this study. Organisations should take these generational differences into consideration when developing generation-specific HR practices for the retention of knowledge workers (Singh & Gupta, 2015).

5.5.8 Empirical research aim 6: Interpretation of the tests for significant mean differences results

Research aim 6 was to empirically investigate whether individuals from the various generational cohorts, gender, race, marital status, job level and employment status sub-groups differ significantly regarding the psychological career-related construct (psychological contract, psychosocial career preoccupations) and the retention factors construct variables.

Table 5.23 to 25 are relevant to this section.

5.5.8.1 Gender: Differences in terms of the psychological retention profile

Female participants scored significantly lower on compensation than their male participants. These findings suggested that male participants may have tended to be more concerned about compensation as a retention factor than their female counterparts. These results are consistent with the findings of Metcalfe (1993), who found that male employees were more concerned about extrinsic job factors such as higher salaries and fringe benefits (Bellou, 2009).

The results furthermore indicated that male participants scored significantly higher on organisational commitment than female participants. These findings suggest that males may tend to be more committed to an organisation than females, and are similar to the results of a study conducted by Jena (2015), which revealed that male employees showed stronger organisational commitment in relation to female participants. Research has shown that the lower commitment demonstrated by female employees may be the result of their primary role as females within the family context (Baugh, 1990; Bellou, 2009), that is, their responsibilities in terms of child and elderly care as well as household duties (Bellou, 2009; Bielby & Bielby, 1998).

To conclude, the results revealed that there were significant mean differences for gender in terms of compensation and organisational commitment.
5.5.8.2 Race: Differences in terms of the psychological retention profile

White participants scored significantly lower than black participants on career opportunities. These findings suggest that black participants may be more concerned about career opportunities than white participants. This finding is in agreement with the findings of Hofhuis et al. (2014), who suggested that employees from the minority group will display greater dissatisfaction than the majority group in terms of career opportunities as a predictor of turnover intentions.

The results in the present study also revealed that white participants scored significantly lower than black participants in terms of work/life balance, suggesting that black participants might have been more concerned with work/life balance than white participants. Castaneda et al. (2015) mentions that for the underrepresented minority employees, work/life balance policies are gradually becoming more significant factors in the recruitment and retention of this group of employees, thus supporting the results of the current study.

White participants scored significantly higher than black participants on organisational commitment. This finding suggests that black employees may have been less committed to the organisation than white employees. This finding is consistent with those of a study conducted by Gonzalez and Denisi (2009) that revealed that men from the minority racial group in an organisation showed lower attachment behaviour than the majority racial group.

In terms of differences regarding race and the psychosocial career preoccupations, the results revealed that white participants scored significantly lower than black participants on career establishment preoccupations, career adaptation preoccupations and work/life adjustment preoccupations. The finding suggests that black employees are likely to be more concerned about their career development in the organisation than their white counterparts. This could be attributed to the introduction of various Employment Equity legislation including affirmative action (AA) policies and the advancement of recruiting and developing and training disadvantaged individuals from designated groups (Wöcke & Sutherland, 2008), therefore opening new career pathways in favour of black employees in the organisation. Previous research has consistently revealed that employees from minority groups believe that racial discrimination will inhibit them from achieving their desired career outcomes (Haynes et al., 2015; McWhirter, 1997).
The results with regard to the psychological contract variables revealed that white participants scored significantly higher than black participants on satisfaction with the psychological contract. This suggests that white participants may have been more satisfied with their psychological contract than black participants. This finding is in line with those of Wöcke and Sutherland (2008), which indicated that African employees where least satisfied in terms of the fulfilment of employers’ obligations. The results also indicated that black participants scored significantly higher than white participants on the state of the psychological contract, suggesting that black participants tended to perceive their psychological contract as fairer and more just than white participants; it is possible that white employees have found that employment equity practices create disruptions in the relational components of their psychological contract with their employer (Wöcke & Sutherland, 2008).

In conclusion, the results contributed to the construction of the psychological retention profile by determining the significant differences for race in terms of career opportunities, work/life balance, organisational commitment, the psychosocial career preoccupations variables, satisfaction with the psychological contract and state of the psychological contract.

5.5.8.3 Generational cohorts: Differences in terms of the psychological retention profile

The results revealed that participants from Generation Y scored significantly higher than those from Generation X and the Baby Boomers in terms of career opportunities and work/life balance. This suggests that employees from the Generation Y cohort were more likely to be satisfied with career opportunities and work/life balance than employees from the other two cohorts. This result is finds support in previous studies which have found that Generation Y employees prefer stimulating jobs that provide them with opportunities to improve their future-orientated career development (de Cooman & Dries, 2012; Guillot-Soulez & Soulez, 2014; Hite & McDonald, 2012). Generation Y employees are also more inclined to demand a work/life balance through all the stages of their careers (McDonald & Hite, 2008; Ng, Schweitzer, & Lyons, 2010).

Furthermore, the findings revealed that participants from the Baby Boomers cohort scored significantly higher than the Generation X and Y participants in terms of organisational commitment. This suggests that participants from the Baby Boomers cohort may have been more committed to the organisation than those participants from the other cohorts. This finding is consistent with the results of a study among nurses that revealed that employees from the Baby Boomers cohort were significantly more committed to their organisation than Generation X and Y employees (Brunetto, Farr-Wharton, & Shacklock, 2012, Nelson, 2012).
In terms of the psychosocial career preoccupation variables, the results revealed that participants from the Generation Y cohort scored significantly higher than those from the Generation X and Baby Boomers cohorts on career establishment preoccupations. This suggests that Generation Y employees (aged 17–36) may be more concerned with establishing themselves in their careers than employees from the Generation X (aged 37–the 51) and Baby Boomers (aged 52–70) cohorts. This result was anticipated as Generation Y represents the age group of individuals who have recently joined the job market and are in the process of establishing themselves in their careers. In addition, the Baby Boomers scored significantly lower than participants from Generations Y and X on the career adaptation preoccupations as well as on the work/life adjustment preoccupations. This suggests that employees from the Baby Boomers cohort were more likely to be less concerned about advancing in their careers and about work/life adjustment than employees from the Generation Y and X cohorts. The evidence of significant differences observed between the three generational cohorts suggested that the career preoccupations in the current study might be generation-related, which is in contrast to the findings of Coetzee’s (2015) study, which revealed that career preoccupations were not age-related. The present results do, however, support the notion that career preoccupations were not narrowed down to a specific generational cohort only (Coetzee, 2015; Mahoney, 1987).

In terms of the psychological contract variables, the study found that participants from Generation X scored significantly higher than those from Generation Y and the Baby Boomers with regard to employee obligations. This suggests that employees from the Generation X cohort were more likely than the Generation Y and Baby Boomers employees to believe that they had fulfilled their promises to their employers. This finding differs from those of Bal and Kooij’s (2011), who found that Baby Boomers showed more transactional and relational obligations than Generation X employees.

In conclusion, the results contributed to the construction of the psychological contract by establishing the significant differences among generational cohorts in terms of career opportunities, work/life balance, organisational commitment, career establishment preoccupations, career adaptation preoccupations and employee obligations.

5.5.8.4 Marital status: Differences in terms of the psychological retention profile

The results indicated that married participants scored significantly lower than single/divorced participants in terms of career opportunities. This suggests that single/divorced participants
were more likely to be satisfied with career opportunities than married participants. Mubarak et al. (2012) observe that marital status has been identified as a biographical variable that has an influence on retention factors. Moreover, studies have indicated that job satisfaction appears to escalate with advanced life stages and also amid married academics (Ryan et al., 2012).

Married participants scored significantly lower than single/divorced participants in terms of all the psychosocial career preoccupations variables. These results thus suggest that single/divorced participants are more likely to be more concerned about their career development than married participants.

In conclusion, these results contributed to the construction of the psychological retention profile by identifying the significant mean differences for marital status and career opportunities and the psychosocial career preoccupations variables.

5.5.8.5 Job level: Differences in terms of the psychological retention profile

The results indicated that administrative participants scored significantly lower than academic participants in terms of job characteristics. Academic employees thus appeared to be more likely to be satisfied with job characteristics than administrative employees. A study conducted by Barkhuizen and Rothmann (2008) found that job characteristics were a stressor that had a significant impact on affective commitment of academic staff in the higher educational environment. The results of the present study furthermore revealed that academic staff participants scored significantly lower than support staff participants in terms of work/life balance, suggesting that academic employees were likely to be less satisfied with work/life balance than administrative employees. This is in contrast to Barkhuizen and Rothmann’s (2008) findings: they found that academic employees experienced high levels of stress as a result of trying to achieve a work/life balance.

Administrative participants were also found to have scored significantly higher than academic participants in terms of the career establishment preoccupations and the career adaptation preoccupations. Thus it seemed that administrative employees were more concerned with preoccupations related to establishing and adapting to their careers than academic employees. These results may be result from the fact that, in general, administrative employees do not have well-defined paths in terms of career development (Renkema et al., 2009).
The results also revealed that academic participants scored significantly higher than administrative participants in terms of employer obligations. This suggests that academic employees felt that the organisation had made and fulfilled more promises than administrative employees. This is in contrast to the findings of Shen (2010), which revealed that the sense of fulfilment of the psychological contract of academic employees was low, as 17 of 21 employer obligations scored low.

To conclude, the results contributed in the construction of the psychological retention profile through the identification of the mean differences between job level and job characteristics, work/life balance, career establishment preoccupations and employer obligations.

5.5.8.6 Employment status: Differences in terms of the psychological retention profile

Permanent participants scored significantly lower than contract participants in terms of job characteristics, supervisor support, career opportunities, and work/life balance. These results suggest that participants employed on a contract basis were more likely to be satisfied with job characteristics, supervisor support, career opportunities and work/life balance as retention factors than permanently employed employees. These results are consistent with those of a study conducted by Jafri (2014), which suggested that contracted faculties expected more from the institution in terms of job content and supervisor support.

Permanent participants also scored significantly higher than contract participants in terms of compensation. These results suggest that permanently employed employees were more likely to be satisfied with compensation than employees employed on a contract basis. These findings are in contrast to those of a study conducted by Unsal-Akbiyik (2014), which found no statistically significant differences between the perceptions of permanent and contract employees in terms of compensation practices in their organisations.

In addition, the results revealed that permanent participants scored significantly higher than contract participants in terms of their satisfaction with the psychological contract. This suggests that permanently employed participants were more likely to be satisfied with their psychological contract than employees employed on a contract basis. This finding is in contrast to the findings of De Jong et al. (2009), who found that permanent employees experienced fewer fulfilled obligations, and were therefore less satisfied with their psychological contract. In the present study, contract participants scored significantly higher than permanent participants in terms of the state of the psychological contract, suggesting that
those employed on a contract basis were more likely to experience their psychological contract as fair and just than those who were permanently employed. These results are consistent with the findings of De Jong et al. (2009) that employees employed on a contract basis experience relatively fair and good exchanges with regard to fulfilment of the psychological contract.

To conclude, these results contributed to the construction of the psychological retention profile by identifying the mean differences between employment status and job characteristics, supervisor support, career opportunities, work/life balance, compensation, satisfaction with the psychological contract and state of the psychological contract.

5.5.8.7 Main findings: Synthesis

From the above discussion, it can be deduced that biographical differences should be taken into consideration when developing a psychological retention profile. All the biographical variables, gender, race, marital status, job level and employment status, showed differences with the specific variables, and are thus of great importance when developing a psychological retention profile. Organisations should therefore take differences in terms of biographical characteristics into account when developing retention strategies for their employers.

5.5.8.8 Counter-intuitive findings

In terms of significant findings, no significant mean differences in terms of the biographical variables were observed for the retention factors construct variable training and development opportunities.

5.5.9 Synthesis: Constructing a psychological retention profile for diverse generational groups in the higher educational environment

The central hypothesis of this study was that a relationship exists between an individual’s psychological career-related attributes (psychological contract and psychosocial career preoccupations), biographical characteristics (generational cohorts, gender, race, marital status, job level and employment status) and retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment). The study furthermore hypothesised that, based on the empirically derived relationship dynamics among the variables an overall psychological retention profile could be constructed to inform retention management practices for diverse groups of employees in the higher educational environment of South Africa.
The significant associations between the variables highlighted the following psychological elements that should be taken into account when considering the retention of staff in the higher educational environment:

- Employer obligations and the state of the psychological contract are important in predicting overall satisfaction with retention factors.
- Canonical correlations and structural equation modelling highlighted the following as important retention factors in this study: compensation, training and development opportunities, supervisor support and career opportunities.
- The results of the hierarchical moderated regression analysis showed that:
  - Positive perceptions of an individual’s concerns relating to their career development within an organisation would strengthen the link between their psychological contract and their satisfaction with training and development opportunities.
  - Gender and employment status acted as predictors for compensation.
  - Employment status acted as a predictor for supervisor support.
  - Race and marital status acted as predictors for career opportunities.
  - No biographical variable predicted training and development opportunities.
- The results of the moderated mediation modelling revealed:
  - A direct effect of psychosocial career preoccupations on the link between employer obligations and state of the psychological contract and on the link between the state of the psychological contract and satisfaction with the overall retention factors.
  - No direct effect of generational cohorts on the link between employer obligations and state of the psychological contract or on the link between the state of the psychological contract and satisfaction with the overall retention factors.
  - An indirect effect of generational cohorts on the link between employer obligations and state of the psychological contract or on the link between the state of the psychological contract and satisfaction with the overall retention factors.
- The results of the tests for mean differences revealed that:
  - Gender and employment status differed for compensation.
  - Job level and employment status differed for job characteristics.
  - Employment status differed for supervisor support
  - Race, generational cohorts, marital status, job level and employment status differed for career opportunities.
- Race, generational cohorts, job level and employment status differed for work/life balance.
- Gender, race and generational cohorts differed for organisational commitment.
- Race, generational cohorts, marital status, job level and employment status differed for career establishment preoccupations.
- Race, generational cohorts, marital status and job level differed for career adaptation preoccupations.
- Race, generational cohorts, marital status and employment status differed for work/life adjustment preoccupations.
- Job level differed for employer obligations.
- Generational cohorts differed for employee obligations.
- Race and employment status differed for satisfaction with psychological contract.
- Race and employment status differed for state of the psychological contract.

An overview of the empirically manifested psychological retention profile is provided in Figure 5.6. This profile can be adopted when devising retention management strategies.
Figure 5.6 Empirically manifested psychological retention profile
In order to improve the retention of employees in the higher educational environment, industrial and organisational psychologists and human resource practitioners should consider developing the psychological elements to improve the psychological career-related attributes of employees and thereby improving the retention of employees.

In terms of the psychological contract, the results revealed that the most important factors to consider are the employer obligations and the state of the psychological contract. The results suggested that if organisations ensure that they fulfil the promises and expectations of their employees it will likely enhance the employees’ satisfaction with compensation as a retention factor. Smith (2013, as cited in Klimkiewicz & Beck-Krala, 2015) argues that the primary objective of a compensation system is to attract, develop, motivate and retain talented employees in the organisation. Higher educational institutions should therefore ensure that they don’t create expectations or promises of compensation which they are unable to fulfil as researchers have found that more than 50% of academic staff indicated that they were not satisfied with their compensation (Ng’ethe et al., 2012; Presbitero et al., 2016; Rosser, 2004).

The results also suggested that organisations where employees perceive that their employer have fulfilled their promises and expectations will be more satisfied with their training and development opportunities as a retention factor. Training and development opportunities for academic employees are an essential factor of their professional careers (Rosser, 2004). Professional development of academic employees is a major factor in developing higher educational institutions into centres of ideas and innovation (Ng’ethe et al., 2012). Employees of higher educational institutions thus have the expectations that their institution will provide sufficient training and development opportunities in order for them to develop their professional careers. Interventions should therefore focus on determining the specific needs and expectations of academic employees in order to provide them with the training and development opportunities that they need.

Engaging in management practices that create positive perceptions of fairness and trust in the fulfilment of promises and therefore creating a positive perception of the state of the psychological contract was also found to be likely to enhance satisfaction with supervisor support and career opportunities. Thus, employees who regard their psychological contract as fair and, in addition, trust their employer to fulfil its promises will be more likely to be satisfied with the recognition and feedback they receive from their supervisors. They will also be more likely to be satisfied with the opportunities provided to them by the organisation to advance and to develop in their careers. Previous research has found that the state of the psychological contract is a significant precursor to the behaviour and attitudes of employees (Guest, 1998;
Van der Vaart et al., 2013). Academic employees feel valued when their contributions are recognised (Ng’ethe et al., 2012) and an employee’s relationship with his/her superior is a significant factor in raising the level of employee satisfaction and the likelihood of retention (Ibidunni et al., 2016). Therefore higher educational institutions should encourage and train their supervisors in order to provide academic and administrative employees with more supervisor support as it may result in a positive perception of the state of the psychological contract of employees. Academic employees furthermore experience promotional opportunities as long, stressful and cumbersome (Tettey, 2006). Higher educational institutions should focus on providing career opportunities for their employees based on requirements that are reasonable and fair. This will likely create a positive perception of the state of the psychological contract and thereby improve the retention of higher educational employees.

The results of the hierarchical moderated regression analysis showed that positive perceptions of an individual’s concerns relating to their career development within an organisation would strengthen the link between their psychological contract and their satisfaction with training and development opportunities. This implies that the psychosocial career preoccupations of an individual can either strengthen or weaken the link between positive perceptions of the psychological contract and high levels of satisfaction with training and development opportunities. Previous research has indicated that the career stage of employees and/or their particular psychosocial career preoccupations at a specific time in their lives might have an influence on their inclinations towards certain psychological contract elements (Low et al., 2016). Therefore higher educational institutions should develop strategies in terms of training and development opportunities which are specific to the psychosocial career preoccupations of their employees. This will likely improve the psychological contract of the employees and thereby improve the retention of the employees.

The results of the moderated mediation revealed that if an organisation is able to create positive perceptions of employer obligations (i.e. such that employees regard employer obligations as fulfilled), it will be able to enhance positive perceptions of the state of the psychological contract, therefore creating perceptions of fairness in terms of the psychological contract. This in turn could enhance the overall satisfaction with human resource practices associated with employee retention. In addition, positive perceptions of employer obligations could enhance satisfaction with the overall retention factors through positive perceptions of the state of the psychological contract when employees are either very concerned about their career development in the organisation (i.e. high psychosocial career preoccupations) or when
they are not particularly concerned about their career development in the organisation (i.e. low psychosocial career preoccupations).

High levels of psychosocial career preoccupations suggest strong concerns about career development within the current organisation. As such, employees may have concerns about becoming established in the organisation, fitting into a group, finding security and stability in terms of their careers and economically, creating opportunities to develop themselves in terms of self-expression and personal growth, and advancing in their current career (Coetzee, 2015a). They may also have concerns about the adaption of their careers, which may involve concerns relating to employability, adapting to change such as career changes, and to their ability to adjust their interests, talents and capabilities in order to be employable in other positions in the job market (Coetzee, 2015a). Finally, they may also have concerns related to the balance of work and life outside work, which may involve concerns such as downscaling on work, settling down, and accomplishing a balance between work and personal life, and an awareness of retirement (Coetzee, 2015a).

The study found that increasing concerns about career development (i.e. becoming established in one’s current career, adapting the self in order to advance one’s career or to adjust to a work/life balance) cushioned the effect of positive perceptions of the state of the psychological contract and the impact of the link between positive perceptions of employer obligations and satisfaction with the overall retention factors. Assisting employees at higher educational institutions to develop positive concerns in terms of their career development, in other words to take an active interest in establishing their careers, or to advance their careers or to assist them to adjust to a work/life balance, could assist in strengthening their satisfaction with retention factors, on the condition that positive perceptions of the state of the psychological contract are created. Similarly, negative concerns about career development in an organisation may result in lower levels of satisfaction with the overall retention factors.

It appears from these results that creating positive perceptions of the fairness of the psychological contract and trust in the fulfilment of promises (i.e. the state of the psychological contract) will result in greater concerns about career development (i.e. getting established in one’s career, adapting one’s career and adjusting to a work/life balance), which may enhance satisfaction with human resource practices focused on employee retention (i.e. retention factors, such as compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life balance and organisational commitment). On the other hand, if employees have no active concerns or preoccupations about their career development within their current organisation, the link between positive perceptions of
employer obligations and satisfaction with the overall retention factors through positive perceptions of the state of the psychological contract may be weakened. This implies that if employees become ambivalent towards their career development or withdraw from their career development, this may have a negative influence on their perceptions of employer obligations and on the retention of such employees.

The results showed no direct effect of generational cohorts on the link between employer obligations and state of the psychological contract or on the link between the state of the psychological contract and satisfaction with the overall retention factors. However, the results did indicate that younger generational cohorts (i.e. Generation Y, Generation X and the Baby Boomers) are cushioned from the effect of positive perceptions of the state of the psychological contract and the impact of the link between positive perceptions of employer obligations and satisfaction with the overall retention factors. In other words, the younger the employees (i.e. employees from the Generation Y cohort), the greater the effect of positive perceptions of employer obligations on high levels of satisfaction with retention factors through the positive perception of the state of the psychological contract.

The study found that employees who were employed in administrative positions scored lower in terms of employer obligations than those who were employed in academic positions. These results suggested that administrative employees were less likely than academic employees to perceive the fulfilment of employer obligations as positive. Therefore organisations should focus on improving the experiences or perceptions of administrative employees in terms of the fulfillment of employer obligations. This would in turn assist in the enhancement of these employees’ satisfaction with their compensation and training and development opportunities. Significant mean differences were also found for race in terms of the state of the psychological contract.

The results indicated that white participants scored lower than black participants in terms of the state of the psychological contract, suggesting that white employees were less likely to have positive experiences or perceptions with regard to the state of the psychological contract. Organisations should therefore focus on improving the state of the psychological contract of white employees by ensuring that these employees regard their psychological contracts as fair and that they trust their employers to reciprocate their commitment. The results also indicated significant mean differences for employment status in terms of the state of the psychological contract, suggesting that permanent employees were less likely to have positive experiences or perceptions regarding the state of the psychological contract than employees who were employed on a contract basis. Organisations should focus on improving the
perceptions among permanently employed staff with regard to the fairness of their psychological contracts; the employer should ensure that these employees have faith in the organisation to fulfil its promises.

The results showed that employees’ concerns about their career development might differ depending on certain biographical variables; race, generational cohorts and marital status showed differences in terms of psychosocial career preoccupations. The results showed that white employees had fewer concerns about their career development (i.e. getting established in their career, adapting their careers in order to advance in their career, or adapting to a work/life balance) than black employees. Older employees (i.e. employees from the Baby Boomer cohort) also showed fewer concerns about their career development than employees from the younger generational cohorts. Married employees were less concerned about career development than single/divorced employees. Employment status reflected differences in terms of career establishment preoccupations and work/life adjustment preoccupations. This suggests that participants who were permanently employed were less concerned about establishing themselves in their new employment and adjusting to a work/life balance than employees who were employed on a contract basis. Finally, there were also differences in job level in terms of career adaptation preoccupations: academic employees showed fewer concerns in terms of career adaptation preoccupations than administrative employees. Higher educational institutions should take these biographical differences into account when developing retention strategies in order to retain their employees.

5.5.9.1 Main findings: Synthesis

In summary, the descriptive statistics revealed that the research participants felt that they had made and kept their promises to the organisation to a great extent. Participants also felt that the organisation had made promises to them, but had only partially fulfilled these promises. Participants were neither satisfied nor dissatisfied with their psychological contract or with the state of their psychological contract. They were mostly concerned with career establishment preoccupations, followed by work/life adjustment preoccupations and finally career adaptation preoccupations; however, they were not overly concerned about their career development in the organisation. These results suggested that participants were committed to stay in the organisation and that they were somewhat satisfied with their compensation packages and job characteristics, and training and development opportunities. Participants were, however, neither satisfied nor dissatisfied with the supervisor support, career opportunities and work/life balance of the organisation.
In terms of the correlational statistics, the results showed significant positive correlations between the overall psychological contract and the overall retention factors construct. The overall psychosocial career preoccupations construct was significantly and negatively related to the overall retention factors construct.

As far as the inferential statistics were concerned, the canonical correlations showed that employer obligations and state of the psychological contract were the strongest psychological career-related dispositional attributes in explaining satisfaction with retention factors, specifically compensation, training and development opportunities, supervisor support, career opportunities and organisational commitment. This analysis was also useful in the structural equation modelling. The model with the best fit indicated that employer obligations contributed significantly to the retention factors construct variables of compensation and training and development, and that the state of the psychological contract contributed significantly to the retention factors construct variables of supervisor support and career opportunities.

The hierarchical moderated regression analysis indicated that there was an interaction effect between the individual's psychosocial career preoccupations and the psychological contract variable in predicting satisfaction with training and development opportunities as a retention factor construct variable. These results indicated no interaction effect between generational cohorts and the psychological contract variable in predicting satisfaction with the retention factors.

The results of the moderated mediation modelling indicated that the effect of positive perceptions of employer obligations on high levels of satisfaction with the retention factors through the state of the psychological contract increased when scores on psychosocial career preoccupations were high. The results also indicated that the effect of positive perceptions of employer obligations on high levels of satisfaction with the retention factors through the positive state of the psychological contract increased when the age group of participants was lower (i.e. younger generations).

The test for significant mean differences showed that research participants from various biographical groups (i.e. gender, race, generational cohorts, marital status, job level and employment status) significantly differed in terms of the psychological career-related variables (psychological contract and psychosocial career preoccupations) and the retention factors construct variables (compensation, job characteristics, training and development opportunities, career opportunities, supervisor support, work/life balance, and organisational commitment).
In general, the results provided supportive evidence for most of the stated research hypotheses, as indicated in Table 5.31 below.

5.5.8.2 Counter-intuitive findings

The findings of the hierarchical moderated regression analysis indicated that generational cohorts did not have a moderating effect on the relationship between the psychological contract and the retention factors. This is in contrast to previous research which has found that generational differences moderate the relationship between the fulfilled psychological contract, affective commitment and intention to leave the organisation (Lub et al., 2016). Kleinhans et al. (2015) believes that the identification of generational characteristics and their effects on work-related variables might offer a framework with which to effectively recruit and retain staff from different generations in the higher educational institution. The moderated mediation modelling did, however, find that the effect of positive perceptions of employer obligations on high levels of retention factor satisfaction through positive state of the psychological contract increased when the age group of participants was lower (i.e. younger generations).

5.5.10 Decisions concerning the research hypotheses

Table 5.32 below provides a summary of the key conclusions regarding the research hypotheses.
Table 5.32
*Summary of the Main Findings Relating to the Research Hypotheses*

<table>
<thead>
<tr>
<th>Research aim</th>
<th>Research hypothesis</th>
<th>Statistical procedures</th>
<th>Supportive evidence provided</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research aim 1:</strong> To assess the statistical interrelationship between the career-related construct variables (psychological contract and psychosocial career preoccupations), the biographical characteristics variables (generational cohorts, gender, race, marital status, job level and employment status) and the retention factors construct variables.</td>
<td><strong>H1:</strong> There is a statistically positive interrelationship between the psychological career-related construct variables (psychological contract and psychosocial career preoccupations), the biographical characteristics variables (generational cohorts, gender, race, marital status, job level and employment status) and the retention factors construct variables.</td>
<td>Correlation analysis</td>
<td>Yes</td>
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<tr>
<td><strong>Research aim 2:</strong> To empirically investigate whether the psychological career-related construct variables (psychological contract and psychosocial career preoccupations) positively and significantly predict the retention factors construct variables.</td>
<td><strong>H2:</strong> The psychological career-related construct variables (psychological contract and psychosocial career preoccupations) positively and significantly predict the retention factors construct variables.</td>
<td>Canonical correlation</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Research aim 3:</strong> Based on the statistical relationship between the psychological career-related construct variables</td>
<td><strong>H3:</strong> The theoretically hypothesised psychological profile has a good fit with the empirically manifested structural model.</td>
<td>Structural Equation Modelling (SEM)</td>
<td>Yes</td>
</tr>
<tr>
<td>Research aim</td>
<td>Research hypothesis</td>
<td>Statistical procedures</td>
<td>Supportive evidence provided</td>
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<td>(psychological contract and psychosocial career preoccupations) and the retention factors construct variables (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment), to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model.</td>
<td>H4: There is a significant interaction effect between (1) individuals’ psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in predicting satisfaction with retention factors.</td>
<td>Hierarchical moderated regression analysis</td>
<td>Partial</td>
</tr>
<tr>
<td>Research aim 4: To assess the interaction effect between (1) individuals’ psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in predicting satisfaction with retention factors.</td>
<td>H5: The effects of (a) employer obligations and (b) state of the psychological contract on retention factors satisfaction are moderated by (1) employees’ psychosocial career preoccupations, such that stronger effects are associated with</td>
<td>Moderated mediation modelling</td>
<td>Yes</td>
</tr>
<tr>
<td>Research aim</td>
<td>Research hypothesis</td>
<td>Statistical procedures</td>
<td>Supportive evidence provided</td>
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<td>preoccupations, such that stronger effects are associated with stronger career preoccupations, and (2) by generational cohorts, such that stronger effects are evident for certain generational cohorts.</td>
<td>stronger career preoccupations, and (2) by generational cohorts, such that stronger effects are evident for certain generational cohorts.</td>
<td>Tests for significant mean differences</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Research aim 6:</strong> To empirically investigate whether individuals from the various generational cohorts, gender, race, marital status, job level and employment status sub-groups differ significantly with regard to the psychological career-related construct (psychological contract, psychosocial career preoccupations) and the retention factors construct variables.</td>
<td><strong>H6:</strong> Individuals from various generational cohorts, gender, race, marital status, job level and employment status sub-groups differ significantly with regard to the psychological career-related construct (psychological contract, psychosocial career preoccupations) and the retention factors construct variables.</td>
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</tr>
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</table>
5.6 CHAPTER SUMMARY

This chapter provided the findings of the preliminary statistical analysis, descriptive statistics, correlational statistics and inferential statistics in order to determine the nature of the empirical relationships between the psychological career-related construct variables (psychological contract and psychosocial career preoccupations), the biographical variables (generational cohorts, gender, race, marital status, job level and employment level) and the retention-related construct variables (compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life balance and organisational commitment). Findings of the literature review together with the empirical research were interpreted and provided support for the research hypotheses.

The following research aims were achieved:

Research aim 1: To assess the statistical interrelationship between the career-related construct variables (psychological contract and psychosocial career preoccupations), the biographical characteristics (generational cohorts, gender, race, marital status, job level and employment status) variables and the retention factors construct variables. (This research aim relates to research hypothesis H1.)

Research aim 2: To empirically investigate whether the psychological career-related construct variables (psychological contract and psychosocial career preoccupations) positively and significantly predict the retention factors construct variables. (This research aim relates to research hypothesis H2.)

Research aim 3: Based on the statistical relationship between the psychological career-related construct variables (psychological contract, psychosocial career preoccupations, generational cohorts) and the retention factors construct variables (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment), to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model. (This research aim relates to research hypothesis H3.)

Research aim 4: To assess the interaction effect between (1) individuals’ psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in predicting satisfaction with retention factors. (This research aim relates to research hypothesis H4.)
Research aim 5: To assess whether the effects of (a) employer obligations and (b) state of the psychological contract on retention factors satisfaction are moderated by (1) employees’ psychosocial career preoccupations, such that stronger effects are associated with stronger career preoccupations, and (2) by generational cohorts, such that stronger effects are evident for certain generational cohorts.

Research aim 6: To empirically investigate whether individuals from the various gender, race, marital status, job level and employment status sub-groups differ significantly regarding the psychological career-related construct (psychological contract, psychosocial career preoccupations, and generational cohorts) and retention factors variables. (This research aim relates to research hypothesis H6.)

Chapter 6 places emphasis on research aim 7, namely to formulate recommendations for industrial, organisational and human resource management retention practices and future research.
CHAPTER 6: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter addresses research aim 7, namely to formulate recommendations for industrial, organisational and human resource management retention practices and future research. The limitations of the literature review and the empirical results of the study are discussed and provide recommendations for the practical application of the findings. Finally, suggestions for future research studies are made.

6.1 CONCLUSIONS

This section provides the conclusions that are based on both the literature review and the empirical study, in accordance with the research aims as outlined in Chapter 1.

6.1.1 Conclusions relating to the literature review

The general aim of this study was to construct an overall psychological retention profile based on the empirically derived relationship dynamics between an individual’s psychological career-related attributes (psychological contract and psychosocial career preoccupations) and retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment), in order to inform retention management practices among diverse groups of employees in the context of the higher educational environment in South Africa. The research also aimed to conceptualise generational diversity and retention in the diverse and multi-cultural contemporary workplace. A further aim was to conceptualise the psychological career-related attributes of the psychological contract and psychosocial career preoccupations, and to establish how an individual’s biographical characteristics (including gender, race, generational cohorts, marital status, job level and employment level) might influence the development of these competencies.

In the case of each of the specific theoretical research aims, the following conclusions were made with regard to the relationship dynamics between the variables relevant to the study.

6.1.1.1 Research aim 1: To conceptualise generational diversity and retention in the diverse and multi-cultural contemporary workplace

This first aim was achieved in Chapter 2.
South African organisations are faced with many challenges as they are hampered by a lack of scarce skills and an increasing turnover rate among talented employees (Ready & Conger, 2007; Smit, Stanz, & Bussin, 2015). Apart from these challenges, organisations are confronted with significant changes in the composition of the population (Stone & Deadrick, 2015), such as the prospect over the next few years of an aging workforce worldwide (Appannah & Biggs, 2015; Bal et al., 2015). The following conclusions, based on the literature review, can be made about generational diversity and retention in the diverse and multi-cultural contemporary workplace:

(a) Retention in the diverse and multi-cultural contemporary workplace

- Employee retention is currently a major cause for concern and a complex issue for many organisations (Shore, 2013; Tladinyane et al., 2013).
- Turnover costs caused by the loss of valuable employees include separation costs, vacancy costs, replacement costs, training costs and performance differential costs (Byerly, 2012; Cascio, 1976; Jain, 2011; James & Mathew, 2012; Masango & Mpofu, 2013; Morrell et al., 2004; Ratna & Chawla, 2012; Schlechter et al., 2015; Takawira et al., 2014).
- Employee retention is therefore very important for the competitiveness of an organisation as employee turnover can have detrimental effects on its productivity and profitability (Idris, 2104; Samual & Chipunza, 2009; Sigler, 1999).
- Effective retention management strategies should be developed, based on the factors that make employees want to either leave or stay (Armstrong, 2009).
- The HR practices related to compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment are critical factors in the retention of employees (Döckel et al., 2006).
- There exists a need to prioritise, formalise and institutionalise a knowledge retention framework in order to enhance the retention of employees (Dube & Ngulube, 2013).
- Age, gender, employment level, race, marital status, career stage and tenure have been identified as biographical variables that have an influence on the retention of employees (Amutuhaire, 2010; Bushe, 2012; Gaiduk & Gaiduk, 2009; Mubarak et al., 2012; Ng’ethe et al., 2012; Pienaar & Bester 2008).

(b) Generational diversity in the contemporary workplace

- Effective diversity management may result in positive outcomes for an organisation, such as improved organisational performance (Chrobot-Mason & Aramovich, 2015;
Cox, 1993; Mamman et al., 2012; Richard, 2000). The absence of effective diversity management may result in absenteeism, intergroup conflict and staff turnover (Chrobot-Mason & Aramovich, 2015; Mamman et al., 2012).

- More specifically, generational diversity is a pressing issue globally with regard to the design of work environments to attract and retain both younger and older generations (Hendricks & Cope, 2012; Shacklock & Brunetto, 2012).

- Different generational cohorts have different values as their conduct, attitudes towards work and expectations are influenced by their specific life events and culture; feelings of dissatisfaction and disappointment will arise if these expectations are not met (Tay, 2011).

- Baby Boomers are competitive by nature and believe in growth, change and expansion (Lowe et al., 2008). They expect promotion on the basis of their seniority and loyalty towards the organisation (Tay, 2011). Work is the most important aspect of their lives and they have a strong work ethic (Stanley, 2010). They are self-absorbed and have feelings of entitlement (Gibson et al., 2009). They respect authority (Lowe et al., 2008) and seek recognition for their contributions through monetary incentives (Hendricks & Cope, 2012).

- Generation X employees are less loyal to organisations and more concerned with their careers (Crampton & Hodge, 2007; Gibson et al. 2009). They expect a work-life balance (Shacklock & Brunetto, 2011) and seek prompt feedback and credit for their efforts (Lowe et al., 2008).

- Generation Y employees expect immediate feedback and constant recognition (Crumpacker & Crumpacker, 2007). They seek training and development opportunities and are career-orientated (Farr-Wharton et al., 2012) and work that provides them with flexibility (Favero & Heath, 2012).

It is clear that the identification of generational characteristics and their effects on work-related variables might offer a framework to assist in the effective recruitment and retention of staff from different generations in higher educational institutions (Kleinhans et al., 2015). If the values and preferences of different generational cohorts in the multigenerational workplace were fully understood, human resource practitioners and industrial and organisational psychologists would be better equipped to institute policies and strategies to meet the needs of the current academic workforce.
6.1.1.2 Research aim 2: To conceptualise the psychological career-related attributes of the psychological contract and psychosocial career preoccupations, and to establish how an individual’s biographical characteristics influence the development of these competencies

The second aim was achieved in Chapter 3.

The following conclusions were drawn:

- The role of the psychological contract and work expectations on guiding the relationship between mutual expectations has strengthened over the past decade (O’Meara et al., 2016). Unfulfilled expectations will result in employees exhibiting negative behaviours, such as poor performance, absenteeism and turnover, mistrust and lack of commitment (Lam & De Campos, 2015). The fulfilment of an employee’s psychological contract and his or her work experiences will predict an employee’s turnover intention (le Roux & Rothmann, 2013). A sound exchange relationship is based on psychological contract fulfilment and non-violation of this contract (le Roux & Rothmann, 2013). There is a gap in research that investigates demographic variables such as gender, tenure and age in terms of the direct and indirect relationship between the psychological contract and turnover intention (le Roux & Rothmann, 2013).

- A distinction can be drawn between career theories linking certain career preoccupations to a particular age (Super, 1957) and to career stage (Savickas, 1997). Certain career preoccupations are not age related (Coetzee, 2014), where career establishment preoccupations are positively related to commitment and negatively related to external interests of the job and career, therefore potentially affecting retention (Coetzee, 2015a). Limited research that relates to Coetzee’s (2015a) framework of psychosocial career preoccupations is available; thus it is hoped that this study will make a valuable contribution.

- Men and women’s career development differs as men are more inclined to focus on physical, traditional career success and more inclined towards a bounded, hierarchical career, whereas women are more focused on psychological, non-traditional career success (Jung & Takeuchi, 2016; Sullivan & Arthur, 2006). The psychological contract of males and females may also differ as they react differently to various human resource management practices (Chin & Hung, 2013).
Employees from minority race groups have different expectations of the psychological contract (Pant & Vijaya, 2015); black professionals experience particular career challenges (Maree, 2016). There is a need for further research into methods to address the career concerns of black employees at different employment levels (Maree, 2016) as well as the important elements of the psychological contract for individuals of different race groups (Pant & Vijaya, 2015).

Employees from different generational cohorts have developed different mental schemas regarding the environment in which they work and live. This may influence the psychological contract of these generations (Lub et al., 2016).

Employees at different career stages and from different generations exhibit different needs and preoccupations (Chen et al., 2003).

The psychological contract of employees from different job levels differs in terms of its content (Pant & Vijaya, 2015).

An employee with a short tenure will experience greater expectations of career development, intrinsic tasks and self-control (Jiang et al., 2016).

6.1.1.3 Research aim 3: To conceptualise the theoretical relationship between the psychological career-related attributes (psychological contract, psychosocial career preoccupations, and generational cohorts) and the retention factors constructs (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment)

The third aim, namely to conceptualise the theoretical relationship between the psychological career-related attributes and the retention factors constructs was achieved in Chapter 3.

The literature review revealed theoretical relationships between the psychological career-related attributes and the retention factors constructs.

(a) Conclusions relating to the theoretical relationship between the psychological contract and psychosocial career preoccupations

Individuals with different career preoccupations, including career establishment preoccupations, career adjustment preoccupations and work/life adaptation preoccupations might have different expectations with regard to employer and employee obligations in terms of the psychological contract. Their satisfaction with the psychological contract might differ, as
may the state of the psychological contract, across the various psychosocial career preoccupations.

(b) **Conclusions relating to the theoretical relationship between the psychological contract and the generational cohorts**

Individuals from different generations, in this case the Baby Boomers, Generation X and Generation Y, might have different expectations with regard to employer and employee obligations in terms of the psychological contract. Their satisfaction with the psychological contract and state of the psychological contract may also differ depending on their generational cohort.

(c) **Conclusions relating to the theoretical relationship between the psychological contract and retention factors**

The psychological contract of individuals with regard to various retention factors, including compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment may differ from individual to individual.

(d) **Conclusions relating to the theoretical relationship between the psychosocial career preoccupations and generational cohorts**

There may be a correlation between the psychosocial career preoccupations, including career establishment preoccupations, career adaptation preoccupations and work/life adjustment preoccupations, and the generational cohorts, that is, the Baby Boomers, Generation X and Generation Y.

(e) **Conclusions relating to the theoretical relationship between the psychosocial career preoccupations and retention factors**

A relationship may exist between the psychosocial career preoccupations, including career establishment preoccupations, career adaptation preoccupations and career adjustment preoccupations, and satisfaction with various retention factors, including compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment. An individual with certain career concerns that are related to career development may be satisfied with different retention factors than an individual with other career concerns related to career development.
(f) **Conclusions relating to the theoretical relationship between generational cohorts and retention factors**

Individuals from different generational cohorts, including the Baby Boomers, Generation X and Generation Y, might be satisfied with different retention factors, including compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment, differently. Therefore, individuals from the Baby Boomers generational cohort might differ from individuals from the Generation X and Generation Y cohorts in terms of what they perceive as important retention factors.

(h) **Conclusions relating to the theoretical moderating relationship of generational cohorts and psychosocial career preoccupations**

Individuals from the different generational cohorts, including the Baby Boomers, Generation X and Generation Y cohorts may have a moderating effect on the relationship between the psychological contract variables and the retention factors variables. Individuals with different psychosocial career preoccupations, including career establishment preoccupations, career adaptation preoccupations and work/life adjustment preoccupations, might have a moderating effect on the relationship between the psychological contract variables and the retention factors variables. Therefore, the psychological contract of employees from the same generational cohort or psychosocial career preoccupation may be similar with the result that they are satisfied with the same retention factors.

6.1.1.4 **Research aim 4: Based on the theoretical relationship between the psychological career-related attributes and retention factors constructs, to determine the theoretical elements that constitute an integrated psychological retention profile for diverse groups of employees**

The fourth research aim, namely to determine the theoretical elements that constitute an integrated psychological retention profile for diverse groups of employees, was achieved in Chapter 3.

Based on information from the literature review, I developed a theoretical psychological retention profile outlining the psychological career-related attributes (psychological contract and psychosocial career preoccupations) and the retention factors (compensation, job characteristics, training and development, career opportunities, supervisor support, work/life
balance and commitment) at an individual and organisational level in order to inform retention practices.

Both on an individual and an organisational level, the retention of individuals may be subject to the employer obligations, employee obligations, satisfaction with the psychological contract, as well as the state of the psychological contract (Rousseau, 1995). Retention practices should determine the content of an individual employee’s psychological contract as well as the employee’s satisfaction with the psychological contract and state of the psychological contract. This could assist in the development of specific retention strategies that would enhance the psychological contract of employees and ultimately lead to higher commitment and lower turnover.

Employees’ psychosocial career preoccupations, such as the career establishment preoccupations, career adaptation preoccupations and work/life adjustment preoccupations might also have an influence on their retention (Coetzee, 2014). Retention practices should take into account individual employees’ specific career preoccupations. This could inform retention practices and allow the development of retention strategies that would retain employees with differing psychosocial career preoccupations.

The specific generational cohort to which an individual belongs, including Baby Boomers, Generation X and Generation Y, might also have an influence on his or her retention (Mannheim, 1952). Retention practices should therefore determine the specific needs of each generational cohort in order to inform retention practices and develop retention strategies that are specific to employees from different generational cohorts.

Retention factors that may have an influence on an individual’s retention include compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment (Döckel, 2003). Those concerned with retention practices should therefore take these factors into account in the development of retention strategies.

6.1.1.5 Research aim 5: To outline the implications of the psychological retention profile for retention management practices

The fifth aim, namely to outline the implications of the psychological retention profile for retention management practices, was achieved in Chapters 2 and 3.
It was evident from the literature that the contemporary workplace has changed dramatically over the last few decades. Employees from three different generations are currently working together; human resource management practitioners and industrial and organisational psychologists are faced with a tremendous challenge in keeping these employees satisfied with their working environment and ultimately retaining them in their organisations.

Many organisations struggle with the concept of retention and this creates major difficulties for them. Retention is not merely the departure of an employee; it is associated with various turnover costs including separation costs, vacancy costs, replacement costs, training costs, and performance differential costs (Byerly, 2012; Cascio, 1976; Jain, 2011; James & Mathew, 2012; Masango & Mpolo, 2013; Morrell et al., 2004; Ratna & Chawla, 2012; Schlechter et al., 2015; Takawira et al., 2014).

The literature indicates that human resource practitioners and industrial and organisational psychologists would be better equipped to institute policies and strategies to meet the needs of the current workforce if they fully understood the particular values and preferences of different generational cohorts (Kleinhans et al., 2015). This research study attempts to fill this research gap by determining the expectations of three generational cohorts. This could provide some insight that would assist in the development of strategies to retain young Generation Y employees/graduates, and to prevent Generation X employees from leaving. The latter are necessary to fill the gap left by the retirement of the Baby Boomers (Rajput et al., 2013). Such a psychological retention profile for diverse generational groups would be a powerful tool to further our understanding of how different generations are satisfied in terms of retention factors, ultimately assisting in the retention of employees from different generational cohorts.

Döckel (2003) identified seven critical retention factors that should be considered in the retention of high technology skills employees. These could assist human resource practitioners and industrial and organisational psychologists to retain their employees. These retention factors might be valued differently by the different generational cohorts.

It also became apparent from the literature review that the various generational cohorts will share similar values and beliefs (Farr-Wharton et al., 2012; Kupperschmidt, 2000) and might therefore different generations will have different psychological contracts. The literature has also indicated that an unfulfilled or violated psychological contract may result in turnover of valuable employees. A better understanding of the psychological contract of employees from
the different generational cohorts may assist human resource practitioners and industrial and organisational psychologists in the development of retention strategies.

The psychosocial career preoccupations of employees refer to career preoccupations that are not age-related (Coetze, 2014). Human resource practitioners and industrial and organisational psychologists can therefore use the knowledge of employees’ concerns or interests with regard to their career development in order to develop retention strategies specific to their career preoccupations.

6.1.2 Conclusions relating to the empirical study

The empirical aim of this study was to address the following seven essential aims:

- To assess the statistical interrelationship between the career-related construct variables (psychological contract and psychosocial career preoccupations), the biographical characteristics (generational cohorts, gender, race, marital status, job level, and employment status) variables and the retention factors construct variables (H1)
- To empirically investigate whether the psychological career-related construct variables (psychological contract and psychosocial career preoccupations) positively and significantly predict the retention factors construct variables (H2)
- Based on the statistical relationship between the psychological career-related construct variables (psychological contract and psychosocial career preoccupations) and the retention factors construct variables (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment), to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model (H3)
- To assess the interaction effect between (1) individuals’ psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in predicting satisfaction with retention factors (H4)
- To assess whether the effects of (a) employer obligations and (b) state of the psychological contract on retention factors satisfaction are moderated by (1) employees’ psychosocial career preoccupations, such that stronger effects are associated with stronger career preoccupations, and (2) by generational cohorts, such that stronger effects are evident for certain generational cohorts (H5)
- To empirically investigate whether individuals from the various gender, race, marital status, job level and employment status sub-groups differ significantly with regard to the...
psychological career-related construct (psychological contract, psychosocial career preoccupations, and generational cohorts) and retention factors variables (H6)

- To formulate recommendations for industrial, organisational and human resource management retention practices and future research.

6.1.2.1 Research aim 1: To assess the statistical interrelationship between the psychological career-related construct variables (psychological contract and psychosocial career preoccupations), the biographical characteristics (generational cohorts, gender, race, marital status, job level, and employment status) variables and the retention factors construct variables.

The first aim, namely to assess the statistically interrelationship between the psychological career-related construct variables, the biographical characteristics variables and the retention factors construct variables, was achieved in Chapter 5. Supportive evidence was provided for research hypothesis H1.

Conclusion: Individuals' psychological career-related construct variables (psychological contract and psychosocial career preoccupations), their biographical characteristics (generational cohorts, gender, race, marital status, job level and employment status) variables and their retention factors construct variables are significantly related.

Based on the significant relationships that were revealed between participants' psychological career-related attributes (psychological contract and psychosocial career preoccupations), their biographical characteristics and their retention factors, the following specific conclusions were drawn:

In terms of the independent psychological contract variable and the dependent retention factor construct variable, the results showed significant positive correlations between the overall psychological contract and the overall retention factors construct. These results suggest that positive perceptions of the psychological contract are likely to be associated with high satisfaction with the overall retention factors (i.e. compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life balance and organisational commitment). It was also found that the overall psychosocial career preoccupations construct was significantly and negatively related to the overall retention factors. These results suggest that high levels of concern or interest in terms of career development are likely to be linked to lower levels of satisfaction with the overall retention factors.
6.1.2.2 Research aim 2: To empirically investigate whether the psychological career-related construct variables (psychological contract and psychosocial career preoccupations) positively and significantly predict the retention factors construct variables

The second aim, namely to empirically investigate whether the psychological career-related construct variables positively and significantly predict the retention factors construct variables, was achieved in Chapter 5. Supportive evidence was provided for research hypothesis H2.

On the basis of the empirical results, the following conclusions can be drawn:

Conclusion: Individuals’ psychological career-related attributes (psychological contract and psychosocial career preoccupations) positively and significantly predict their retention factors. More specifically, positive perceptions of employer obligations and the state of the psychological contract are the strongest psychological career-related variables in predicting the retention factors of compensation, training and development opportunities, supervisor support, career opportunities and organisational commitment.

6.1.2.3 Research aim 3: Based on the statistical relationship between the psychological career-related construct variables (psychological contract, psychosocial career preoccupations, and generational cohorts) and the retention factors construct variables (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment), to assess the fit between the elements of the empirically manifested structural model and the theoretically hypothesised model

The third aim, namely to assess the fit between the psychological career-related construct variables and the retention factors construct variables, was addressed in Chapter 5. Supportive evidence was provided for research hypothesis H3.

Conclusion: Based on the empirical results, the following conclusions were drawn:

• Positive perceptions of employer obligations contributed most in explaining high levels of satisfaction with compensation and training and development opportunities as retention factors.

• Positive perceptions of the state of the psychological contract contributed most in explaining high levels of satisfaction with supervisor support and career opportunities as retention factors.
6.1.2.4 Research aim 4: To assess the interaction effect between (1) individuals’ psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in predicting satisfaction with retention factors

The fourth aim, namely to assess the interaction effect between (1) individuals’ psychosocial career preoccupations and (2) generational cohorts and the psychological contract variable in predicting satisfaction with retention factors, was achieved in Chapter 6. Partial supportive evidence was provided for research hypothesis H4.

Conclusion: Based on the empirical results, the following conclusions were drawn:

- Psychosocial career preoccupations have a moderating (buffer) effect in the link between an individual’s psychological contract and his/her satisfaction with retention factors.
- More specifically, the psychosocial career preoccupations have a moderating (buffer) effect on the link between an individual’s psychological contract and his/her satisfaction with training and development opportunities as a retention factor.
- These results imply that the psychosocial career preoccupations of an individual may either strengthen or weaken the link between positive perceptions of the psychological contract and high levels of satisfaction with training and development opportunities.
- Generational cohorts do not have a moderating (buffer) effect on the link between an individual’s satisfaction with the psychological contract and his/her level of satisfaction with retention factors.
- Certain person-centred characteristics are also important variables to consider in the main and moderation effect; these include compensation (gender, employment status), career opportunities (race, marital status) and supervisor support (employment status).

6.1.2.5 Research aim 5: To assess whether the effects of (a) employer obligations and (b) state of the psychological contract on retention factors satisfaction are moderated by (1) employees’ psychosocial career preoccupations, such that stronger effects are associated with stronger career preoccupations, and (2) by generational cohorts, such that stronger effects are evident for certain generational cohorts.

The fifth research aim was achieved in Chapter 5. Supportive evidence was provided for research hypothesis H5.
Conclusion: Based on the empirical results, the following conclusions were drawn:

- Psychosocial career preoccupations do not have a moderating (buffer) effect on the link between employer obligations and the state of the psychological contract.
- Psychosocial career preoccupations have a moderating (buffer) effect on the link between the state of the psychological contract and the retention factors overall.
- The effect of positive perceptions of employer obligations on high levels of satisfaction with the retention factors through the state of the psychological contract increases when the scores on psychosocial career occupations are high.
- Generational cohorts do not have a moderating (buffer) effect on the link between employer obligations and the state of the psychological contract.
- Generational cohorts do not have a moderating (buffer) effect on the link between the state of the psychological contract and the retention factors overall.
- The effect of positive perceptions of employer obligations on high levels of satisfaction with retention factors through positive perceptions of the state of the psychological contract increased when the age group of participants was lower (i.e. younger generations).

6.1.2.6 Research aim 6: To empirically investigate whether individuals from the various gender, race, marital status, job level and employment status sub-groups differ significantly regarding the psychological career-related construct (psychological contract, psychosocial career preoccupations, and generational cohorts) and retention factors variables.

The sixth aim, namely to empirically investigate whether individuals from the various generational cohorts, gender, race, marital status, job level and employment status sub-groups differ significantly regarding the psychological career-related construct and retention factors variables, was achieved in Chapter 6. Supportive evidence was provided for research hypothesis H6.

Conclusion: Based on the empirical results, the following conclusions could be drawn as indicated in Table 6.1:

Table 6.1
Conclusions Based on Empirical Results of Individual Differences

<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
</tr>
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</table>
- Female participants were likely to be more concerned about compensation than males.
- Male were likely to be more committed to the organisation than females.

<table>
<thead>
<tr>
<th>Race</th>
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<tbody>
<tr>
<td>Black participants were likely to be more concerned about career opportunities than white participants.</td>
</tr>
<tr>
<td>Black participants were likely to be more concerned about work/life balance than white participants.</td>
</tr>
<tr>
<td>Black participants were likely to be less committed to the organisation than white participants.</td>
</tr>
<tr>
<td>Black participants showed that they were likely to have more career preoccupations than white participants.</td>
</tr>
<tr>
<td>White participants were more likely to be satisfied with their psychological contract than black participants.</td>
</tr>
<tr>
<td>Black participants were more likely to perceive that their psychological contract was fair and just than white participants; therefore their contracts were in a better state.</td>
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</table>

<table>
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<tr>
<th>Generations</th>
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<tbody>
<tr>
<td>Participants from the Generation Y cohort were more likely to be satisfied with career opportunities and work/life balance than participants from the Baby Boomers and Generation X cohorts.</td>
</tr>
<tr>
<td>Participants from the Baby Boomers cohort were more likely to be satisfied with their commitment to the organisation than participants from the Generation X and Y cohorts.</td>
</tr>
<tr>
<td>Generation Y participants were more likely to have career establishment preoccupations than participants from the Generation X and Baby Boomers cohort.</td>
</tr>
<tr>
<td>Participants from the Baby Boomers cohort were less likely to have career adaptation preoccupations and work/life adjustment preoccupations than participants form the Generation Y and X cohorts.</td>
</tr>
<tr>
<td>Participants from the Generation X cohort were more likely to perceive that they had fulfilled their promises to their employer than the Generation Y and Baby Boomers participants.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Job level</th>
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<tr>
<td>Academic participants were likely to be more satisfied with job characteristics than administrative participants.</td>
</tr>
</tbody>
</table>
- Academic participants were likely to be less satisfied with work/life balance than administrative employees.
- Administrative participants were likely to have career establishment preoccupations and career adaptation preoccupations.
- Academic employees were more likely than administrative employees to believe that the organisation had made and fulfilled its promises.

### Employment status

- Participants employed on a contract basis were more likely to be satisfied with job characteristics, supervisor support, career opportunities and work/life balance as retention factors than permanently employed employees.
- Permanently employed participants were more likely to be satisfied with compensation than participants employed on a contract basis.
- Permanently employed participants were more likely to be satisfied with their psychological contract than participants employed on a contract basis.
- Participants employed on a contract basis were more likely than permanently employed participants to regard their psychological contract as fair and just.

### 6.1.3 Conclusions relating to the central hypothesis

The central hypothesis, explained in Chapter 1, stated that a relationship exists between an individual’s psychological career-related attributes (psychological contract and psychosocial career preoccupations), biographical characteristics (generational cohorts, gender, race, marital status, job level and employment status) and retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment. This hypothesis assumed that, based on the empirically derived relationship dynamics among these variables, an overall psychological retention profile for diverse groups of employees in the higher educational environment context of South Africa could be developed.

Both the literature review and the empirical study provided evidence in support of the central hypothesis.

### 6.1.4 Conclusions relating to the field of industrial and organisational psychology
The inferences made from the literature review, together with the results of the empirical study, should make a contribution to the field of industrial and organisational psychology and to diversity and retention practices in particular.

The literature review provided new insights into how an individual’s psychological career-related attributes and biographical characteristics are related to his or her retention factors. More specifically, the literature review provided a new understanding of various concepts and theoretical models that foster the psychological contract, psychosocial career preoccupations, generational cohorts and retention factors.

The literature review provided grounds for the construction of a psychological retention profile, indicating the individual and organisational behavioural elements that have to be considered during the development of employee retention strategies. From the findings it is evident that organisations and industrial and organisational psychologists should focus on the concepts and theoretical models that influence the variables of the psychological contract, psychosocial career preoccupations and retention factors.

The empirical study has provided new information on the relationship dynamics between the psychological career-related attributes (psychological contract and psychosocial career preoccupations), the biographical variables (generational cohorts, gender, race, marital status, job level and employment status) and the retention factors (compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life balance and organisational commitment). The new information gained from the empirical study helped to create a broader perspective of how individuals’ psychological contract and psychosocial career preoccupations explain their satisfaction with retention factors. These findings could also assist participants to address their concerns about their careers, which may in turn have a positive effect on their perceptions of the psychological contract and their satisfaction with retention factors. In considering these findings, organisations should develop a deeper understanding of the perceptions and experiences of individuals in terms of their exchange relationship with the organisation, and in such a way assist organisations to change or develop their retention policies and practices accordingly.

The empirical study contributed by identifying the variables that contributed most in explaining those psychological career-related attributes that act as predictors of satisfaction with retention factors. Employer obligations and state of the psychological contract (psychological contract) seem to be the most significant contributing factors in explaining employees’ satisfaction with retention factors, specifically compensation, training and development,
supervisor support and career opportunities. The results showed that positive perceptions of fulfilled employer obligations are likely to predict high levels of satisfaction with compensation and training and development opportunities. Positive perceptions of the state of the psychological contract are likely to predict high levels of satisfaction with supervisor support and career opportunities. The results also indicated that the psychosocial career preoccupations of an individual may strengthen or weaken the link between positive perceptions of the psychological contract and high levels of satisfaction with training and development opportunities. In addition, positive perceptions of employer obligations can enhance satisfaction with the retention factors overall through the positive perceptions of the state of the psychological contract in cases where employees are either very concerned about their career development in the organisation (i.e. high psychosocial career preoccupations) or when they are not particularly concerned about this (i.e. low psychosocial career preoccupations). In addition, the younger the employees (i.e. employees from the Generation Y cohort), the greater the effect of positive perceptions of employer obligations on high levels of satisfaction with retention factors through the positive perception of the state of the psychological contract.

These findings furthermore revealed that human resource practitioners and industrial and organisational psychologists should continue to pay attention to the psychometric properties of particular measuring instruments (PQ, PCPS, and RFMS) before applying them in organisational initiatives. Organisations should seek the assistance of professionals to ensure that the administration and interpretation of the results of these instruments is done in a fair and equitable manner. Employees should receive feedback that is clear and comprehensible, in a supportive and unthreatening environment. Individuals' biographical characteristics such as generational cohort, gender, race, marital status, job level and employment status, should also be taken into consideration during the development of employee retention strategies, as has been emphasised in the findings of this study.

6.2 LIMITATIONS

The limitations of the literature review and the empirical study are discussed below.

6.2.1 Limitations of the literature review
The exploratory research into psychological career-related attributes (psychological contract and psychosocial career preoccupations), biographical characteristics (generational cohorts, gender, race, marital status, job level and employment status) and retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment) in the South African context was limited by the following aspects:

- There are various psychological career-related variables; however, only two variables (psychological contract and psychosocial career preoccupations) were explored in this study. For this reason, the study was unable to provide a holistic indication of the psychological career-related factors that may potentially have an impact on retention strategies in South African organisations.
- Although a wide range of studies have been conducted on psychological career-related variables and retention factors, little research has been done in the South African context or internationally on the relationship between these psychological career-related variables, biographical variables and retention factors variables. Very little research has specifically highlighted the relationships between these variables in terms of employee retention strategies.
- The classification of the generational cohorts was based on international definitions, which may not be entirely applicable to the South African context.

6.2.2 Limitations of the empirical study

The generalisability of the findings on the size and characteristics of the research sample and the psychometric properties of the PQ, PCPS and RFMS could be limited for the following reasons:

- Although the sample consisted of 579 participants, a larger sample was required to establish a definite relationship between the psychological career-related attributes (psychological contract and psychosocial career preoccupations), the biographical variables and the retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment) in this study.
- The sample comprised mainly married black African male participants, which also limited the generalisability of the findings to the broader South African population.
• The measuring instruments (PQ, PCPS and RFMS) were based on the personal opinions, perceptions and experiences of the participants, which may have influenced the validity of the research results.
• A subscale of the PQ (state of the psychological contract) revealed a low reliability, and was therefore a limitation on the interpretation of the findings.
• Several psychological career-related constructs were omitted from this study; had these been included, they may have affected the findings in a different manner.
• The biographical variables were limited to generational cohorts, race, gender, marital status, job level, and employment status. Other biographical variables might have exerted a different influence on the research findings.
• As a result of the cross-sectional nature of the research design, the researcher was unable to control the research variables; she was thus unable to determine causality in the significant relationships.
• The study was done at only one higher educational institution. The researcher could have added more value if the study had been done at several higher educational institutions.

Taking the abovementioned limitations into account, the study nonetheless showed the potential of investigating variables that influence the psychological contract, psychosocial career preoccupations and retention factors. The results of this study can be regarded as a first step in advancing and stimulating further research into employee retention practices in the diverse South African context.

6.3 RECOMMENDATIONS

As a result of these research findings, conclusions and limitations, the following recommendations for industrial and organisational psychology and further research in this field are discussed below.

6.3.1 Recommendations for the field of industrial and organisational psychology

The research findings and significant relationships that emerged from the study could contribute to the development of the following individual and organisational interventions in terms of retention strategies:
Individual-level interventions:
- Organisations should have discussions with individual employees in order to determine their perceptions of what they expect from the organisation in return for their efforts. Organisations should also establish employees’ perceptions of the fairness of the promises that have been made to them and the degree to which they trust management to fulfil these promises. Improving an employee’s perceptions with regard to the fulfilment of employer obligations could increase the employee’s satisfaction with his/her compensation package and their training and development opportunities. In addition, improving employees’ perceptions of the fairness of the mutual obligations is likely to increase their satisfaction with the support they receive from their supervisor and their opportunities for career development in the organisation.
- Organisations should have regular discussions with individual employees in order to determine their concerns or anxieties about their career development in the organisation. By improving an individual employee’s perceptions of these concerns about career development, his/her perception of the psychological contract is also likely to improve. This in turn will result in an employee who is more satisfied with training and development opportunities.
- Organisations should provide individual employees with opportunities to review their psychological contracts as well as the state of their psychological contracts on an ongoing basis in order to determine exactly what employer obligations they regard as unfulfilled, and what employee obligations they still need to fulfil. In so doing, individuals will be made aware of any issues they need to address with their employers.
- Organisations should have regular discussions with individual employees to make them aware of their specific psychosocial career preoccupations and to help them to understand their own particular needs. Employees should be discouraged from developing their needs based on those of other employees in similar positions or similar tenure, but should base them on their own specific developmental concerns or interests. High levels of career preoccupations will have an effect on the relationship between individual perceptions of employer obligations and retention factors through the state of the psychological contract.
- The career development strategies of employees should take individual biographical variables into consideration, specifically race, marital status and employment status.

Organisational-level interventions:
- In order to fulfil the employer obligations of the psychological contract, organisations should compensate their employees fairly by revising current compensation structures.
• Organisations should also consider the training and development opportunities available to employees. Organisations should align these opportunities to the specific psychosocial career preoccupations of individual employees.

• Organisations could use the Psychological Contract Questionnaire (PC), the Psychosocial Career Preoccupations Scale (PCPS) and the Retention Factor Measurement Scale (RFMS) to identify specific retention factors and to develop retention strategies that are aligned with the psychosocial career preoccupations of individual employees.

• Organisations could also use the PC to determine specific employer obligations that employees regard as made and the extent to which they have been met, the employee's satisfaction with the psychological contract and the state of the psychological contract. This would assist organisations in determining those particular retention factors that they should take into account when developing retention strategies.

• Organisations should appoint supervisors who are competent in this role, or provide training to current supervisors in order to provide employees with the necessary supervisor support.

• Organisations should ensure that individual employees believe that the organisation will provide career opportunities for them. This will enhance the state of the psychological contract of employees and assist in their retention.

6.3.2 Recommendations for future research

The sample was made up predominantly of married black African males. Future research studies should thus make use of larger, independent samples that are more representative of various biographical and occupational groups, in this way increasing the generalisability of the findings.

It is also recommended that future research should focus in more detail on the exploration of the relationship between psychological career-related attributes (psychological contract and psychosocial career preoccupations), biographical variables (generational cohorts, gender, race, marital status, job level and employment status) and retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities,
work/life balance and commitment). The findings of this study allowed only a limited understanding of these psychological career-related attributes, biographical variables and retention factors. Such research would be valuable for industrial and organisational psychologists as well as for human resource practitioners in improving employee retention strategies at an organisational and individual level.

A new generational cohort, Generation Z, is entering the labour market; therefore future research should include this generational cohort. Future research should focus on longitudinal studies in order to assess cause and effect relationships between the variables in various occupational settings and especially regarding the role of generational cohorts. This would help industrial and organisational psychologist to interpret the findings and develop a framework that would assist organisations in retaining valuable employees.

6.4 EVALUATION OF THE STUDY

This study investigated the possibility of the existence of a relationship between the psychological career-related attributes (psychological contract and psychosocial career preoccupations), biographical variables (generational cohorts, gender, race, marital status, job level and employment status) and retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment). The findings showed that a relationship did exist between these variables and that they could deliver a better understanding of retention practices.

6.4.1 Value added at a theoretical level

The literature review revealed that a relationship existed between the psychological career-related attributes, the biographical variables and retention factors. An ageing workforce, globalisation and differences in terms of generational cohorts have forced organisations to improve their retention strategies. The psychological contract and psychosocial career preoccupations are considered important factors in the retention of employees. The differences and similarities among different biographical and demographic groups in terms of their psychological contract, psychosocial career preoccupations and retention factors should also be taken into consideration.

On a theoretical level, the literature review was valuable and contributed to the existing literature through the identification of the relationship that exists between psychological
career-related attributes (psychological contract and psychosocial career preoccupations), biographical variables (generational cohorts, gender, race, marital status, job level and employment status) and retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment). The review assisted the researcher in developing a theoretical psychological retention profile for the purposes of retaining diverse employees. The literature review furthermore indicated that the psychological contract, psychosocial career preoccupations and biographical differences such as generational cohorts, race, gender, marital status, job level and employment status could act as predictors of retention factors valued by diverse employees.

The new insights generated from the literature review, specifically on the psychological retention profile and its behavioural elements, could be used in organisational retention practices. The exploration of the biographical characteristics of individuals and how these characteristics affect the development and manifestation of these variables has been recognised as valuable in understanding retention in the context of a diverse organisation.

6.4.2 Value added at an empirical level

On an empirical level, this study contributed by developing an empirically tested psychological retention profile that could be used to inform retention practices in the South African context. The study is potentially ground-breaking in its combination of various constructs and the use of several statistical procedures that revealed key variables in explaining the psychological retention profile for the diverse South African context. In addition, there has been no prior research in the context of retention in South Africa on the specific relationship dynamics between psychological career-related attributes (psychological contract and psychosocial career preoccupations), biographical variables (generational cohorts, gender, race, marital status, job level and employment status) and retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment) particularly.

Based on the findings of the empirical study, it can be argued that this study is original in terms of its inter- and overall relationships between the particular constructs. This study also contributed to the current literature on generational cohorts through finding that generational cohorts had no effect on either the psychological contract or the satisfaction on retention factors. The empirically tested psychological retention profile could be useful in improving the retention of diverse employees in the South African context.
6.4.3 Value added at a practical level

On a practical level, this study contributed by finding that significant relationships did exist between the psychological career-related attributes (psychological contract and psychosocial career preoccupations), the biographical variables (generational cohorts, gender, race, marital status, job level and employment status) and retention factors (compensation, job characteristics, training and development, supervisor support, career opportunities, work/life balance and commitment). Employees’ psychosocial career preoccupations, in other words their concerns about their career development, were likely to have an effect on their perceptions of their psychological contract, more specifically the fulfilment of employer obligations and the state of the psychological contract. In addition, their career concerns were also likely to have an effect on their satisfaction with retention factors provided by the organisation. These findings also contributed by finding that generational cohorts were not likely to have an effect on the psychological contract of employees or on their satisfaction with retention factors in the higher educational environment. The fact that there might be more similarities than differences between the values of generational cohorts might have contributed to these results. However, findings did show that generational cohorts were likely to buffer the effect of positive perceptions of the state of the psychological contract and to have an impact on the link between positive perceptions of employer obligations and satisfaction with retention factors overall. For these reasons, industrial and organisational psychologists and human resource practitioners could gain a better understanding of psychological career-related attributes, biographical variables and retention factors that would improve the retention of diverse employees.

Findings from future research would improve and broaden the understanding that individual employees have unique psychological contracts and different psychological career preoccupations. Understanding these differences would assist in the retention of diverse employees.

The focus of this study was to determine how psychological career-related attributes influence which retention factors are valued by employees. The findings have given direction to future research into the psychological contract and psychosocial career preoccupations of diverse employees in relation to their satisfaction with retention factors. These findings have thus made a significant contribution to the existing body of knowledge on factors that influence the retention of employees in the context of South African higher educational institutions.

6.5 REFLECTION ON DOCTORATENESS AND CONCLUSION
To conclude, the researcher is optimistic that the results of this study will provide a better understanding of how the inter- and overall relationships between psychological career-related attributes, biographical variables and retention factors can inform the construction of an empirically tested psychological retention profile for retention of diverse employees. The researcher is furthermore optimistic that the results of this study have provided new insights into the current literature on retention of employees in the higher educational environment. The psychological retention profile adds a broader perspective on how employees’ psychological contract and psychosocial career preoccupations explain their satisfaction with retention factors within the higher educational environment. Organisations should ensure that they don’t make promises or create expectations that they can’t fulfil or deliver. The theory of retention has furthermore been extended through determining the significance of employer obligations and the state of the psychological contract in the satisfaction of employees in terms of retention factors. The moderating effect of the psychosocial career preoccupations, especially on the relationship between the psychological contract and the retention factors, has also extended the theory on retention and career development. It is anticipated that industrial and organisational psychologists, human resource practitioners and managers will be able to apply this new knowledge in improving their own retention strategies. The psychological retention profile has also extended the theory on generational cohorts through finding that generational cohorts had no direct effect on the psychological contract or satisfaction with retention factors. Generational cohorts did however have an indirect effect on the relationship between the employer obligations and retention factors through the state of the psychological contract. The research findings, conclusions and recommendations for future research should be viewed as a positive contribution to the field of industrial and organisational psychology in the South African context.

Throughout this study, the researcher had personally gained deeper insights into the concepts of the psychological contract, psychosocial career preoccupations, generational cohorts and retention factors. The researcher were able to conceptualise these constructs, determine certain variables that have an impact on these constructs and were able to provide a synthesis of these variables in terms of current literature on retention. The researcher also gained a tremendous amount of knowledge in terms of data analyses and reporting on statistics. From the data analyses and reporting, the researcher learned to think of the bigger picture in terms of retention and not to focus on the face value results. By completing this study, the researcher learned valuable lessons in perseverance, patience, collegiality, and multi-tasking.
6.6  CHAPTER SUMMARY

This chapter discussed the conclusions of the study in terms of both the theoretical and empirical aims. The potential limitations of both the theoretical and the empirical study were discussed. This was followed by recommendations for future research. An integration of the research was provided, underlining the extent to which the findings of the study provided support for the relationship between the psychological career-related attributes, the biographical variables and the retention factors and how this assisted in the development of a psychological retention profile for diverse employees.

This chapter achieved the following research aim:

Research aim 7: To formulate recommendations for industrial and organisational and human resource management retention practices and future research
REFERENCES


Castaneda, M., Zambrana, R. E., Marsh, K., Vega, W., Becerra, R., & Perez, D. J. (2015). Role of institutional climate on underrepresented faculty perceptions and decision making in use of work-family policies. *Family Relations, 64*, 711–725.


REFERENCES: ETHICAL CLEARANCE CERTIFICATE

CEMS/IOP/ RESEARCH ETHICS REVIEW COMMITTEE

08 October 2014

Ref #: 2014/CEMS/IOP/020
Name of applicant: ALDA DEAS
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Dear Alda Deas,

Decision: Ethics Approval

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Supervisor: Prof M Coetzee
Proposal: Constructing a psychological retention profile for diverse generational groups in the higher educational environment

Qualification: DCom IOP

Thank you for the application for research ethics clearance by the CEMS/IOP Research Ethics Review Committee for the above mentioned research. Final approval is granted.

For full approval: The application was reviewed in compliance with the Unisa Policy on Research Ethics by the CEMS/IOP Ethics Committee on 08 October 2014.

For expedited review: The application [or re-submitted documentation] was reviewed in compliance with the Unisa Policy on Research Ethics by the [add name of unit/sub-unit RERC] on [add date of determination/meeting]. The decision will be tabled at the next RERC meeting on [add the date] for notification/ratification.
The proposed research may now commence with the proviso that:

1) The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.

2) Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the (Name of unit/sub-unit) Ethics Review Committee. An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.

3) The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.

4) [Stipulate any reporting requirements if applicable].

Note:
The reference number [#2014/CEMS/IOP/020] should be clearly indicated on all forms of communication [e.g. Webmail, E-mail messages, letters] with the intended research participants, as well as with the [CEMS/IOP Ethics committee]

Kind regards,

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