The moderating role of graduate skills and	attributes in relation to the employability and
retention of graduates	s in a retail organisation

by

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SCOPE OF THE DISSERTATION

The Department of Industrial and Organisational Psychology prescribes a research report

format for the purposes of a master's dissertation of limited scope such as this one (50% of the

total master's degree). This format involves four chapters – an introductory chapter, a literature

review chapter, integrated research (chapter an report 3) and

conclusion/limitations/recommendations chapter.

**TECHNICAL AND REFERENCE STYLE** 

The APA 6th edition guidelines for referencing, tables and figures were used for the purposes of

this study.

**DECLARATION** 

I, Livhuwani Ronnie Mulaudzi, student number 43652646, declare that this dissertation of limited

scope entitled "The moderating role of graduate skills and attributes in relation to the

employability and retention of graduates in a retail organisation" is my own work, and that

all the sources that I have used or from which I have quoted have been indicated and

acknowledged by means of complete references. The research report is original and my own,

unaided work. It has not 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 on 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 organisation that participated in the study.

LIVHUWANI RONNIE MULAUDZI (Student number: 43652646)

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#### SUMMARY

The moderating role of graduate skills and attributes in relation to the employability and retention of graduates in a retail organisation

by

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DEPARTMENT : Industrial and Organisational Psychology

DEGREE : MCom (Industrial and Organisational Psychology)

The general aim of the study was to assess the relationship between the graduateness, employability and satisfaction with retention factors of individuals and whether graduateness moderates the relationship between employability and satisfaction. The study used a quantitative, cross-sectional research design on a purposive, non-probability sample (N = 100) of predominant black (93%), male (49%) and female (51%) trainees between the ages of 17-29 years (early career). Presenting/applying information skills significantly and negatively predicted compensation while ethical/responsible behaviour significantly and positively predicted satisfaction with job characteristics and organisational commitment. Graduateness related positively to self-perceived general employability. General employability did not significantly predict the participants' satisfaction with retention factors. Graduate skills and attributes did not significantly moderate the relationship between self-perceived employability and satisfaction with retention factors. Males had significantly stronger perceptions of employability compared to females while females had higher levels of work–life balance satisfaction compared to males. Overall, the results suggest that general self-perceived employability is more a function of graduateness than of retention, while graduateness positively relates to retention factors.

# **KEY TERMS**

Career mobility; competencies; graduateness; graduate skills and attributes; generic skills; labour market; retention factors; self-perceived employability; talent management; world of work

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#### **CHAPTER 1: SCIENTIFIC ORIENTATION TO THE RESEARCH**

This study investigates the relationship between graduate skills and attributes and the employability and satisfaction with retention factors of graduates in a retail organisation. The first section of this chapter considers the background and motivation for this study. The second section of the chapter deals with the problem statement, specific literature questions, specific empirical questions and the potential value that this study may contribute to Industrial and Organisational Psychology. Section three discusses the general aim of the study, as well as the specific literature and empirical aims of the study. The paradigm perspective is explained in section four and includes the intellectual climate within which this study was conducted and the definitions of the constructs that will be studied. The research design section provides details on the research approach, validity and reliability, variables, unit of analysis and ethical considerations. Section five discusses the research method used in the study and includes a description of the sample, the psychometric instruments utilised, data capturing and data analysis. The final section provides an overview of the conclusions, recommendations and limitations of the study.

#### 1.1. BACKGROUND AND MOTIVATION OF THE RESEARCH

The context of the study is the employability and the retention of graduates in the South African retail industry. According to a report by Proudfoot Consulting (2008), the most common barrier to company productivity is related to labour, specifically staff shortages and an insufficient labour pool. The study by Proudfoot Consulting showed that, in 2008, South Africa had a 24% labour turnover rate compared to its global counterparts. After the resources sector, the wholesale and retail sector is the sector that shows the most potential for growth (World Economic Forum, 2013). Globally, the retail sector is experiencing a labour turnover rate of 24%, which appears to be exacerbated by low employee morale and motivation (Hart, Stachow, Farrell, & Reed, 2007; Proudfoot Consulting, 2008). Employee turnover in the retail sector is further exacerbated by the physical and environmental conditions which are associated with the industry and which include long hours and poor work–life balance (Hart et al., 2007; Jain, 2010). A study conducted by Accenture in 2009 further demonstrated that there is a significant need on the part of retail organisations in the United States of America to attract and retain suitably qualified talent in the long term (Accenture, 2009).

Jain (2010) corroborates this claim and states that it is essential that retail organisations have programmes in place to identify and attract high potential talent in the industry and also to prevent its loss. However, the retail industry globally has been shown to be one of the least attractive industries for university graduates (Accenture, 2009). This scarcity of skills poses a challenge for organisations, particularly in view of the fact that, according to the 2009 Accenture study, the demand for qualified graduates showed an upward trend. Accenture also found that only 12% of the graduates surveyed globally chose retail as a top career option, while 25% of the retail workers in the survey indicated that they planned to leave their jobs within a year. These trends further support earlier research conducted by Gush (1996) which indicated that the number of graduates entering and remaining in the retail industry in the United Kingdom was lower than the demand.

Similar to the studies by Accenture, Gush (1996) claims that graduate employees look for short-term relationships with employers, while employers are looking for longer-term relationships with their employees. This is further perpetuated by the fact that the retail industry is traditionally known to employ non-graduate employees as a result of the practical nature of the work in the industry (Gush, 1996). Consequently, a mismatch has been noted between graduate expectations and the requirements for successful performance in retail jobs. Gush also found that 31% of graduates believed they did not need a graduate qualification in order to do their jobs in retail. Furthermore, Gush found that graduates were lacking in terms of certain skills such as dealing with ambiguity, decision-making and dealing effectively with interpersonal politics. Other skills unfamiliar to graduates included managing staff, handling change, being adaptable, possessing transferable skills and demonstrating business acumen (Gush, 1996; Sánchez-Manjavacas, Saorín-Iborra, & Willoughby, 2014).

In the context of this study, Gush's findings led the researcher to ask questions about the employability of graduates. In South Africa there is a lack of research that specifically reflects the trends in respect of the employability of graduates in the retail industry. It is, thus, hoped that research in this area will provide valuable insights to enable employers to align their talent strategies in such a way as to meet the supply and demand challenges for scarce skills. In addition, it is anticipated that research into the relationship between graduate skills and attributes, self-perceived employability and retention factors will provide valuable insights to assist retail organisations in implementing relevant talent strategies and development programmes for graduates.

It is in the best interests of organisations to retain talented employees in order to mitigate the risks associated with skills shortages, as well as to avoid the costs associated with replacing employees with critical and scarce skills (Netswera, Rankhumise, & Mavundla, 2005). Coetzee and Esterhuizen (2010) define employability as a set of proactive behaviours and abilities that assist graduates in obtaining access to employment and maintaining employment by successfully adapting and performing optimally. As already indicated above, it is becoming increasingly important for institutions of higher education to demonstrate that the skills and attributes of their graduates contribute positively to their employability on completion of their studies (Lees, 2002; Spencer, Riddle, & Knewstubb, 2012). Lees (2002) describes employability as the individual's ability to effectively present and use what he/she knows in a particular work context.

Although presented simplistically in this study, the literature review indicates that employability is a complex and multifaceted concept which cannot be limited to key skills (Barnard & Nel, 2009; Pool & Sewell, 2007; Hillage & Pollard, 1998; Jain, 2010; Potgieter, 2012). An individual's employability assets involve the interaction between what the individual knows, what they can do and how they go about doing it (Hillage & Pollard, 1998). In addition, the research literature highlights the importance of the transferability of skills between varying work contexts (Pool & Sewell, 2007; Hillage & Pollard, 1998; Jain, 2010; Ntsizwane, Swanepoel, & Barkhuizen, 2013). Hillage and Pollard (1998) further state that it is essential that individuals possess certain personal resources or assets such as self-awareness and the ability to present themselves in order to actualise their employability. Once again, the role of higher education and the quality of graduates produced by tertiary institutions are being called into question (Sánchez-Manjavacas, 2014; Spies & Van Niekerk, 2007).

Research conducted by the Central University of Technology (CUT) in South Africa indicates that there is a clear need for students to be assisted to improve their employability by means of a series of employment skills training interventions (Spies & Van Niekerk, 2007). However, the study does not indicate the proportion of students who attended these training sessions and who were able to obtain employment after completing their studies. Hillage and Pollard (1998) indicate that more research needs to be conducted to investigate the transitional processes that graduates go through as they enter the formal job market.

An understanding of the various transitions through which graduates go may provide further insights into their employability. The literature review seems to indicate that students with the requisite generic graduate skills and attributes demonstrate higher levels of employability (Jain, 2010). For the purposes of this study, employability is defined as the extent to which individuals evaluate their own skills and abilities in relation to the way in which they perceive that an organisation may respond to them "as individuals with varying characteristics and attributes" (Rothwell & Arnold, 2007, p. 20).

There is increasing concern that there is a gap between what academic institutions teach and the type of attributes and skills which employers look for in graduates (De La Harpe, Radloff, & Wyber, 2000; Spencer et al., 2012). This has led to a worldwide call for institutions of higher learning to demonstrate that the quality and outcomes of their learning programmes actually meet the skills demands of employers (Beyer, Wilkinson, & Friedrich-Nel, 2010; Coetzee, 2012). The literature shows that academics in general define graduate attributes and skills in different ways. This then poses a challenge as regards achieving consensus in the definitions and has led to a number of terms used to define the same attribute (Beyer et al., 2010). Institutions of higher education in Australia define generic graduate attributes as those "skills, knowledge and abilities" which are obtained by graduates during their undergraduate studies (Barrie, 2006, p. 217).

It is imperative that these "skills, knowledge and abilities" should transcend the academic content and that they should be applicable in various contexts (Spencer et al., 2012). South African institutions of higher education have also been influenced by international trends in this regard. Beyer et al. (2010) use the terms "graduate attributes" and "graduate skills" interchangeably. However, graduate skills and attributes should direct the development of relevant curricula (Barrie, 2006). For the purposes of this study graduate skills and attributes are defined as those generic, transferable skills and attributes which contribute to the employability and work readiness of an individual (Coetzee, 2012). As indicated, these generic graduate skills vary depending on the institution of higher learning, area of study and other factors and include critical and independent thinking, teamwork, lifelong learning, sustainability, communication, problem solving, inter-cultural competence, planning and organising, self-management, initiative and entrepreneurial skills (Barnard & Nel, 2009; Coetzee, 2012; 2014; Vu, Rigby, Wood, & Daly, 2011).

The link between employability and the ability of individuals to maintain employment thus starts to emerge, leading to a discussion on employee retention. Browell (2003) defines employee retention as the process of preventing the organisation from losing employees who occupy critical positions that are important for organisational success. Employee retention is a multifaceted process which requires a well-considered approach, because a one-size-fits-all approach is not deemed to be effective (Allen & Bryant, 2012; McKeown, 2002). The research literature shows that, given the characteristics of the workplace of the 21st century, the retention of employees is becoming more challenging (Coetzee & Roythorne-Jacobs, 2012; McKeown, 2002; Mohlala, Goldman, & Goosen, 2012; Van Dyk & Coetzee, 2012). The high levels of employee mobility experienced by organisations is exerting pressure on them to be more strategic in the way in which they manage top talent (Van Dyk & Coetzee, 2012). Employee turnover has cascading effects on both organisational performance and productivity as a result of lost work, as well as the higher demands placed on the remaining employees (Takawira, Coetzee, & Schreuder, 2014; Van Dyk & Coetzee, 2012).

Van Dyk and Coetzee (2012) refer to the seven retention factors which were identified by Döckel (2003). It is in the interests of organisations to consider these seven retention factors if they are to successfully retain employees with technical skills. These factors were deemed to be relevant for the purposes of this study and include the following: compensation, job characteristics, opportunities for training and development, supervisor support, career opportunities, work-life balance and organisational commitment (Döckel, 2003). The literature reveals that job satisfaction and organisational commitment have been found to have an influence on employee retention (Döckel, 2003; Lumley, Coetzee, Tladinyane, & Ferreira, 2011). Döckel's concepts are relevant because they represent the attitudes of employees towards their work and the organisational characteristics which could have a bearing on employee retention (Lumley et al., 2011). Coetzee and Roythorne-Jacobs (2012) posit that, as a result of the changing world of work and the emergence of the knowledge economy, employee mobility is much higher than it was previously. This employee mobility is, in turn, leading to a shorter tenure of workers in organisations. Döckel (2003) views retention practices as strategic human resource processes for fostering employee commitment in order to gain a competitive advantage.

This study focuses on the relationship between the graduate skills and attributes, self-perceived employability and satisfaction with retention factors of graduates in a retail organisation. More specifically, the study aimed at assessing whether the graduate skills and attributes of individuals significantly moderate the relationship between their self-perceived employability and their satisfaction with retention factors. It is hoped that the findings of the study may contribute to the understanding of the factors that may lead to the better retention of talented employees in retail. In other words, what does a high level of graduateness mean in terms of a graduate's employability and how do the graduate skills and attributes of individuals affect the relationship between their self-perceived employability and their satisfaction with certain retention factors? Hypothetically, finding an answer to this question may assist human resources practitioners and industrial and organisational psychologists in retail to proactively develop better retention mechanisms for talented graduates with these improved retention measures being based on the levels of graduateness and self-perceived employability of the graduates in question.

It is also important to assess how biographical variables such as gender, race and level of qualifications influence this relationship. It is possible that biographical variables may confound the relationship between the variables and influence the internal validity of the study. Accordingly, the study will use these biographical variables as control variables.

The following research hypotheses stemmed from the literature review as discussed in the background to the study.

H1: There is a positive and significant relationship between individuals' gender, race and level of qualification, graduate skills and attributes, self-perceived employability and their satisfaction with the factors influencing their retention.

H2: Individuals' graduate skills and attributes and self-perceived employability significantly and positively predict their satisfaction with the factors influencing their retention.

H3: Individuals' graduate skills and attributes significantly moderate the relationship between their self-perceived employability and their satisfaction with the factors influencing their retention.

H4: Individuals of different genders and level of qualifications differ significantly regarding their graduate skills and attributes, self-perceived employability and satisfaction with retention factors.

#### 1.2. PROBLEM STATEMENT

The literature review shows that the significant levels of labour turnover and apparent low retention of talent are an issue of grave concern in the retail industry. This state of affairs, together with the global scarcity of critical skills and a shrinking labour pool, is being exacerbated by the recent high mobility of talent in the knowledge economy (Coetzee & Roythorne-Jacobs, 2012; Takawira et al., 2014). The misalignment between the increased need for qualified graduates in the retail sector and the apparent lack of interest on the part of graduates to join the industry further compounds the problem. In addition, the apparent mismatch between the skills and attributes acquired by graduates at tertiary institutions and the needs of employers is also creating a problem (Accenture, 2009; Coetzee et al., 2012; Coetzee & Roythorne-Jacobs, 2012; Gush, 1996; Mohlala et al., 2012; Netswera, Rankhumise, & Mavundla, 2005; Proudfoot Consulting, 2008). The literature review revealed that there is a link between a graduate's self-perceived employability and their graduate skills and attributes.

The literature review also showed that the retention of graduates is influenced by their satisfaction with a set of specific retention factors. However, it is not clear whether the relationship between the self-perceived employability of individuals and their satisfaction with certain retention factors is influenced by their graduate skills and attributes. An understanding of this relationship may contribute to the field of industrial and organisational psychology, especially concerning the enhancement of the retention practices of employable graduates. It would appear that there is a paucity of research into understanding the relationship between graduate skills and attributes, self-perceived employability and graduate satisfaction with retention factors in the retail sector.

In addition, there is also a further lack of research into understanding the way in which biographical variables such as gender, race and levels of qualifications relate to the relationships between the three aforementioned variables.

The general research question of this study is as follows:

What is the nature of the relationship between the graduate skills and attributes of individuals, their self-perceived employability and their satisfaction with the factors influencing their retention, and do graduate skills and attributes moderate the relationship between self-perceived employability and satisfaction with retention factors?

# 1.2.1. Specific research questions: literature review

- What is the theoretical relationship between graduate skills and attributes, self-perceived employability and retention factors?
- How are graduate skills and attributes conceptualised in the literature?
- How is employability conceptualised in literature?
- How is employee retention conceptualised in the literature?
- How are retention factors conceptualised in the literature?
- What are the implications of the theoretical relationships of the variables in relation to retention practices?

# 1.2.2. Specific research questions: empirical study

- What is the nature and direction of the relationship between gender, race, level of
  qualifications, graduate skills and attributes, self-perceived employability and satisfaction
  with retention factors in a sample of graduate trainees at a retail organisation (H1)?
- What is the nature of the relationship between the independent variable (self-perceived employability) and the dependent variable (retention factors satisfaction) when moderated by graduate skills and attributes (moderating variable) (H2 and H3)?
- Are there significant differences in the graduate skills and attributes, self-perceived employability and retention factors of males and females and of individuals with matric/diploma and a degree (H4)?
- What are the implications of the empirical relationships of the variables for retention practices and what recommendations may be made for the field of industrial and organisational psychology and for future research?

#### 1.3. AIMS OF THE RESEARCH STUDY

The general aims of the research study are formulated in conjunction with the stated hypotheses and research questions.

## 1.3.1. General aim of the study

The general aim of the study is to assess the relationship between the graduate skills and attributes of individuals, their self-perceived employability and their satisfaction with retention factors and whether graduate skills and attributes moderate the relationship between self-perceived employability and satisfaction with retention factors.

#### 1.3.2. Specific literature aims

**Research aim 1:** To conceptualise graduate skills and attributes, self-perceived employability and retention factors from a theoretical perspective and to conceptualise the theoretical relationships between the variables.

**Research aim 2:** To explore how race, gender and qualification level influence the graduate skills and attributes of individuals, their self-perceived employability and retention factors.

**Research aim 3:** To critically evaluate the implications of the theoretical relationships of the variables in relation to retention practices.

# 1.3.3. Specific empirical aims

**Research aim 1:** To investigate the nature and direction of the relationship between the gender, race and level of qualifications, graduate skills and attributes, employability and satisfaction with retention factors in a sample of graduate trainees at a retail organisation (H1).

**Research aim 2:** To explore whether graduate skills and attributes and self-perceived employability significantly and positively predict satisfaction with the factors influencing retention (H2).

**Research aim 3:** To explore the nature of the relationship between the independent variable (self-perceived employability) and the dependent variable (retention factors satisfaction) when moderated by graduate skills and attributes (moderating variable) (H3).

**Research aim 4:** To assess whether individuals of different gender and level of qualifications differ significantly regarding their graduate skills and attributes, self-perceived employability and satisfaction with retention factors (H4).

**Research aim 5:** To identify the implications of the empirical relationships of the variables for retention practices and formulate appropriate recommendations for the field of industrial and organisational psychology and future research.

#### 1.4. THE PARADIGM PERSPECTIVE

Paradigms provide a framework, a set of knowledge or a frame of reference within which a researcher may act and think (Terre Blanche, Durrheim, & Painter, 2006). These interrelated systems of practice, called paradigms, consider the nature of the reality to be studied, the manner in which the researcher goes about interacting with this reality and the method adopted to study it (Terre Blanche et al., 2006). This study adopted a positivist research paradigm. The literature review included existing literature on an open systems paradigm which focuses on the various components of an open system working together towards the completion of the whole (Kutilek, Gunderson, & Conklin, 2002).

#### 1.4.1. The intellectual climate

The study will be conducted within the boundaries of the discipline of Career Psychology which is, in turn, a sub-field of Industrial and Organisational Psychology. Career psychology focuses on the study of issues related to the career development of individuals. This includes the study of employment and unemployment issues, career choice, career development, career theories, and other related topics. Another important aspect of this field involves helping clients to work through various career conflicts and facilitating effective career planning processes (Bergh & Theron, 2006; Coetzee & Roythorne-Jacobs, 2012).

Thematically, the literature review on graduate skills and attributes, self-perceived employability and retention factors will be presented within the context of the humanistic and open systems paradigm. The humanistic paradigm is based on the subjective and unique experiences of individuals and which happen through self-introspection (Bergh & Theron, 2006). This humanistic perspective views human nature in a positive light, while each person is believed to have their own interpretation and meaning of reality.

Every person has their own context and exists in relation to the world and society and also their own psychological aspects (Bergh & Theron, 2006). In view of the fact that the survey questionnaires used to collect data for this study are based on self-perceptions, the humanistic paradigm aligns well with the study.

Patton and McMahon (2006) posit that systems theory provides an overarching theoretical framework to aid in the observation of people's behaviours. People's behaviours are not only affected by intrapersonal influences (influences within themselves) and there is an acknowledgment that people form part of an open system which consists of many components, both environmental and social. Thus, there is constant interaction between the elements of such an open system with the individuals concerned (Patton & McMahon, 2006). Within the context of this study, systems theory facilitates an understanding of the complexity of the relationships between the independent variable (self-perceived employability), moderating variables (graduate skills and attributes) and dependent variables (satisfaction with retention factors).

The empirical study of the three variables is presented from the positivist research paradigm. The positivist paradigm emerged in the 19th century. According to this paradigm the truth about reality may be revealed by scientific knowledge only (Scheurich, 2014). In the context of this study this implies that the study is typically quantitative in nature, objective and with less risk of being compromised by researcher bias. Valid and reliable questionnaires were used to collect the requisite data objectively. The study is a cross-sectional field survey which aimed to describe general observations in the population at a certain point in time (Coldwell & Herbst, 2004).

# 1.4.2. Conceptual descriptions of variables

**Graduate skills and attributes**: For the purposes of this study graduate skills and attributes are defined as those generic, transferable skills and attributes which contribute to the employability and work readiness of an individual (Coetzee, 2012; 2014). Examples of these skills and attributes include problem-solving, decision-making, analytical thinking and enterprising skills (Coetzee, 2012, 2014).

**Self-perceived employability** may be defined as the extent to which individuals may obtain employment and retain such employment by evaluating their own skills and abilities in relation to the way in which they perceive an organisation may respond to them as individuals with varying characteristics and attributes (Potgieter & Coetzee, 2013; Rothwell & Arnold, 2007, p. 20).

**Employee retention** may be defined as the process of preventing an organisation from losing talented and high performing employees who occupy critical positions which are important for organisational success (Browell, 2003; Kodikal, Pakkeerappa, & Ahmed, 2012; Olckers & Du Plessis, 2012).

**Retention factors** refer to those factors that induce organisational commitment based on individual satisfaction (Döckel, 2003; Döckel, Basson, & Coetzee, 2006). The retention factors relevant to this study include the following: compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life balance and commitment to the organisation (Van Dyk & Coetzee, 2012).

#### 1.4.3. Central theoretical statement

The central hypothesis of the study is as follows:

There is a positive and significant relationship between the graduate skills and attributes of individuals, their self-perceived employability and their satisfaction with retention factors. The graduate skills and attributes of individuals have a moderating effect on the relationship between their self-perceived employability and satisfaction with retention factors. Higher levels of graduate skills and attributes will result in a stronger positive relationship between the self-perceived employability of individuals and their satisfaction with retention factors.

Males and females and also individuals with a matric/diploma and degree will differ significantly regarding their graduate skills and attributes, self-perceived employability and satisfaction with retention factors.

#### 1.5. RESEARCH DESIGN

The following section discusses the research approach used in the study, the validity and reliability of the instruments used, as well as the variables, the unit of analysis and ethical considerations of the study.

#### 1.5.1. Research approach

The study used a cross-sectional, quantitative research design with a focus on descriptive, correlational and inferential statistical analyses to achieve the research objectives and to test the research hypotheses. A research design may be defined as the blue-print for a particular research study (Terre Blanche et al., 2006). This study follows the positivist tradition and, thus, it was quantitative in nature. Valid and reliable questionnaires were used to collect the requisite data objectively. The study was a cross-sectional field survey as it did not seek to prove cause and effect but, instead, the focus was on describing what was observed in the population in question (Coldwell & Herbst, 2004), and on exploring the magnitude of the nature and direction of relationships between the variables. Descriptive statistics involves organising data into a comprehensible format in line with the number of variables under study (Mouton, 1996). Multivariate statistical analyses refer to various advanced statistical techniques which are used to study the relationships between several variables simultaneously (Cohen, Cohen, West, & Aiken, 2003). These statistical methods were used to analyse the data in this study.

The correlation coefficient was used to assess the strength of the relationship between two variables, but without necessarily implying cause and effect (Terre Blanche et al., 2006). Inferential analyses allowed inferences about the population in question to be made on the basis of the observations made in the sampling frame. This is possible if a representative sample is used for a study (Terre Blanche et al., 2006).

#### 1.5.2. Validity and reliability

Validity refers to the extent to which an instrument measures what it was originally designed to measure (Terre Blanche et al., 2006). Internal validity occurs when there is congruence between the findings of a study and its research design such that it is not possible to explain the conclusions reached by means of alternative explanations (Terre Blanche et al., 2006).

External validity refers to the extent to which the results of a study may be generalised beyond the parameters of the original research design (Terre Blanche et al., 2006). In this study, clarity in terms of the research questions and research aims, coupled with the use of validated instruments and models, ensured the internal validity of the study.

In order to further ensure the internal validity of the study, a large as possible a sample was selected in order to offset the effects of extraneous (confounding) variables. The questionnaires included standard instructions and information for all the participants while the statistical procedures controlled for biographical variables (gender, race and level of qualifications) by ascertaining whether these biographical variables related significantly to the variables of concern in the study. The external validity of the study was ensured through the use of a representative sample from which generalisations about the population could be made.

Reliability refers to the extent to which an instrument produces consistent results on every occasion it is used (Terre Blanche et al., 2006). Reliability indicators were discussed for each measuring instrument used in the study. The internal consistency reliability of the measuring instruments was tested. Although a Cronbach's alpha of .70 was preferred, within the social sciences a Cronbach's alpha of .60 is regarded as an acceptable level of internal consistency for broad research purposes (Hair, Black, Babin, & Anderson, 2010).

#### 1.5.3. Variables

A variable is "defined as a concept that can take on two or more values" (Terre Blanche et al., 2006, p. 42). In a study, the independent variable is manipulated to observe if it has an effect on the dependent variable. The dependent variable is the result or outcome of another variable. For the purposes of this study (empirical research aims 1 and 2, H1 and H2), the independent variables were graduate skills and attributes and self-perceived employability while the dependent variable was the satisfaction with retention factors. The study focused on establishing whether there was a significant statistical relationship between these variables. In the empirical research aim 3 (H3), the self-perceived employability of individuals constituted the independent variable and their satisfaction with retention factors the dependent variable. The moderating variable was graduate skills and attributes. Terre Blanche et al. (2006) define a moderating variable as a variable which affects the strength of the relationship between two other variables.

The biographical variables were treated as person-centred control variables which influenced the employability attributes, career adaptability and satisfaction with retention factors of individuals. In the context of this study (empirical research aim 4, H4), the biographical variables (gender, race and level of qualifications) were regarded as the independent (predictor) variables while graduate skills and attributes, self-perceived employability and satisfaction with retention factors were the dependent (criterion) variables.

# 1.5.4. Unit of analysis

There are four types of units of analysis in social science research, namely, "individual, groups, organisations and social artefacts" (Terre Blanche et al., 2006, p. 41). In the context of this study the unit of analysis comprised individuals within a group of graduates in a retail organisation. The sub group of analysis in terms of the associations between the variables and person-centred characteristics included gender, race and qualification levels. The sample in the study comprised a predominantly homogeneous group in terms of age (17–29 years = 96%) and race (black participants = 93%). The researcher was therefore interested in exploring differences between males and females and between the individuals' level of qualifications only.

#### 1.5.5. Ethical considerations

Ethics in research provides researchers with a moral guideline stipulating the standards and norms of acceptable behaviour (Coldwell & Herbst, 2004. The aim of ethics is to protect the rights and indicate the obligations of all the research participants namely, the researcher, the end users of the research results and the participants (Coldwell & Herbst, 2004).

The study took into account the ethical considerations as stipulated by the Health Professions Council of South Africa (HPCSA). The basic ethical issues to which the study adhered included honesty, informed consent, confidentiality, voluntary participation, respect for participants, fairness and validity (Terre Blanche et al., 2006). Ethical clearance for the research was obtained from the University of South Africa, while permission to conduct the study was obtained from the organisation in question.

According to Resnik (2011), ethics in research in general seek to provide a uniform code of conduct for professionals in specific fields of study. The ethical norms in research promote the production of knowledge and truth and the avoidance of the falsification of data. General ethical principles include honesty, objectivity, integrity, carefulness, openness, confidentiality, social responsibility, non-discrimination and the protection of human rights.

#### 1.6. RESEARCH METHOD

The research method used in this study included a literature review which was conducted in order to conceptualise the relevant concepts and an empirical study which was conducted in order to operationalise the variables included in the study.

#### 1.6.1. Phase 1: Literature review

Chapter 2 comprises a review of the relevant literature on the core constructs used in the study in order to realise the following research aims:

- Conceptualise graduate skills and attributes (Coetzee, 2014), self-perceived employability (Rothwell & Arnold, 2007) and retention factors (Döckel, 2003; Döckel et al., 2006) from a theoretical perspective.
- Conceptualise the theoretical relationships between graduate skills and attributes, selfperceived employability and retention factors.
- Explore the way in which the variables of age, gender, race and level of qualifications influence the graduate skills and attributes of individuals, their self-perceived employability and their satisfaction with the factors influencing their retention.
- Critically evaluate the implications of the relationships between the variables in relation to retention practices.

#### 1.6.2. Phase 2: Empirical study

The empirical study is presented in the form of a research report contained in chapter 3. The research report outlined the core focus of the study, the background to the study, trends emerging from relevant literature, the potential value add of the study, the research design (research approach and research method), the research results, a discussion of the research results, the conclusions of the study, the limitations of the study and recommendations for both practice and future research. Chapter 4 integrates the research study and discusses the conclusions, limitations and recommendations in more detail than the discussion in chapter 3.

Phase two consisted of the following steps:

## 1.6.2.1. Step 1: Determination and description of the sample

The target population of the study consisted of all employees who were employed with the organisation in question via the organisation's graduate development programme. However, the sampling frame consisted of those graduates who were still in the employ of the organisation at the time of the study and who had been employed between January 2010 and January 2013. The total estimated population comprised 240 graduate alumni. The non-probability purposive sampling methodology was employed in order to optimise the researcher's accessibility to the sampling frame (Struwig & Stead, 2001). A list of all graduates for the stipulated period was requested from the Human Capital Management Department of the organisation. The researcher attempted to reach the total population in order to facilitate the statistical analysis which was to be conducted.

# 1.6.2.2. Step 2: Choosing and motivating the psychometric battery

The study used four questionnaires to collect raw data in respect of the three variables being investigated. These four questionnaires included a questionnaire which was aimed at collecting biographical data from the participants.

#### Graduate Skills and Attributes Scale (GSAS)

The graduateness skills and attributes were measured by the Graduate Skills and Attributes Scale (GSAS) which was developed by Coetzee (2014) for the South African context. The GSAS is a self-rated, multi-factorial measure which contains 64 items and eight sub-scales and measured the self-perceived graduateness of the participants on a six-point Likert-type scale in terms of their (1) *scholarship* as measured by their problem-solving and decision making skills (8 items); enterprising skills (9 items); and analytical thinking skills (4 items); (2) *global/moral citizenship behaviour* as measured by their interactive skills (16 items); skills in presenting and applying information (5 items); and ethical and responsible behaviour (5 items); and (3) *life-long learning attributes* as measured by their continuous learning orientation (7 items) and goal-directed behaviour (10 items). Table 1.1 presents examples of typical items from the GSAS questionnaire as they related to a specific sub-scale.

Table 1.1.

Examples of Typical Items from the Graduate Skills and Attributes Scale (GSAS)

GSAS Sub-scale	Example item from the GSAS questionnaire	
Problem solving & decision making skills	I make quick but clear decisions that spur others on toward action	
Enterprising skills	I find it easy to identify business opportunities for myself, my	
	community or organisation	
Analytical skills	I can make a rational judgment from analysing information and data	
Interactive skills	I am aware of and adept at dealing with organizational or team politics	
Presenting & applying information skills	I can structure information in a way that meets the needs of my	
	audience	
Ethical & responsible behaviour	I encourage responsible behaviour toward the community and the	
	environment	
Continuous learning orientation	I am always on the lookout for ways to improve my knowledge and	
	skills, and develop myself as a person	
Goal-directed behaviour	I follow up on goals, tasks and assignments to assure successful	
	completion.	

Research conducted by Coetzee (2014) provides evidence of both the construct and the internal consistency reliability of the GSAS. Cronbach's alpha coefficients for each of the eight subscales ranged between .79 and .96 (high).

The problem-solving and decision-making skills, analytical-thinking skills, and enterprising skills subscale items were clustered together to describe the overall scholarship attributes of the participants in the study ( $\alpha$  = .91), while the interactive skills, presenting and applying information skills, and ethical and responsible behaviour items were clustered together to describe the participants' overall global and moral citizenship attributes ( $\alpha$  = .93). Similarly, the goal-directed behaviour and continuous learning orientation items were clustered together to describe the life-long learning attributes of the participants ( $\alpha$  = .91).

## Graduate Employability Measure (GEM)

The Graduate Employability Measure (GEM) (Rothwell & Arnold, 2007) was used to measure self-perceived employability as a unitary construct. The GEM is a self-rated measure consisting of 11 items as presented in Table 1.2.

Table 1.2.

Items from the Graduate Employability Measure (GEM)

#	Question		
#	Question		
1.	Even if there was downsizing in this organisation I am confident that I would be retained		
2.	My personal networks in this organisation help me in my career		
3.	I am aware of the opportunities arising in this organisation, even if they are different to what I do now		
4.	The skills I have gained in my present job are transferable to other occupations outside this organisation		
5.	I could easily re-train to make myself more employable elsewhere		
6.	I have a good knowledge of opportunities for me outside of this organisation even if they are quite different		
	from what I do now		
7.	Among the people who do the same job as me, I am well respected in this organisation		
8.	If I needed to, I could easily get another job like mine in a similar organisation		
9.	I could easily get a similar job to mine in almost any organisation		
10.	Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly		
	sought after by employers		
11.	I could get any job, anywhere, so long as my skills and experience were reasonably relevant		

The employability measure is based on a six-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree).

A validation study by Rothwell and Arnold (2007), report a Cronbach's alpha (internal consistency reliability) of .83. This indicates that, overall, the instrument demonstrates good internal reliability.

# Retention Factor Scale (RFS)

The participants' satisfaction with retention factors was measured using the Retention Factor Scale (RFS) which was developed by Döckel (2003) for the South African organisational context. The Retention Factor Scale (RFS) measured the participants' satisfaction with the following retention factors on a 6-point Likert-type scale: compensation (13 items), job characteristics (4 items), training and development opportunities (6 items), supervisor support (6 items), career opportunities (6 items), work–life balance (4 items) and organisational commitment (3 items). Table 1.3 presents examples of items from the retention factors questionnaire as they related to a specific sub-scale.

Table 1.3.

Examples of Items from the Retention Factors Questionnaire

Retention factor sub-scale	Example item from Retention Factor Scale	
Compensation	On my present job how do I feel aboutthe information about pay issues that is provided by the Company.	
Job characteristics	My current job requires me to use a number of complex or hig level skills.	
Training and development opportunities	There are enough development opportunities for me in the company.	
Supervisor support	I feel undervalued by my supervisor.	
Career opportunities	My chances for being promoted are good.	
Work/life balance	My job affects my role as a spouse and/or parent.	
Commitment to the organisation	How would you rate your chances of still working at the company a year from now?	

A factor analysis on the RFS conducted by Döckel (2003) confirmed the construct validity of the questionnaire. In terms of the internal consistency reliability of the retention factors scale, Döckel et al. (2006) report the following Cronbach's alpha coefficients: compensation .90, job characteristics .41, training and development opportunities .83, supervisor support .90, career opportunities .76, work/life balance .87, and commitment to the organisation .89.

## 1.6.2.3. Step 3: Administration of the psychometric battery (research procedure)

The administration of the questionnaire was conducted electronically as a result of the geographic spread of the participant group. The ethical requirements as set out in the research institution's Research Ethics Policy, as well as the codes and guidelines of the Health Professions Council of South Africa (HPCSA), were followed in the process of conducting this research study.

A letter of permission to conduct the study was obtained from the office of the human capital executive of the organisation concerned. In addition, the researcher obtained the informed consent of all the participants while the data were reported in a manner that ensured the confidentiality of each participant (Terre Blanche et al., 2006). The participants were also not harmed in any way during the study.

#### 1.6.2.4. Step 4: Scoring of the psychometric battery

The survey responses were scored in accordance with the relevant test developer guidelines and the participants' responses were captured on a Microsoft Excel spread sheet.

# 1.6.2.5. Step 5: Formulation of research hypotheses and the statistical analysis

Table 1.4 presents an overview of the research aims, research hypotheses and statistical procedures that were used in the study.

Table 1.4.

An Overview of the Research Aims, Hypotheses and Statistical Procedures Relevant to the Study.

Empirical research aim	Research hypothesis	Statistical procedure
Research aim 1: To investigate the nature and direction of the relationship between the gender, race, level of qualifications, graduate skills and attributes, employability and satisfaction with retention factors in a sample of graduate trainees in a retail organisation	H1: There is a positive and significant relationship between the gender, race, level of qualifications, graduate skills and attributes, their self-perceived employability of individuals and their satisfaction with the factors influencing their retention.	Correlational statistics (Pearson product-moment correlations) was used to determine the direction and strength of the relationship between constructs  The absolute values of the Pearson product moment correlation coefficient ( $r$ ) provide an indication of the practical effect size (Cohen, 1988; Cohen et al., 2003).  Small effect: $r \le .20$ Medium effect: $r \ge .30 \le .49$ Large effect: $r \ge .50$ The significance levels of $p \le .05$ and $r \ge .30$ were chosen as the cut-off point for
Research aim 2: To explore whether graduate skills and attributes and self-perceived employability significantly and positively predict their satisfaction with the factors influencing their retention	H2: The graduate skills and attributes of individuals and their self-perceived employability significantly and positively predict their satisfaction with the factors influencing their retention	rejecting the null hypotheses.  Stepwise regression analysis was used to determine which independent variable was the best predictor of the dependent variable.
Research aim 3: To explore the nature of the relationship between the independent variable (self-perceived employability) and the dependent variable (retention factors satisfaction) when moderated by graduate skills and attributes (moderating variable)	H3: The graduate skills and attributes of individuals significantly moderate the relationship between their self-perceived employability and their satisfaction with the factors influencing their retention.	Hierarchical moderated regressions was used to determine the interaction effect between employability and graduate skills and attributes in predicting satisfaction with retention factors  Due to the small sample size ( $N = 100$ the significance level was set at $p = .10$ for interpreting the results of the moderater hierarchical analysis.
Research aim 4 To assess whether individuals from different gender and level of qualifications differ significantly regarding their graduate skills and attributes, self-perceived employability and satisfaction with retention factors.  Research aim 5:	H4: Individuals of different genders and level of qualifications differ significantly regarding their graduate skills and attributes, self-perceived employability and satisfaction with retention factors.	Tests for significant mean differences were conducted

#### Research aim 5:

To identify the implications of the empirical relationships of the variables for retention practices and formulate appropriate recommendations for the field of industrial and organisational psychology and future research.

Notes: H: Research hypotheses, IV: Independent variable. DV: Dependent variable.

Level of significance for correlations: The levels of statistical significance of the stepwise regression used in this study were as follows:

- F(p) < .001
- F(p) < .01
- F(p) < .05 as the cut-off for rejecting the null hypotheses

The study placed specific emphasis is placed on the relationship between the strength of a moderator and its statistical significance and the magnitude of the increment in  $R^2$  as associated with the moderator. Due to the small sample size (N = 100) the significance level was set at p =.10 for interpreting the results of the moderated hierarchical analysis.

Tests for differences: The statistical analysis was significant and valid only if the probability associated with the analysis was less than  $p \le .05$ .

Prior to conducting the statistical analyses, the assumptions underlying the statistical procedures were assessed. The following assumptions were tested:

#### Normal distribution of data and variables

The normal distribution plays an important role in social sciences research and describes a set of probability distributions which are generally symmetric and follow a bell-shaped curve (Ahsanullah, Kibria, & Shakil, 2014). Normal distributions possess general characteristics such as a mean, standard deviation, median, coefficient of skeweness and variance. Normally distributed datasets possess an equal mean, mode and median while other values are symmetrically distributed around the mean (Ahsanullah et al., 2014; Terrel, 2012). The normal distribution of data allows for the use of a discrete set of parametric statistical procedures such as the *t*-test and the analysis of variance (ANOVA). However, it is not necessary for the data to be perfectly normally distributed each time data is analysed, as inferential statistics may be used to manipulate the data (Terrel, 2012). The ANOVA takes certain assumptions into account, including the normal distribution of data around the dependent variable, the independence of the observations, and the homogeneity of variance. In other words, the ANOVA assumes that the variances of the sub-groups are equal (Stevens, 2009; Terrel, 2012).

The nature of variables: continuous and interval

A continuous variable has the ability to take on any value on a scale between two points (Cohen, Manion, & Morrison, 2007). In order to test the relationships between the key variables under investigation, it is important to consider the nature of variables. According to Cohen et al. (2007), the Pearson product moment correlation deals specifically with interval and ratio data. Interval and ratio data may take on any value within a given range, they are continuous and characteristically use more powerful statistics than nominal and ordinal data. It is important to differentiate between these scales of data to ensure that the appropriate statistical analysis is used, namely, one that is aligned to and correct for the type of data collected (Cohen et al. 2007). In other words, it would be incorrect to apply statistics which may be used at a higher scale of data only to lower scale data.

## 1.6.2.6. Step 6: Reporting and interpreting the results

The discussion and reporting of the research results were in line with the aims of the study, the research hypotheses and the findings from the literature review. Deviant results were noted and recommendations for further research suggested.

# 1.6.2.7. Step 7: Formulation of research conclusions, limitations of the study and recommendations

The research study aimed to ascertain whether there is a positive relationship between graduate skills and attributes, self-perceived employability and retention factors. The study also aimed to explore whether personal characteristics influence graduate skills and attributes, self-perceived employability and retention factors and whether males and females and individuals with different levels of qualifications also differ in terms of these variables.

# Conclusions

The study aimed to provide findings with regards to the nature of the relationship between the graduate skills and attributes of individuals, their self-perceived employability and their satisfaction with retention factors. The study also aimed to assess whether the graduate skills and attributes of individuals significantly moderate the relationship between their self-perceived employability and satisfaction with retention factors.

Finally, the study aimed to assess whether individuals of different gender and qualification levels differ significantly regarding their graduateness, employability and satisfaction with retention factors.

# Limitations

The following limitations of the study were anticipated:

- In view of the fast-paced nature of the retail environment, not all the people in the target population may have been willing to participate in the study and this could have resulted in a lower response rate than may otherwise have been the case.
- Some graduate employees may have left the organisation and this could also have led to a lower response rate.
- The sample size may have been too small to allow generalisations to be made to both a
  wider population and to industries other than the retail industry.

#### Recommendations

The study anticipated making the following recommendations:

- The nature of the relationship between student graduateness, employability and satisfaction with retention factors can be useful in the attraction, development and retention of talent in retail organisations.
- The moderating effect of graduate skills and attributes on employability and employee turnover may be used to determine meaningful talent retention strategies by human resources practitioners.
- Differences in gender and qualification level may have an effect on the level of student graduateness, employability and satisfaction with retention factors.

# 1.7. CHAPTER LAYOUT

The chapters are presented as follows:

**Chapter 2:** Literature review: Graduate skills and attributes, self-perceived employability and retention factors

Chapter 3: Research report

Chapter 4: Conclusions, limitations and recommendations

The study results are reported in a research report format. The report contains an introduction which provides the key focus of the study; the background to the study; trends which emerged from the research review; the research objectives and the potential value-add of the study.

The research design is then discussed in the research report section. This discussion includes the research approach followed in the study and the research method employed, while the sample used is described as are the measuring instruments and procedure which were used to collect the requisite data. The research hypotheses are formulated. The statistical procedures which were conducted are explained and the statistical results of the study reported in terms of descriptive, correlational and inferential statistics. The research results are then summarised and integrated. Finally, the chapter concludes with recommendations for retention practices and for future research in the field of industrial and organisational psychology. The limitations of the study are also explained.

# 1.8. CHAPTER SUMMARY

This chapter provided an overview of how the study was conducted. This overview included a discussion of all the necessary research methodology requirements. The study investigated the relationship between the graduate skills and attributes of graduates in a retail organisation and their employability and satisfaction with retention factors. Existing research was discussed in order to provide the background to the study and the motivation behind the study. The problem statement was formulated. The potential value-add of the study to the field of industrial and organisational psychology was discussed in section two of the study. This section also included the specific research questions which pertained to the study. The general and specific aims of the study were also discussed as was the paradigm perspective and the intellectual climate.

The constructs to be used in the study were defined. The section of the research design used in the study provided details on the research approach, validity, reliability, variables, unit of analysis and ethical considerations. The research method was discussed in section five and provided a description of the sample used, the psychometric instruments utilised as well as the data capturing and data analysis processes which were conducted. The final section contained an overview of potential conclusions to the study as well as the limitations and recommendations of the study.

# CHAPTER 2: LITERATURE REVIEW ON GRADUATE SKILLS AND ATTRIBUTES, EMPLOYABILITY AND RETENTION FACTORS

Chapter 2 discusses the core constructs in the study and their conceptualisation in the literature. The constructs are discussed in terms of the underlying theory as well as the influence of extraneous variables on these constructs.

#### 2.1. GRADUATE SKILLS AND ATTRIBUTES

This section discusses the concept of graduate skills and attributes as well as the Graduate Skills and Attributes framework which was developed by Coetzee (2012). The variables which influence student graduateness are also discussed.

# 2.1.1. Conceptualisation

The higher education system is increasingly being challenged to instil more than just discipline-based knowledge in students (Bridgstock, 2009; Coetzee, Botha, Eccles, Holtzhausen, & Nienaber, 2012; McNeil, Scicluna, Boyle, Grimm, Gibson, & Jones, 2012; Spencer et al., 2012). There is a growing need to produce graduates who are equipped with attributes and skills that will enable their successful interaction into the world, the knowledge economy and the technological advancements which characterise the modern world (Bridgstock, 2009; Spencer et al., 2012). The concept of graduate skills and attributes has differing interpretations in various contexts (Steur, Jansen, & Hofman, 2012). In some instances the concept is referred to as graduateness or graduate capabilities (Coetzee, 2011; Coetzee, 2012; Coetzee, 2014; Spencer et al., 2012) while, on other occasions, these skills and attributes are referred to as generic or transferable skills (Steur et al., 2012). Graduateness is often described as an individual's basic skills, personal skills, ethics and values while, in other scenarios, it is used as an indicator of employability skills (Steur et al., 2012).

Coetzee (2011) describes graduateness as the ability of a student to demonstrate generic, transferable meta-skills and personal attributes and which also serve as an indicator of employability or work readiness. McNeil et al. (2012) refer to generic capabilities which include outcomes such as effective communication, critical analysis and teamwork.

However, they concede that these too are referred to as generic skills, transferable skills, generic attributes or graduate attributes in the literature. However, McNeil et al. (2012) maintain that their definition denotes a higher level of learning and they emphasise the cross-disciplinary nature of the concept. The development of generic capabilities is best brought about by the specific context provided within various disciplines (McNeil et al., 2012).

McNeil et al. (2012) describe three principle arguments in favour of the development of generic capabilities. The first argument is that institutions of higher learning should produce graduates who will be able to contribute positively to society. The second argument is that institutions of higher learning should further produce graduates who are employable and ready for the world of work beyond mere disciplinary competence. In other words, graduates should be able to display and apply additional skills which enable them to be effective at work soon after they have been employed. The final argument is that graduates should possess the generic skills that prepare them for both postgraduate studies and to be able to deal with rapid changes in knowledge and practice (McNeil et al. 2012). Graduates with well-developed generic capabilities are more geared towards becoming life-long learners while they also possess the capacity to deal with the demands of the 21st century world of work (Coetzee, 2012; Coetzee, 2014; Coetzee et al., 2012; McNeil et al. 2012).

The literature review revealed that the various institutions of higher education and government agencies have different focus areas when it comes to the graduate skills and attributes they aim to develop in their students (Coetzee et al., 2012; McNeil et al., 2012). For example, in 2004 the Faculty of Medicine at the University of New South Wales focused on developing the following generic skills, namely, effective communication, team work, self-direction, critical evaluation, reflective practice and ethical/social responsibility (McNeil et al., 2012). The Australian Qualifications Framework of 2011 stipulated that students should acquire the skills that enable them to analyse information critically, communicate effectively and clearly, be autonomous and responsible, find solutions to complex and unpredictable problems and deliver well-thought-through judgements (Fraser & Thomas, 2013).

La Trobe University identified eight graduate capabilities that should form the foundation of all curriculum design, namely: "writing, speaking, inquiry/research, critical thinking, creative problem-solving, teamwork, ethical awareness and information literacy" (Spencer et al., 2012, p. 217). These graduate capabilities were further mapped to each faculty and degree programme in the University to ensure discipline-specific context was maintained.

It is clear from the above examples of the lists of generic graduate skills that there is overlap in terms of what the various role-players view to be generic graduate skills/attributes/capabilities/core skills.

In light of the above discussion, it is not surprising that the literature acknowledges that there considerable debate on the conceptualisation and definition of graduate skills and attributes (graduateness) (Coetzee et al., 2012; Jones, 2013; McNeil et al., 2012; Steur et al., 2012). Steur et al. (2012) posit that the apparent lack of consistency in defining the concept has resulted in there being little theoretical foundation for the concept of graduateness. However, notwithstanding this debate, Steur et al. (2012) posit that graduateness comprises the following key elements, namely, scholarship, intellectual development, the growth of self-awareness, citizenship, life-long learning and reflective thinking.

For the purposes of this study, the concept of graduate skills and attributes is defined as those generic, transferable meta-skills and personal attributes which contribute to the employability and work readiness of an individual (Coetzee, 2012, 2014). As such, graduateness is an indicator of the quality of the learning outcomes achieved at university and the relevance of the skills acquired by students in respect of the world of work (Coetzee et al., 2012). According to Coetzee et al. (2012), student graduateness, as viewed by the University of South Africa's (UNISA) College of Economic and Management Sciences (CEMS), consists of the following skills: interactive skills, problem-solving/decision-making skills, continuous learning orientation, enterprising skills, presenting and applying information skills, goal-directed behaviour, ethical and responsible behaviour and analytical skills.

The Graduate Skills and Attribute framework developed by Coetzee (2012; 2014) as a model of student graduateness is discussed in detail in the following section.

## 2.1.2. Coetzee's Framework for Graduate Skills and Attributes

The Graduate Skills and Attribute framework developed by Coetzee (2012, 2014) differentiates between eight core skills which were identified through a extensive review of relevant literature, engagement with stakeholders in higher education and employer surveys (Coetzee, 2012, 2014; Coetzee et al., 2012).

The eight core skills are clustered into three main domains of personal and intellectual development, namely, scholarship, moral and global citizenship and life-long learning. The characteristics of this model are similar to those in the model of graduateness as proposed by Steur et al. (2012), except that Steur et al.'s model is based on the hypothesis that reflective thinking is linked to all the other domains as reflected in Coetzee's model.

# 2.1.2.1. Scholarship

According to Coetzee (2014), scholarship refers to the way in which graduate employees approach knowledge. They should not only be able to apply the knowledge that they assimilated through their studies but they should also contribute to the production of new knowledge. Steur et al. (2012) posit that professionals face challenging and complex problems which require a level of analytical inquiry and investigation before solutions may be found. In addition, post-implementation evaluation is often necessary to determine whether the solution was appropriate. Thus, scholarship does not only refer to basic research skills but to the ability of graduates to apply an understanding of new knowledge through inquiry, critique and synthesis (Coetzee, 2014).

Three sets of skills are linked to the domain of scholarship, namely, problem-solving and decision-making skills, analytical thinking skills and enterprising skills (Coetzee, 2012). *Problem-solving and decision-making* skills refer to the ability to approach problems from a much wider perspective, taking into account the context within which the problem, for example cultural, business and economic factors (Coetzee, 2012). Problem solving and decision-making also refer to the way in which innovation and creativity are employed to provide new and unique solutions to problems; as well as the ability to make clear decisions which inspire others (Coetzee, 2012).

Analytical thinking skills refer to the ability to use logic as well as reflective and critical thinking in order to provide accurate explanations about information and various forms of data, both qualitative and numerical (Coetzee 2012). In addition, analytical thinking skills refer to the ability to break information down into its component parts, draw inferences, recognise patterns and relationships between the various parts and make logical judgements and conclusions (Coetzee, 2012).

Enterprising skills refer to the way in which an individual ventures into economic undertakings by being proactive and applying critical thinking, either in creating the individual's own business or by contributing substantially as an employee (Coetzee, 2012). This, in turn, also involves the way in which an individual navigates the organisational and team dynamics, as well as how the individual demonstrates business acumen and financial awareness (Coetzee, 2012). People with enterprising skills are able to function independently and make sound business decisions, weighing various options and their impact on the wider business and social context (Coetzee, 2012).

#### 2.1.2.2. Global and moral citizenship

Global and moral citizenship refers to the way in which graduates view and engage with their communities as moral citizens and exercise their responsibility towards society (Coetzee, 2012; Steur et al., 2012). Coetzee (2012) identified three skills that relate to this domain, namely, ethical and responsible behaviour, presenting and applying information skills and interactive skills.

**Ethical and responsible behaviour** refers to individuals upholding the values and ethics of their profession, society and workplace; and taking full responsibility for their decisions, actions and outcomes (Coetzee, 2012). This also implies that an individual should be able to take the leadership role in protecting both the environment and the communities in which business is conducted (Coetzee, 2012).

**Presenting and applying information skills** enable an individual to communicate effectively, both verbally and in writing; information, facts, ideas and opinions, to an audience in a manner that is convincing (Coetzee, 2012). This also refers to the ability of an individual to engage an audience at the appropriate level in a meaningful way. The ability to learn new information quickly, remember the information when it is required, organise it and present it clearly contributes to a graduate's success in the workplace (Coetzee, 2012).

Interactive skills refer to the ability to use language and technology effectively to communicate one's viewpoints, insights and ideas to diverse people (Coetzee, 2012). This also refers to the way in which one builds social networks, influences and persuades others, resolves conflict, functions in a team context and gains/shows respect to others (Coetzee, 2012).

# 2.1.2.3. Lifelong learning

The domain of lifelong learning is concerned with the way in which graduates approach their own ongoing development in order to further understand the world and their role in the world (Coetzee, 2012). This is a process which involves the continuous acquisition of the new knowledge and skills that enable a graduate to adapt to future situations (Steur et al., 2012). Coetzee (2012) identified goal-directed behaviour and continuous learning orientation as the two sets of skills in this domain.

**Goal-directed behaviour** refers to the way in which the individual manages him/herself and plans and executes tasks and activities to achieve particular outcomes (Coetzee, 2012). **Continuous learning orientation** refers to the way in which the individual approaches their own learning and acquisition of new knowledge, skills and insights in order to adapt to changing context (Coetzee, 2012).

Figure 2.1 presents a high level summary of the theoretical framework for graduate skills and attributes as developed by Coetzee (2012; 2014).

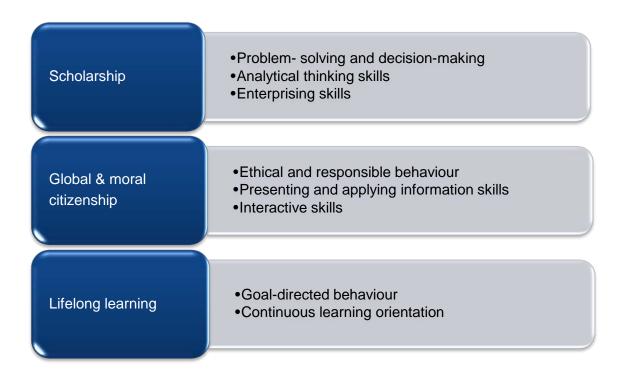


Figure 2.1 The framework for graduate skills and attributes (Coetzee, 2012)

# 2.1.3. Relationship between graduateness skills and attributes and employability

Employability relates to an individual's self-assessment of their own capacity to interact with the work place in the future and the vigour the individual displays in exploring career opportunities (Botha, Coetzee, & Coetzee, 2015; Coetzee et al., 2012; Fugate, Kinicki, & Ashforth, 2004). Generic graduate skills and attributes in discipline-specific contexts at different levels of educational complexity contribute to the enhancement of student graduateness (Coetzee, 2014). These generic skills equip students as scholars, global and moral citizens, lifelong learners and, ultimately, effective members of modern society and agents of change. These industry-relevant, generic, graduate attributes can be applied to diverse work contexts, thus contributing to organisational and individual professional success (Coetzee, 2014).

# 2.1.4. Variables influencing graduate skills and attributes

Research conducted by Coetzee (2012) revealed that female participants scored consistently and significantly higher than males on the eight graduateness variables while Indian participants scored higher than other race groups on seven of the factors (with the exception of analytical thinking).

Coloured participants scored significantly higher than the other race groups on the analytical thinking variable while the Africans participants scored significantly lower than the other race groups on all eight of the graduateness factors. It would, therefore, appear that person-centred characteristics influence the graduate skills and attributes of individuals.

#### 2.2. SELF-PERCEIVED EMPLOYABILITY

This section discusses the concept of employability and the employability model of Rothwell and Arnold (2007). The variables that influence employability are also discussed.

# 2.2.1. Conceptualisation

The new world of work is characterised by a knowledge-based economy, technology, leaner organisational structures, lower job security than in the past and globalisation (Archer & Chetty, 2013; Potgieter & Coetzee, 2013; Rothwell, Jewell, & Hardie, 2009; De Vos, De Hauw, & Van der Heijden, 2011).

The characteristics of the 21st century world of work have implications for the way in which individuals manage their careers, as well as the continued employment and development opportunities offered by employers (Clarke, 2008; Coetzee, 2012; Potgieter, 2012). According to Dacre Pool and Qualter (2013), there has been little empirical research conducted on graduate employability and there are, therefore, problems as regards the clarity of conceptualisation as well as the measurement of the concept. There is a close relationship between the concept of graduate employability and the concept of graduate skills and attributes (Dacre Pool & Qualter, 2013). The employability of workers is achieved through the acquisition of the knowledge, skills and abilities which are considered valuable by employers (De Vos et al., 2011). However, Dacre Pool and Qualter (2013) posit that graduate employability is not only about the accumulation of skills or the ability to acquire employment.

According to Rothwell et al. (2009) and Clarke (2008), the literature available on the topic of employability may be divided into three broad perspectives; namely, national workforce planning level, human resource management and the psychology of work and careers, and the ability of institutions of higher learning to produce graduates who possess the skills required by employers. At the national workforce planning level, employability relates to government policy and the skills development agenda with an industry focus. The human resource perspective relates to employability as the ability to obtain and keep employment as a result of the skills and experience acquired over time while the last broad area which is the employability of individuals in formal education relates to the question of whether or not institutions of higher learning are producing graduates who meet employer demands (Rothwell et al., 2009).

Similar to Rothwell et al. (2009), Coetzee et al. (2012) identify four perspectives to employability, namely, society, the company, the individual worker and higher education. At the societal or national level, employability is an indicator of the rate of employment (full time employment) which is, in turn, an indicator of the state of the economy. On the organisational level the organisation views employability as its ability to match employee skills with the demands of both the business context and the economic conditions within which the organisation operates. The changing nature of the employment contract and the complexities of career management in the 21st century world of work mean that organisations have to be significantly more flexible than they were in the past in order to remain competitive. At an individual level, employees are concerned about their ability to continuously match what they have to offer to organisations in exchange for a stable job and a fulfilling career.

Career development is no longer a linear, upward trend which employees leave to organisations to control but, instead, it is a more complex and unpredictable individually driven process than in the past. The higher education perspective relates to the ability of institutions to produce graduates who have attained a certain level of discipline specific knowledge and their ability to use this foundation to create new knowledge by applying critical thinking, self-reflection and continuous learning (Coetzee et al., 2012).

Fugate et al. (2004, p. 15) define employability as "a psycho-social construct that embodies individual characteristics that foster adaptive cognition, behaviour, and affect, and enhance the individual-work interface". This person-centred definition encompasses a number of constructs which work together to increase adaptability in a constantly changing economic environment (Fugate et al., 2004; Jain, 2010; Koen, Klehe, & Van Vianen, 2013). This person-centred definition is in alignment with the literature on employability that indicates the shift in the career development of individuals from being the responsibility of employers to being that of individual employees (Coetzee, 2012; Coetzee et al., 2012; Coetzee & Roythorne-Jacobs, 2012; Coetzee & Schreuder, 2011; Koen et al., 2013; Potgieter & Coetzee, 2013; Potgieter, Coetzee, & Masenge, 2013). The model as proposed by Fugate et al. (2004) consists of four interrelated dimensions, namely, adaptability, social capital, human capital and career identity (Koen et al., 2013).

The definition of employability proposed by Fugate et al. (2004) has been adopted by other writers. It includes the way in which career-related attributes and dispositions improve the suitability and appropriateness of an individual to identify and secure sustainable job opportunities (Coetzee, 2011; Koen et al., 2013; Potgieter et al., 2012). Rothwell et al. (2009) define employability as the perception of an individual that the individual will obtain employment commensurate with their level of qualifications. De Vos et al. (2011) posit that employability is a consequence of the acquisition of the knowledge, skills and abilities which are deemed valuable by employers. As a result, De Vos et al. (2011) support the notion of employability as the acquisition, sustenance and execution of job requirements through the optimal use of competencies. In this definition of employability, adaptability to both the internal and the external changing labour market conditions is regarded as a key competency (De Vos et al., 2011).

Dacre Pool and Qualter (2013) adopted the definition which states that employability is a set of achievements and personal attributes which improves the chances of graduates gaining employment and which contributes to their success in their chosen careers. De Cuyper, Mauno, Kinnunen, and Makikangas (2011) define perceived employability as how easily an employed individual believes they will be able to secure alternative employment. The term "employability" combines the two words employment and abilities (which refers to the set of skills and competencies an individual possesses in relation to the demands of the labour market) (De Cuyper et al., 2011). Schreuder and Coetzee (2011) view employability as a form of career resiliency, which reflects one's belief as driven from within about how possible it is for to obtain and maintain employment even in uncertain economic conditions.

Thus, employability reflects how satisfied an individual is that the skills, knowledge, achievements and experience they possess may facilitate the creation and acquisition of employment (Schreuder & Coetzee, 2011). Clarke (2008, p. 262) defines employability as "an individual's relative potential to obtain and retain suitable employment within the current labour market context". Clarke argues that the possession of the appropriate mix of skills alone does not guarantee employment, especially in a highly competitive labour market in which similarly skilled people are seeking the limited employment opportunities in the same pool. Employability comprises the following elements, namely, skills and attributes, attitudes and behaviours, individual characteristics and labour market trends (Clarke, 2008).

For the purposes of this study employability is defined as the extent to which an individual may obtain the new employment that the individual desires or sustain current employment (Rothwell & Arnold, 2007). However, this definition does not deny the multifaceted nature of employability as discussed in the literature review above. It is acknowledged that the concept of employability comprises several attributes including individual knowledge and skills, lifelong learning, effective job search skills and the display of career management behaviours (Rothwell & Arnold, 2007).

# 2.2.2. Rothwell and Arnold's Self-perceived Employability Model

Rothwell and Arnold (2007) developed the self-perceived employability scale. The scale takes cognisance of the notion that employability involves more than individual attributes only with labour market factors both internally and externally influencing self-perceived employability.

Employability is also more focused on an individual's current assessment of the extent to which the individual believes they will be able to navigate the employment landscape in the future (Rothwell & Arnold, 2007). The self-perceived employability measure is based on the definition proposed by Rothwell and Arnold (2007) and is made up of 11 items which are designed to test various aspects of the employability model. As depicted in Figure 2.2, the model of employability developed by Rothwell and Arnold (2007) consists of four quadrants formed along four dimensions, namely, internal labour markets, external labour markets, personal attributes and occupational attributes.

This model by Rothwell and Arnold focuses on the two dimensions of external and internal labour markets. The top left quadrant, "a", represents the individual's evaluation of the value the individual believes they offer to the organisation currently employs them. The top right quadrant, "b", indicates how the organisation values the occupation group in which an individual's role lies. Quadrants "a" and "b" reflect internal labour market conditions. The bottom left quadrant, "c", relates to the self-evaluation of the individual's own skills rather than the characteristics of their job. The bottom right quadrant, "d" reflects how the external labour market values people with experience in a particular occupation. Quadrants "c" and "d" are more external labour market compared to quadrants "a" and "b".

The employability model of Rothwell and Arnold (2007) reflects other characteristics which have been identified in the literature on employability, namely, skills and behaviours, resilience or adaptability to changing circumstances, support structures and contacts which provide information, job-seeking skills and knowledge of the labour market.

Figure 2.2 presents a diagrammatic representation of the employability model developed by Rothwell and Arnold (2007).

# Internal labour markets

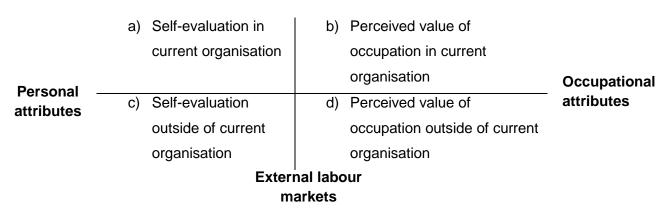


Figure 2.2 A diagrammatic representation of the Employability Model of Rothwell and Arnold (2007)

# 2.2.3. Research into Rothwell and Arnold's Employability Model

A South African-based study conducted by Tredway (2012) confirmed the construct validity and internal consistency reliability of the Graduate Employability Measure (GEM). Tredway (2012) reported a Cronbach's alpha of .70, which is considered to be a good indicator of instrument validity. Rothwell and Arnold (2007) reported a statistically significant negative relationship between age and overall employability. Their study showed that, the younger the age group, the higher the levels of self-perceived employability while, the older the age group, the level of self-perceived employability. This trend was evident in external rather than internal employability, thus implying that older people have less confidence about finding a job outside of their current organisation than younger people.

In terms of gender, Rothwell and Arnold (2007) found that women demonstrated a statistically significantly higher self-perceived employability as compared to men. This was mainly in terms of external employability. On the other hand, in terms of internal employability, the differences between males and females were not statistically significant. Another study conducted by Rothwell et al. (2009) found that there were no statistically significant differences in the self-perceived employability of postgraduate students.

A study conducted by Van der Heijden, De Lange, Demerouti, and Van der Heijde (2009) found that there was a negative relationship between gender and employability in the participants younger than forty, with men scoring higher in their employability scores than women. Rothwell and Arnold (2007) found that there were no statistically significant differences between participants who had degrees and those who did not have degrees. This trend was observed both for internal and external employability.

The study conducted by Rothwell and Arnold (2007) did not report any data on race. However, a later study conducted by Rothwell et al. (2009) showed that there were not statistically significant differences that could be attributed to ethnicity as regards the self-perceived employability of postgraduates.

# 2.3. RETENTION FACTORS

The following section discusses retention as a concept and also the theory underpinning the retention factors model proposed by Döckel (2003). The variables that impact on retention will also be discussed.

# 2.3.1. Conceptualisation

Globalisation, increased market competition, uncertain economic conditions and technological advancements require the organisations of today to attract, develop and retain the best people in order to deliver optimal results in a challenging business environment (Chabault, Hulin, & Soparnot, 2012; Coetzee & Pauw, 2013; Netswera, Rankhumise, & Mavundla, 2005). The 21st century world of work, which is characterised by knowledge workers, has made it more difficult for organisations to retain top talent than was previously the case. Employees are now more in control of their careers than before and they display higher levels of mobility which are geared towards satisfying their own individual aspirations (Coetzee & Roythorne-Jacobs, 2012; Lumley et al., 2011). It would appear that psychological attributes, as well as the individual ability to be proactive and adaptable in a changing career landscape, influence staff retention.

Retention may be referred to as the effort an organisation makes in order to keep in its employment those employees it has evaluated positively and who may, otherwise, voluntarily resign (Mengel, 2001). This definition was also adopted in the study conducted by Van Dyk et al. (2013), who further posit that organisations should aim to retain high performing, knowledgeable and skilled employees in order to maintain a competitive advantage. McKeown (2002) defines retention as the systematic effort by an organisation to keep its current top performing employees and address their diverse needs through a series of policies and practices. In some cases retention is not possible, thus resulting in staff turnover. However, it is important to distinguish between good staff turnover and bad staff turnover (De Cuyper et al., 2011; Zachariah & Roopa, 2012).

It is desirable that poor performing employees leave an organisation. However, when good performers leave, the organisation often loses its competitive advantage (McKeown, 2002; Zachariah & Roopa, 2012). Browell (2003) defines retention as keeping those employees the organisation wishes to keep and preventing them from going to a competitor for whatever reasons. This definition is also used in the study by Mohlala et al. (2012). Govaerts, Kyndt, Dochy, and Baert (2011, p. 37) define retention as "the effort by an employer to keep desirable workers in order to meet business objectives".

For the purposes of this study, the following retention factors are deemed to induce organisational commitment based on an individual's satisfaction with those factors (Döckel, 2003), namely, compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life balance and commitment to the organisation (Van Dyk & Coetzee, 2012).

# 2.3.2. The Retention Factors Model of Döckel

The retention factors model proposed by Döckel (2003) consists of the top seven factors which were identified as appropriate to the Information and Technology sector from relevant literature for the period 1995 to 2002. These factors include the following: training and development opportunities, supervisor behaviour/support or feedback, career opportunities, skill variety, quality of life or work/life policies, job autonomy, job challenge and basic salary (Döckel, 2003).

For the purposes of this study, seven of these eight factors were chosen, namely, compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life balance and commitment to the organisation.

#### 2.3.2.1. Compensation

Studies have shown that pay alone is not the sole reason for employee satisfaction (Spector, 2008). Organisations that pay high salaries and offer attractive benefits have not necessarily been associated with high retention (Rankhumise, Netswera & Mavundla, 2005). This does not diminish the importance of this aspect of retention but, instead, it highlights the importance of other related factors. Studies have shown that, if the compensation is competitive, financial rewards become less of a driving retention factor (Mohlala et al., 2012). According to Döckel (2003), compensation refers to both the monetary and the non-monetary elements of the employment packages offered by employers as per the company's remuneration philosophy, policies and practices.

#### 2.3.2.2. Job characteristics

Job characteristics refer to elements such as job autonomy, skill variety, challenging work, solving interesting problems, flexibility, and the freedom to structure own work (Döckel, 2003). Döckel found that job characteristics that lead to feelings of increased competence and meaning have a positive impact on retention. Lunenburg (2011) refers to the job enrichment model of Hackman and Oldham and which is based on the assumption that jobs may be designed in such a way so as to bring about meaning, value and enjoyment for employees. Both Döckel (2003) and Lunenburg (2011) refer to skill variety as one of the elements of job characteristics and which refers to the extent to which a job requires the use of an employee's varying skills and talents. High variety jobs have been found to be regarded as more challenging by employees as they offer a greater sense of competence as compared to low variety jobs.

According to the Hackman and Oldham model (2010), core job characteristics such as skill variety, task identity and task significance influence people's critical psychological states such as meaningfulness of work and feelings of responsibility for work outcomes (Lunenburg, 2011; Oldham & Hackman, 2010). The combination of core job characteristics and critical psychological states may lead to personal and work outcomes such as high internal work motivation and high growth satisfaction (Lunenburg, 2011; Oldham & Hackman, 2010). Job autonomy refers to the "degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in doing the work" (Lunenburg, 2011, p. 3).

However, this does not imply that workers should work haphazardly outside of organisational constraints but that they should be given a fair amount of freedom to plan their work activities.

# 2.3.2.3. Training and development

Döckel et al. (2006) posit that organisations which invest in the proper training of their staff create attachment to the organisation because employees view this gesture as the organisation's interest in improving their skills and ability. If the training provided by the organisation is perceived to provide organisation-specific skills and improve an individual's status within the company and their ability to advance economically, this may, in turn, lead to continuance commitment towards the organisation (Döckel et al., 2006). Continuance commitment can be defined as the employee's positive emotional attachment to the organisation (Pannacio, Vandenberghe, & Ayed, 2014). In other words, the employee remains with the organisation because of the perceived cost of terminating their employment. Employees may also develop a sense of obligation to stay with the organisation until they have reciprocated the cost of the training offered to them by an equivalent amount of service (Döckel et al., 2006).

# 2.3.2.4. Supervisor support

Supervisor support refers to the behaviours displayed by supervisors and which sustain innovation on the part of employees (Döckel et al., 2006). These behaviours may include recognition and reward, as well as sufficient performance feedback. Döckel et al. (2006) posit that these behaviours cultivate positive attitudes towards the organisation in employees and help prevent early intentions to leave the organisation.

#### 2.3.2.5. Career opportunities

Internal and external career opportunities have been found to foster organisational commitment and, thus, positively influence retention (Döckel et al. 2006). This is particularly important in today's organisational context in which there has been a shift from the paternalistic career management practices of the previous century (Coetzee & Roythorne-Jacobs, 2012).

In the 21st century world of work employees manage their careers in a self-sufficient way and they demonstrate higher mobility between organisations. It would appear that organisations which create internal promotion and development opportunities influence employee commitment positively (Döckel et al., 2006).

#### 2.3.2.6. Work/life balance

Work/life balance refers to the perceived satisfactory balance between one's work and personal life (Döckel et al., 2006). This, in turn, refers to the way in which how an individual balances liferoles such as being a parent, spouse, sibling and, friend and being involved in other extra-mural activities with work (Straub, 2012). Straub posits that managers and supervisors may be powerful change agents in making workplaces more family-friendly by their decision-making powers and influence. This, in turn, may result in employees having a positive outlook towards the organisation while the employer is perceived to be caring and concerned about employee welfare.

# 2.3.2.7. Organisational commitment

Organisational commitment is a multidimensional concept which is made up of both attitudinal and behavioural components (Meyer & Allen, 1991). Organisational commitment is broken up into three dimensions, namely, affective, continuance and normative commitment. Commitment to the organisation on the basis of emotional bonds and engagement is referred to as affective commitment while the perceptions employees have about what they would lose in terms of benefits and related privileges if they left their organisation constitutes continuance commitment. Normative commitment refers to the sense of indebtedness the employee feels toward the organisation (Meyer & Allen, 1991).

# 2.3.3. Research regarding retention of employees

According to Kodikal et al. (2012), demographic factors such as age, tenure, level of education, level of income, job category and gender have been found to influence employee retention. In particular, age, tenure and income level were found to have a negative relationship with turnover intention. For the purposes of this study, the following variables are of interest, namely, age, race, gender and level of qualifications.

In terms of age, Govaerts et al. (2011) found that there was a higher risk of younger employees leaving their current organisations as compared to older employees while, on the other hand, older employees tended to demonstrate a lower intention to leave their organisations as compared to their younger counterparts. Govaerts et al. (2011) did not report on any of the other variables although they did indicate that the research relating to gender is, on the whole, inconclusive as regards the influence of gender on retention. However, Kodikal et al. (2012) report that some studies found that females tended to demonstrate a higher intent to leave as compared to males while other research showed contrary findings. Govaerts et al. (2011) also reported that some research studies show no relationship between turnover and gender. In terms of level of education, Kodikal et al. (2012) indicate that the more educated employees tend to display a higher inclination to seek new job opportunities as compared to their counterparts with lower levels of education.

# 2.4. INTEGRATION: THEORETICAL RELATIONSHIP BETWEEN GRADUATE SKILLS AND ATTRIBUTES, SELF-PERCEIVED EMPLOYABILITY AND RETENTION FACTORS

The aim of the previous sections in this chapter was to review the literature relating to the three constructs which are of importance in this study. The constructs of graduate skills and attributes, self-perceived employability and retention factors were conceptualised and the theories underlying these constructs were discussed. It would appear that there are close links between graduate skills and attributes and employability at a conceptual level. This is evident in the work of Coetzee et al. (2012), Dacre Pool and Qualter (2013) and De Vos et al. (2011). In view of the fact employability stems from the acquisition of knowledge, skills and abilities (De Vos et al., 2011), it is not surprising that there is likely to be a strong positive relationship between a higher level of graduate skills and attributes and employability and satisfaction with retention factors (H1).

The ability of graduate skills and attributes, in conjunction with self-perceived employability, to significantly and positively predict satisfaction with retention factors is represented by H2 while the moderating effect of graduate skills and attributes in relation to self-perceived employability and satisfaction with retention factors is represented by (H3).

Finally, individuals of different genders and level of qualifications differ significantly regarding their graduate skills and attributes, self-perceived employability and satisfaction with retention factors (H4). These differences may have implications for the implementation of retention practices in the retail sector.

# 2.5. CRITICAL EVALUATION

The literature review provided an indication that graduate skills and attributes may be interpreted in different ways (Steur et al., 2012). Coetzee (2011) and Steur et al. (2012) agree that graduate skills and attributes serve as indicators for employability or work-readiness. This assertion is further supported by McNeil et al. (2012) who emphasise that generic graduate skills and attributes are important for the development of work-ready and employable graduates who are able to contribute to the world of work beyond discipline specific competence. Conceptually, it appears reasonable to accept that a link between graduateness and employability exists. However, it is the aim of this study to clarify and describe this link between the two concepts.

Notwithstanding these corroborated views, there is, however, no indication in the literature of the way in which graduate skills and attributes (graduateness) and employability are empirically related. There is no standard, universally agreed upon definition of the concept of graduateness. Coetzee et al. (2012) posit that graduateness is an indicator of the extent to which the skills learned in tertiary education may be applied to the world of work. It is hoped that this study will make a valuable contribution to this debate in view of the fact that the study seeks to ascertain the relationship between these two concepts empirically. In light of the various definitions of student graduateness, the study used an empirically tested model of graduate skills and attributes to conduct an empirical study.

According to Van der Heijden et al. (2009), enhancing the employability of employees has positive outcomes for both the employee and the organisation. Increasingly employees are required to possess a broader competence package or employability than was the case previously in order to successfully sustain their competence in a fast changing, organisational environment. In the constantly changing 21st century world of work, it is reasonable to assume that, if an individual leaves tertiary education with a higher set of skills and attributes and which are transferable, the more adaptable and useful the individual will be in a volatile organisational landscape.

Similar to graduateness, there is no clarity in the conceptualisation of employability in the literature (Dacre Pool & Qualter, 2013). De Vos et al. (2011) posit that employability is attained through the acquisition of the knowledge, skills and abilities which considered important in the world of work. This study uses a specific model of employability to understand the relationship between employability and graduateness.

It is also plausible to hypothesise that a higher level of graduateness may predict a higher level of employability in graduates. This, in turn, may provide valuable insights into the recruitment, selection and retention of graduates and this may then result a higher person—environment fit than may otherwise have been the case. Rothwell and Arnold (2007) found that people of differing age and gender groups differed significantly in terms of their employability, although no statistically significant differences were found in terms of race and level of qualification. This study seeks to contribute to the existing body of knowledge by providing additional data in terms of which individuals with similar biographical information are tested in terms of their employability.

The literature review indicated that both the advent of the knowledge worker and the changing world of work have made retaining talented employees more challenging than it was in the past (Chabault et al., 2012; Coetzee & Pauw, 2013; Netswera, Rankhumise, & Mavundla, 2005). This appears to be a plausible assertion in view of the fact that employees are more in control of their careers and they also demonstrate higher levels of mobility geared towards the fulfilment of individual goals than previously (Coetzee & Roythorne-Jacobs, 2012; Lumley et al., 2011). In addition, it has been found that psychological attributes and the ability of individuals to be proactive and adaptable in a changing career landscape appear to influence staff retention in organisations (Coetzee & Stoltz, 2015; Lumley et al., 2011).

The deduction that the characteristics of the new world of work can be linked to the personal attributes of individuals' characteristics, ties in with the previous discussion on the graduateness and employability of employees. If the ability to proactive and adaptable influences the retention of individuals organisations, it is reasonable to assume that graduate skills and attributes as well as employability may be linked to retention. Van Dyk et al. (2013) emphasise that organisations should focus on retaining knowledgeable and skilled workers in order to remain competitive. The establishment of the link between the variables of graduateness, employability and retention may provide insights into the implementation of appropriate retention practices in organisations.

# 2.6. IMPLICATIONS FOR RETENTION PRACTICES

Retention practices may be described as the systematic efforts of an employer to create and foster an environment that encourages talented employees to remain in the employ of the employer in question by implementing relevant policies and practices that address the diverse needs of employees (Gupta, 2014; McKeown, 2002; Tladinyane, Coetzee, & Masenge, 2013; Van Dyk et al., 2013). Employee retention is important for both organisational success and competitiveness because it impacts on productivity, effective succession planning, preservation of institutional memory, reduced recruitment and selection costs, optimisation of training time and investment (Gupta, 2014; Van Dyk et al., 2013). The changing organisational landscape in which employees are more dependent than before on personal attributes and psychological career resources is a cause of concern for organisations (Tladinyane et al., 2013). It is becoming increasingly challenging for organisations to attract and retain the right calibre of talented employees as a result of a highly competitive and unpredictable business environment as well as the scarcity of skills globally (Coetzee & Pauw. 2013; Tladinyane et al., 2013).

According to Coetzee and Pauw (2013), research has suggested various drivers which may result in employees leaving their organisations. These include, inter alia, dissatisfaction with compensation, training and development opportunities, the organisational culture, relationships with managers and organisational communication, as well as negative perceptions of the organisational leadership. In view of the fact that organisations want to attract and retain the best talent in order to optimise their competitiveness (Gupta, 2014; Van Dyk et al., 2013), it is reasonable to assume that such best talent should also display higher levels of graduateness and employability. When talented employees leave organisations, they take with them their knowledge and skills with them and this, in turn, increase the likelihood of the organisation losing its competitive edge (Coetzee & Pauw, 2013). It is obvious that the level of graduateness and employability of an individual may lead to that individual being deemed to have a higher retention value for an organisation compared to other employees.

Accordingly, an understanding of the nature of the relationship between these three variables, namely, graduateness, employability and retention of employees, may provide valuable insights. There is a paucity of research on the nature of the relationship between graduateness, employability and retention of employees within the organisational context. Training and development is one of the retention factors elements used in this study.

Coetzee and Pauw (2013) suggest that training and development may be perceived by employees as an indication that the company values them and is interested in their advancement. It is, thus, reasonable to assume that, if a company provides its employees with training opportunities that enhance their skills and attributes, this should, in turn, add to their overall employability and, subsequently, to their retention. This may also stronger organisational commitment (João & Coetzee, 2011; João & Coetzee, 2012; Coetzee & Pauw, 2013).

It has been found that age, job tenure, level of education, level of income, job category and gender all influence employee retention (João & Coetzee, 2011; João & Coetzee, 2012; Kodikal et al., 2012). In particular, age, job tenure and income level were found to have a negative relationship with turnover intention. Thus, as age decreased the turnover intention appeared to increase. This finding has implications for this study as the graduate trainees in the sample were, typically, young. Govaerts et al. (2011) found that younger employees manifested the highest risk of leaving their current organisations while older employees tended to demonstrate a lower intention to leave their organisations.

According to Govaerts et al. (2011), the research relating to gender is, on the whole, inconclusive in the context of the influence of gender on retention. However, Kodikal et al. (2012) report that some studies found females to demonstrate a higher intent to leave as compared to their male counterparts while other research found the opposite. Govaerts et al. (2011) also reported that some research has shown no relationship between turnover and gender. For the purposes of this study, it was deemed important to note the relationship their the level of satisfaction of male graduate trainees and retention factors with a lower level satisfaction with particular retention factors perhaps providing an indication of the likelihood of graduates leaving the organisation based on their gender.

In terms of level of education, Kodikal et al. (2012) indicate that the more educated employees demonstrated a higher inclination to seek new job opportunities compared to their counterparts with lower levels of education. This may, in turn, imply that a higher level of education may potentially imply a higher level of both graduate attributes and skills and employability and this may, in turn, result in a higher likelihood of a lower satisfaction with retention factors than may otherwise have been the case.

# 2.7. CHAPTER SUMMARY

The chapter presented the literature review on graduate skills and attributes, self-perceived employability and retention factors. The concepts were conceptualised by summarising the various definitions which emerged from the literature review and the main concepts and subthemes relevant to the three main constructs. A critical evaluation of the literature review was presented in order to position the hypothesised theoretical relationships between the variables and the implications of these relationships for retention practices. A broad perspective in terms of the various biographical variables was also explored.

Thus, the literature research aims of the study were realised. The empirical findings of the study are presented in Chapter 3 in the form of a research report.

#### **CHAPTER 3: RESEARCH REPORT**

The moderating role of graduate skills and attributes in relation to the employability and retention of graduates in a retail organisation

#### **ABSTRACT**

**Orientation:** The scarcity of skills poses a challenge to organisations globally, especially in view of the fact that the demand for qualified graduates is increasing. Retail organisations are also affected by this trend with studies showing that it is imperative that these organisations attract and retain suitably qualified talent in the long term. However, the retail industry has been shown to be one of the least attractive industries for university graduates.

Research purpose: The objectives of the study were: (1) to ascertain the relationship between the age, gender, race and level of qualifications of individuals, their graduate skills and attributes (measured by the Graduate Skills and Attributes Scale), their self-perceived employability (measured by the Graduate Employability Measure) and their satisfaction with retention factors (measured by the Retention Factor Scale), (2) to explore whether the graduate skills and attributes and self-perceived employability of individuals significantly and positively predict their satisfaction with the factors influencing their retention (3) to explore whether graduate skills and attributes of individuals moderate the relationship between their self-perceived employability and satisfaction with retention factors, (4) assess whether individuals of different gender and qualification levels differ significantly regarding their graduate skills and attributes, self-perceived employability and satisfaction with retention factors and (5) identify the implications of the relationships between the variables in relation to talent retention practices.

**Motivation for the study**: Research into understanding the nature of the relationship between graduate skills and attributes in relation to their employability and retention was deemed important as regards talent management practices in the retail industry.

**Research design, approach or method**: The study used a quantitative, cross-sectional research design on a purposive, non-probability sample (N = 100) of black (93%), male (49%) and female (51%) graduate trainees between the ages of 17 and 29 years (early career) in a retail organisation in South Africa.

Main findings: It was found that graduate skills and attributes related positively and significantly to general employability. The study also found that presenting/applying information skills significantly and negatively predicted compensation while ethical/responsible behaviour significantly and positively predicted satisfaction with job characteristics and organisational commitment. There was, however, no evidence that general employability acted as a predictor of the participants' satisfaction with retention factors while graduate skills and attributes did not appear to moderate the relationship between self-perceived employability and satisfaction with retention factors. The association between the biographical variables (race, gender and qualification level) and the scale variables was negligible, thus implying that they did not influence the graduateness, employability and satisfaction with retention factors of the participants. In addition, the study found that the males had significantly stronger perceptions of self-perceived employability compared to the females while the females demonstrated higher levels of work-life balance satisfaction compared to the males.

**Practical implications for industrial organisational psychology practices**: The results suggest that general self-perceived employability is more a function of graduateness than of retention, while graduateness positively relates to retention factors. It is essential that the global/moral citizenship skills and attributes of graduates are taken into account in the design of retention practices in respect of compensation, job characteristics and commitment. This, in turn, will inform the design of appropriate talent retention practices in the retail sector.

**Contribution/value-add**: It is believed that the findings of this study will add valuable insights and knowledge as regards the field of career psychology and that such insights and knowledge may be applied in the retention of young graduates in the retail industry.

**Key words**: Career mobility; competencies; graduateness; graduate skills and attributes; generic skills; labour market; retention factors; self-perceived employability; talent management; world of work

# 3.1. INTRODUCTION

The following section discusses the focus of the study and the background to the study. The literature review is used to reveal the main trends in relation to the conceptualisation of the main variables under study. The objectives of the study as well as the potential value of the study are highlighted.

# 3.1.1. Key focus of the study

The significant levels of labour turnover and the apparent low retention of talent are issues of significant concern in the retail industry (Gush, 1996; Proudfoot Consulting, 2008). The literature review revealed that the labour pool is shrinking and that there is a global scarcity of critical skills. In addition, the 21st century knowledge economy worker is considerably more mobile than in the past and this, in turn, is posing a challenge from an employee retention perspective (Coetzee et al., 2011; Coetzee & Roythorne-Jacobs, 2012; Mohlala et al., 2012; Van Dyk & Coetzee, 2012).). This characteristic of the new world of work is exerting pressure on organisations to be more strategic in the way in which they manage top talent (Van Dyk & Coetzee, 2012). Research into the retail industry has shown that there are challenges in respect of supply and demand in respect of qualified graduates (Accenture, 2009; Gush, 1996; Jain 2010). On the whole, university graduates display little interest in the retail sector as they perceive it to be a practical skill-based industry (Proudfoot Consulting, 2008). In addition, the apparent mismatch between the skills and attributes acquired by graduates during their tertiary education and the requirements of the retail industry is also contributing to the lower levels of employability of graduates (Coetzee et al. 2012; Coetzee & Roythorne-Jacobs, 2012; Gush, 1996; Mohlala et al., 2012; Netswera, Rankhumise, & Mavundla, 2005).

It emerged from the literature review that it would appear that there are links between the self-perceived employability of graduates and their graduate skills and attributes (Australian Chamber of Commerce et al. 2002; Dacre Pool & Sewell, 2007; Hillage & Pollard, 1998; Jain, 2010). Furthermore, Jain (2010) suggests that students with the requisite generic graduate skills and attributes have higher levels of employability as compared to other students. The aim of this study is to explore whether the relationship between the self-perceived employability of individuals and their satisfaction with certain retention factors is influenced by their graduate skills and attributes.

An understanding of this relationship may contribute to the field of Industrial and Organisational Psychology, especially concerning the enhancement of retention practices pertaining to employable graduates.

# 3.1.2. Background to the study

Organisations globally are being challenged to address issues in respect of skills shortages, labour turnover and productivity (World Economic Forum, 2013). South Africa is no exception with organisations in the country showing labour turnover rates of up to 24%. The retail sector is following this trend of high employee turnover at the global level (Proudfoot Consulting, 2008). The retail sector is characterised by low employee morale and motivation and harsh physical conditions, including long hours and low work-life balance (Jain, 2010). These factors all contribute to the low level of attractiveness of the sector, especially to university graduates (Jain, 2010). However, this is an issue of real concern as retail organisations require suitably qualified talent to ensure their future sustainability and growth. Gush (1998) found that, while employers look for long term relationships with their employees, graduates tended to stay with employers for shorter periods. In 2009, 25% of the retail workers surveyed indicated that they planned to leave their jobs within 12 months (Accenture, 2009).

It is, thus, essential that appropriate programmes are devised in order to identify and attract high potential talent as regards the retail industry and also to prevent the loss of such talent (Accenture, 2009; Jain 2010). In 2009, 12% only of the graduates surveyed globally chose retail as a top career choice (Accenture, 2009). This trend further supports the earlier observation regarding the mismatch between the talent supply and demand forecasts in the retail industry. The retail industry has an additional challenge when it comes to attracting graduates in view of the apparent perception that the industry prefers non-graduate employees (Gush, 1998). The other core challenge relating to the employability of graduates includes their apparent lack of both the specific and generic skills that may render them effective in the world of work (Gush, 1998, Spies & Van Niekerk, 2006).

Institutions of higher education have become aware of the types of workplace skills which graduates require in order to improve their employability in the market (Spies & Van Niekerk, 2006). Transferable skills such as decision-making, interpersonal skills, managing staff, business acumen and adaptability have been noted as important for graduates (Spencer et al., 2012). In addition, academic institutions are also making efforts to assist the smooth transition of graduates into the world of work (Smith & Bath, 2006). In order to overcome the challenge of talent supply and demand, institutions of higher learning must ensure that graduates possess the right mix of transferable skills, knowledge and abilities that transcend field-specific content (Beyer et al., 2010; Coetzee, 2012; De La Harpe, Radloff, & Wyber, 2000; Spencer et al., 2012).

This study aims to add new knowledge to the existing understanding of the relationship between graduate skills and attributes, self-perceived employability and graduate satisfaction with retention factors in the retail sector. There is also a further need to understand the way in which biographical variables such as age, gender, race and level of qualifications relate to the relationships between these three variables.

It is anticipated that the findings this study will provide valuable insights which will enable employers to align their talent strategies in order to address the supply and demand challenges in the retail sector. Furthermore, understanding the nature of the relationship between graduate skills and attributes, self-perceived employability and retention factors will provide valuable insights which should assist retail organisations to implement relevant talent strategies and development programmes. It is in the best interests of organisations to retain talented employees in order to mitigate the risks associated with skills shortages as well as to avoid the costs associated with replacing employees with critical and scarce skills (Allen & Bryant, 2012; Chabault et al., 2012; Netswera, Rankhumise, & Mavundla, 2005).

#### 3.1.3. Trends from the literature research

This section provides an overview of the major trends which emerged from the literature review relating to the concepts of graduate skills and attributes (graduateness), self-perceived employability and retention factors.

#### 3.1.3.1. Graduate skills and attributes

The concept of graduate skills and attributes varies in meaning depending on the writer, the context and the area of focus (Steur et al., 2012). Nevertheless, it would appear that there is general consensus that the concept revolves around the nature of the skills, attributes and knowledge acquired by graduates during tertiary education (Coetzee, 2011, 2012, 2014; Spencer et al., 2012). Table 3.1 presents a summary of the various interpretations and definitions of the term graduate skills and attributes.

Table 3.1.

Various Interpretations and Definitions of Graduate Skills and Attributes

Author	Definition/interpretation
Steur et al., 2012	"Generic or transferable skills
	"Graduateness is described as an individual's basic skills, personal skills, ethics and values
Coetzee (2011; 2012; 2014)	"Graduateness is the ability of a student to demonstrate generic transferable meta-skills and personal attributes which also serve as an indicator of employability or work readiness"
McNeil et al., 2012	"Generic capabilities which include outcomes such as effective communication, critical analysis and teamwork"
	"Can also be referred to as generic skills, transferable skills, generic attributes or graduate attributes"
Spencer et al., 2012	"Graduate capabilities"

McNeil et al. (2012) provide an interesting framework for the development of generic capabilities. Figure 3.1 presents the main components of the three principle arguments for the development of graduate capabilities as put forward by McNeil et al (2012). Graduate capabilities denote a higher level of learning and emphasise the cross-disciplinary nature of the concept of graduate capabilities (McNeil et al., 2012).

A higher level of learning is embodied by graduates who are able to demonstrate and apply skills outside their field of study and this, in turn, increases the speed with which they acquire competence at work. In addition, readiness for postgraduate studies will ensure that graduates are able to deal with rapid changes in knowledge and practice (McNeil et al., 2012). Furthermore, graduates with well-developed generic capabilities will be more predisposed to becoming life-long learners while they would also have the capacity to deal with the demands of the 21st century world of work (Coetzee, 2012; Coetzee et al., 2012; McNeil et al., 2012). Figure 3.1 provides a diagrammatic representation of the components of student graduateness.

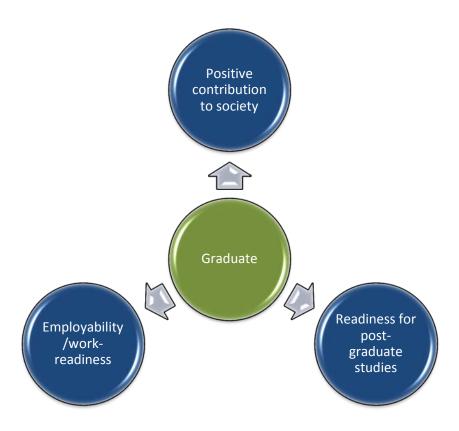


Figure 3.1 A framework for the development of graduate capabilities (McNeil et al., 2012)

The literature revealed that the various institutions of higher education and government agencies have varying focus areas when it comes to the graduate skills and attributes they aim to develop in their students (Coetzee et al., 2012; McNeil et al., 2012). Table 3.2 provides specific examples of graduate skills and attributes as defined by various institutions of higher learning.

Table 3.2.

Specific Examples of Graduate Skills and Attributes Adopted by Institutions of Higher Learning

Author	Examples of skills
McNeil et al. 2012	Faculty of Medicine at the University of New South Wales 2004:
	<ul> <li>Effective communication</li> <li>Team work</li> <li>Self-direction and critical evaluation</li> <li>Reflective practice</li> <li>Ethical/social responsibility</li> </ul>
Fraser & Thomas, 2013	The Australian Qualifications Framework of 2011:
	<ul> <li>Critically analyse information</li> <li>Communicate effectively and clearly</li> <li>Be autonomous and responsible</li> <li>Find solutions to complex and unpredictable problems</li> <li>Deliver well thought through judgements</li> </ul>
Spencer et al., 2013	La Trobe University:
	<ul> <li>Writing</li> <li>Speaking</li> <li>Inquiry/research</li> <li>Critical thinking</li> <li>Creative problem-solving</li> <li>Teamwork</li> <li>Ethical awareness</li> <li>Information literacy</li> </ul>
Coetzee et al. (2012)	University of South Africa: College of Economic and Management Sciences:
	<ul> <li>Interactive skills</li> <li>Problem-solving/decision-making skills</li> <li>Continuous learning orientation</li> <li>Enterprising skills</li> <li>Presenting and applying information skills</li> <li>Goal-directed behaviour</li> <li>Ethical and responsible behaviour</li> <li>Analytical skills</li> </ul>

It is evident from Table 3.2 that there are significant overlaps in terms of the way in which different institutions view the concept of graduate skills and attributes. In addition, the literature review showed that the lack of consistency in the definition of the concept has resulted in a poor theoretical foundation for the concept of graduateness (Steur et al., 2012). Steur et al. (2012) posit that graduateness includes the following key elements, namely, scholarship, intellectual development, the growing of self-awareness, citizenship, life-long learning and reflective thinking.

The key elements of graduateness, as suggested by Steur et al. (2012), are aligned with the work of Coetzee et al. (2012, 2014), in terms of which graduateness is viewed as an indicator of both the quality of the learning outcomes achieved at university and the relevance of the skills acquired by students to the world of work. According to Coetzee et al. (2012), student graduateness, as viewed by the University of South Africa's (UNISA) College of Economic and Management Sciences (CEMS), is made up of three main components, namely, scholarship, global/moral citizenship and life-long learning (Figure 1.1). These components are further broken down into the following specific skills: interactive skills, problem-solving/decision-making skills, continuous learning orientation, enterprising skills, presenting and applying information skills, goal-directed behaviour, ethical and responsible behaviour and analytical skills.

# 3.1.3.2. Self-perceived employability

There has been little empirical research into the issue of graduate employability and this has resulted in difficulties with regard to clarity in the conceptualisation and measurement of the concept (Dacre Pool & Qualter, 2013). Fugate et al. (2004, p. 15) define employability as "a psycho-social construct that embodies individual characteristics that foster adaptive cognition, behaviour, and affect, and enhance the individual-work interface.. It is clear from this definition that employability encompasses more than merely the accumulation of skills or acquisition of employment. This person-centred definition includes a number of constructs which work together to increase adaptability in a constantly changing economic environment (Fugate et al., 2004; Jain, 2010; Koen et al., 2013).

The world of work is in a state of change and the responsibility for career development is shifting from the organisation to the individual (Coetzee, 2012; Coetzee et al., 2012; Coetzee & Roythorne-Jacobs, 2012; Coetzee & Schreuder, 2011; Koen et al., 2013; Potgieter & Coetzee, 2013; Potgieter et al., 2012).

This, in turn, implies that it is up to the individual employee to ensure their own employability levels in line with individual career goals. De Vos et al. (2011) are of the view that the employability of an individual may be enhanced through the acquisition of employer-relevant skills, knowledge and abilities. It emerged from the literature review that there are theoretical linkages between employability and the concept of graduate skills and attributes (Dacre Pool & Qualter, 2013).

Employability may be discussed in terms of three broad perspectives, namely, national workforce planning, human resource management and the psychology of work and careers, and the ability of institutions of higher learning to produce graduates with skills required by employers (Clarke, 2008; Rothwell et al., 2009). Figure 3.2 presents the three broad perspectives of employability.

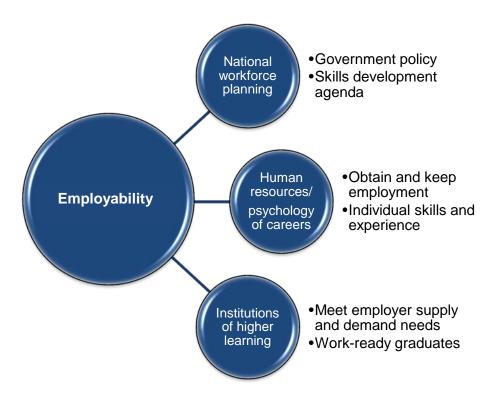


Figure 3.2 Three broad employability perspectives (Rothwell et al., 2009)

Coetzee et al. (2012) describe four perspectives of employability, namely, society, the company, the individual worker and higher education. As may be observed, this model is very similar to that of Rothwell et al. (2009). At national level, employability provides an indication of the rate of full time employment which is a further indicator of the state of the economy.

The organisational perspective of employability refers to its ability to match employee skills with the demands of the business context and economic conditions within which the organisation operates.

Both the changing nature of the employment contract and the complexities of career management in the 21st century world of work mean that organisations have to be significantly more flexible than previously if they are to remain competitive (Coetzee & Roythorne-Jacobs, 2012). Employees are concerned about their ability to continuously match their own skills, experiences, knowledge and abilities to what is required by organisations in exchange for a stable job and a fulfilling career. Career development has evolved into a more complex and unpredictable process than ever before. At an academic level, institutions of higher learning are concerned about their ability to produce work-ready graduates who are able to add value in organisations and the community. In addition, graduates are required to demonstrate competence in specific disciplines as well as the ability to use their academic foundation to create new knowledge by applying critical thinking, self-reflection and continuous learning (Coetzee et al., 2012). Table 3.3 presents various definitions for employability.

Table 3.3.

Employability as Defined by Various Authors

Author	Definition
Fugate et al. (2004)	The way in which career-related attributes and dispositions improve the suitability and appropriateness of an individual to identify and secure sustainable job opportunities
Rothwell et al. (2009)	The perception of an individual to obtain employment commensurate with their level of qualification
Vos et al. (2011)	Employability is a consequence of the acquisition of knowledge, skills and abilities deemed valuable by employers
Dacre Pool & Qualter (2013)	Employability is a set of achievements and personal attributes which improves the chances of graduates gaining employment and contributes to their success in their chosen career
De Cuyper et al. (2011)	Define perceived employability as how easily one believes he/she is able to secure alternative employment
Schreuder & Coetzee (2011)	Employability as a form of career-resiliency which reflects one's belief driven from within, about how possible it is for one to get and maintain employment, even during uncertain economic conditions
Rothwell & Arnold (2007)	The extent to which individuals may obtain new employment that they desire or to sustain their current employment
Clarke (2008, p. 262)	Employability is an individual's relative potential to obtain and retain suitable employment within the current labour market context

There is no doubt that the concept of employability is multifaceted and takes into account both internal and external labour market factors (De Cuyper et al., 2011). However, the right mix of skills, knowledge and experiences are not sufficient in a highly competitive labour market and graduates also require the appropriate personal attributes, attitudes, behaviours and individual characteristics (Clarke, 2008). Rothwell and Arnold (2007) differentiate between internal and external employability. Internal employability refers to how employees rate their employability within their current organisation while external employability refers to the labour market. Younger employees have been found to demonstrate higher levels of external employability as compared to older employees (Rothwell & Arnold, 2007). On the other hand, female employees have been found to demonstrate higher levels of external employability as compared to their male counterparts while, men younger than forty years of age were found to score higher than women.

#### 3.1.3.3. Retention factors

Retention may be defined as the activities and strategies which organisations employ in order to prevent talented employees from leaving (Mengel, 2001). Some organisations view high performing employees as top talent while others view those with considerable technical expertise as highly valuable (Chabault et al., 2012). The rapidly changing world of work which is characterised by globalisation, increased technology, highly mobile knowledge workers and economic turbulence has made it increasingly difficult for organisations to retain talented employees (Coetzee & Pauw, 2013). In order to remain competitive and to deliver exceptional results, organisations are required to leverage the talent of their employees through various policies and practices (Coetzee & Roythorne-Jacobs, 2012; McKeown, 2002). It has also been found that it would appear that psychological attributes as well as the ability of individuals to be proactive and adaptable in a changing career landscape influence people's retention (Coetzee & Esterhuizen, 2010).

Döckel's retention model (2003) was used for the purposes of this study. The model comprises the following components, namely, compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life balance and organisational commitment (Van Dyk & Coetzee, 2012). Research by Kodikal et al. (2012) shows that retention of employees is influenced by a number of biographical variables, for example, Kodikal et al. found that older employees tend to stay longer with their organisations as compared to their younger counterparts.

In addition, employees who have higher levels of qualifications have been found to demonstrate higher intentions to leave their organisations as compared to their less qualified counterparts. Figure 3.3 provides a diagrammatic representation of the theoretical relationships between the main variables in the study.

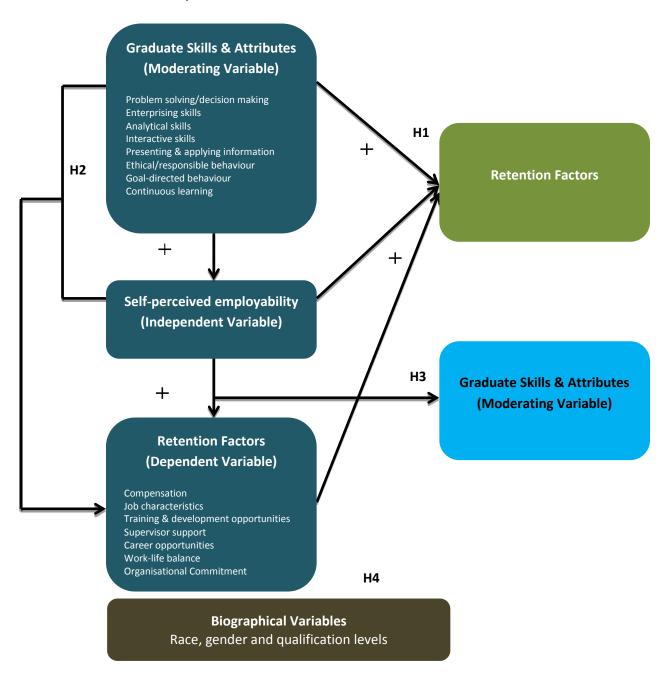


Figure 3.3 The theoretical relationships between the main variables in the study

Graduate skills and attributes serve as indicators for employability or work-readiness (Coetzee, 2011; Steur et al., 2012). McNeil et al. (2012) emphasise that generic graduate skills and attributes are important for the development of work-ready and employable graduates. McNeil et al. (2012) further state that employability is attained through the acquisition of the knowledge, skills and abilities which are considered important to the world of work. Accordingly, a strong positive relationship may be hypothesised between graduate skills and attributes and self-perceived employability.

Lumley et al. (2011) suggest that psychological attributes as well as the ability of individuals to be proactive and adaptable in a changing career landscape influence their retention in organisations. Therefore, a strong positive relationship may be hypothesised between graduate skills and attributes, employability and retention factors.

The following research hypotheses will be tested empirically.

H1: There is a positive and significant relationship between individuals' gender, race, level of qualification, graduate skills and attributes, self-perceived employability and their satisfaction with the factors influencing their retention.

H2: Individuals' graduate skills and attributes and self-perceived employability significantly and positively predict their satisfaction with the factors influencing their retention.

H3: Individuals' graduate skills and attributes significantly moderate the relationship between their self-perceived employability and their satisfaction with the factors influencing their retention.

H4: Individuals of different genders and level of qualifications differ significantly regarding their graduate skills and attributes, self-perceived employability and satisfaction with retention factors.

## 3.1.4. Research objectives

The objectives of the study were to (1) investigate the nature and direction of the relationship between gender, race and level of qualifications, graduate skills and attributes, employability and satisfaction with retention factors, (2) explore the nature of the relationship between the independent variable (self-perceived employability) and the dependent variable (retention factors satisfaction) when moderated by graduate skills and attributes (moderating variable),

(3) assess whether individuals from different gender and level of qualifications significantly differ regarding their graduate skills and attributes, self-perceived employability and satisfaction with retention factors, and (4) identify the implications of the relationships between the variables under study in relation to retention practices and formulate recommendations for the field of industrial and organisational psychology and also future research.

There is a lack of research into the understanding of the relationship between graduate skills and attributes, self-perceived employability and graduates' satisfaction with retention factors in the retail sector. There is also a further lack of research into the understanding of how biographical variables such as gender, race and level of qualifications relate to the relationships between the three aforementioned variables. It is hoped that research in these areas will provide valuable insights which will enable employers to align their talent strategies in such a way that they meet the supply and demand challenges for skills. It is in the best interests of organisations to retain talented employees, to mitigate the risks associated with skills shortages as well as to avoid the costs associated with replacing employees with critical and scarce skills (Netswera et al., 2005).

## 3.1.5. The potential value add of the study

The overall objectives of the study were to ascertain the relationship between the graduate skills and attributes of individuals, their self-perceived employability and their satisfaction with retention factors with the view to obtaining insights that would assist retail organisations in implementing relevant talent retention strategies and development programmes. The study may stimulate future research into understanding whether the variables listed significantly predict each other and whether biographical factors impact on the predictive potential of the variables under investigation.

## 3.1.6. What will follow

The research design used in the study is discussed in the next section. The details of the research approach and research method used are then explored. This is followed by a presentation of the research results, a discussion of the significant findings and an interpretation of the findings in the light of previous studies. The conclusions to the study are then presented and the limitations of the study identified. Finally, recommendations for future research are suggested.

## 3.2. RESEARCH DESIGN

The research design of a study may be viewed as the blue print detailing all the steps followed in a research study in order to answer the research question (Mouton, 1996; Terre Blanche et al., 2006). As such it provides details of the all the key elements to the study including the literature review, research approach, operationalisation of the variables, ethical considerations, methods and procedures used in data collection and data analysis and the validity of the study (Coldwell & Herbst, 2004). This study employed a non-experimental, cross-sectional research design and used survey questionnaires to measure the variables in question and to investigate the nature of the relationships between the variables at a particular point in time (Coldwell & Herbst, 2004). The clarification of the central hypothesis in Chapter 1 and the literature review in Chapter 2 formed the basis of the research design by ensuring the alignment of the research design with the research questions. The research design of the study is discussed in detail below. Reference is made to both the research approach and the research method used.

## 3.2.1. Research approach

The study adopted a positivist research paradigm which was quantitative and logical in nature and which used numerical information to explain the phenomena observed. The study was data focused and employed standardised questionnaires in order to collect the requisite data (Cohen et al. 2007). This research approach allowed for the use of an objective process which reduced researcher bias. The focus of the study was to describe what had been observed in the sample identified and not to prove cause and effect (Coldwell & Herbst, 2004). The study was also exploratory in nature as it aimed to determine whether the hypothesised relationships between the research variables did, in fact, exist (Coldwell & Herbst, 2004).

#### 3.2.2. Research method

This section contains a description of the research methodology used in the study, including the research participants, measuring instruments and research procedure.

## 3.2.2.1. Research participants

A non-probability, purposive sampling methodology was used in order to optimise accessibility to the sampling frame. The target population of the study consisted of all employees who had been employed in the organisation concerned through its graduate development programme from 2007 to 2013. The sampling frame consisted of those graduates who were still in the employment of the organisation at the time of the study. The total estimated population comprised 240 graduate alumni. A total of 100 participants voluntarily participated in the study, thus yielding a 41.67% response rate.

Nearly all the participants were aged 17 to 29 (96% - 96 participants) while 4% (4 participants) were in the 30 to 39 year old bracket. In keeping with a younger sample was the fact that most of the participants were also single (95% - 95 participants). As depicted in Figure 3.4 the sample was evenly distributed between males (49% - 49 participants) and females (51% - 51 participants).

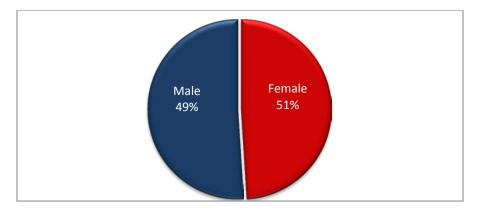


Figure 3.4 Sample distribution by gender (n = 100)

The ethnicity distribution is presented in Figure 3.5. The participants were predominantly African (69% - 69 participants) or Asian (22% - 22 participants) with few white (7% - 7 participants) or coloured (2% - 2 participants) participants represented in the sample. There was, thus, a total of 93 black participants (93%) and seven whites (7%).

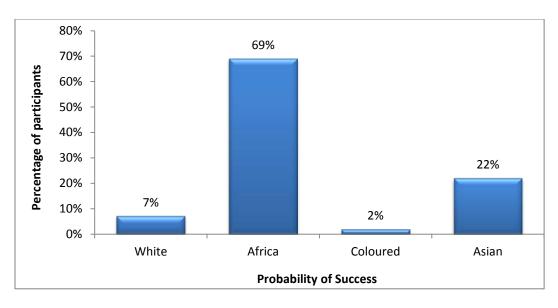


Figure 3.5 Sample distribution by ethnicity (n = 100)

The highest qualification levels of the participants are illustrated in Figure 3.6. With the exception of 2 of the participants the other participants were all in possession of at least a diploma although most had either a degree (50%) or a postgraduate degree (40%). As depicted in Figure 3.6, 10% (10 participants) had either a matriculation exemption or a diploma, 50% (50 participants) had an undergraduate degree and 40% (40 participants) had a postgraduate degree.

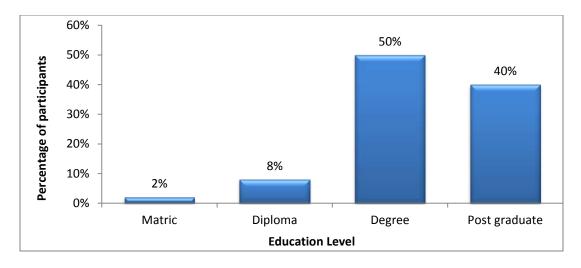


Figure 3.6 Sample distribution by highest qualification (n = 100)

In terms of the employment profile of participants, the majority of the participants had been employed for less than 5 years (95% - 95 participants) while the remaining 5% (5 participants) had been employed for six to 10 years. In addition, most of the participants (93% - 93 participants) were employed in a full-time capacity.

The positions in which participants were employed at the time of the study are presented in Figure 3.7. The majority of the participants were either trainees/interns (48% – 48 participants) or at the operational level (26% – 26 participants).

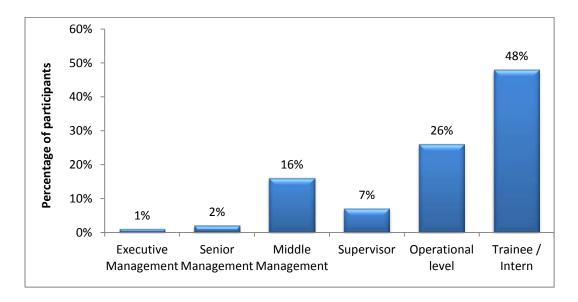


Figure 3.7 Sample distribution by position at the time of the study (n = 100)

Thus, overall the sample was made up of a majority of black male and female people (African, coloured, Indian) between the ages of 17 and 29. In addition, the majority of the participants had worked for less than five years either as trainees or at an operational level. Most of them had a minimum of an undergraduate degree.

# 3.2.2.2. Measuring instruments

A biographical questionnaire was used to collect the biographical data relevant to the study, namely, age, race, gender and level of qualifications. The following measuring instruments were used: the Graduate Skills and Attributes Scale (GSAS) (Coetzee, 2014), the Graduate Employability Measure (GEM) (Rothwell & Arnold, 2007) and the Retention Factors Scale (RFS) (Döckel (2003).

# (i) Graduate Skills and Attributes Scale (GSAS)

The graduateness skills and attributes of the participants were measured using the Graduate Skills and Attributes Scale (GSAS) which was developed by Coetzee (2014) for the South African context. The GSAS is a self-rated, multi-factorial measure which contains 64 items and eight sub-scales which measure the self-perceived graduateness of individuals on a six-point Likert-type scale in terms of their (1) *scholarship* as measured by their problem-solving and decision making skills (8 items); enterprising skills (9 items); and analytical thinking skills (4 items); (2) *global/moral citizenship behaviour* as measured by their interactive skills (16 items); skills in presenting and applying information (5 items); and ethical and responsible behaviour (5 items); and (3) *life-long learning attributes* as measured by their continuous learning orientation (7 items) and goal-directed behaviour (10 items). Table 1 presents examples of typical items from the GSAS questionnaire as relating to a specific sub-scale.

Research conducted by Coetzee (2013) has provided evidence of the construct and internal consistency reliability of the GSAS. Cronbach's alpha coefficients for each of the eight subscales ranging between .79 and .96 (high). For the purposes of the this study the problem-solving and decision-making skills, analytical thinking skills, and enterprising skills subscale items were clustered together to describe the overall scholarship attributes of the participants ( $\alpha = .91$ ).

The interactive skills, presenting and applying information skills, and ethical and responsible behaviour items were clustered together to describe the participants' overall global and moral citizenship attributes ( $\alpha$  = .93) while the goal-directed behaviour and continuous learning orientation items were clustered together to describe the life-long learning attributes of the participants ( $\alpha$  = .91).

# (ii) Graduate Employability Measure (GEM)

The Graduate Employability Measure (GEM) (Rothwell & Arnold, 2007) was used to measure self-perceived employability as a unitary construct. The GEM is a self-rated measure consisting of the 11 items. The employability measure is based on a six-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree).

Rothwell and Arnold (2007) reported a Cronbach's alpha (internal consistency reliability) of .83. This, in turn, indicates that the overall internal reliability of the instrument is good. A South African-based study conducted by Tredway (2012) confirmed the construct validity and internal consistency reliability of the GEM with Tredway (2012) reporting a Cronbach's alpha of .70.

## (iii) Retention Factors Scale (RFS)

The participants' satisfaction with retention factors was measured using the Retention Factor Scale (RFS) which was developed by Döckel (2003) for the South African organisational context. The Retention Factor Scale (RFS) measures the participants' satisfaction with the following retention factors on a 6-point Likert-type scale: compensation (13 items), job characteristics (4 items), training and development opportunities (6 items), supervisor support (6 items), career opportunities (6 items), work/life balance (4 items) and organisational commitment (3 items). A factor analysis on the RFS which was conducted by Döckel (2003) confirmed the construct validity of the questionnaire. In terms of the internal consistency reliability, Döckel, Basson, and Coetzee (2006) reported the following Cronbach's alpha coefficients: compensation (.90), job characteristics (.41), training and development opportunities (.83), supervisor support (.90), career opportunities (.76), work/life balance (.87) and commitment to the organisation (.89).

### 3.2.2.3. Research procedure

The study used a purposive sample of employees who had come into the employment of the company concerned through the company's graduate development programme. In order to ensure that the study met the ethical research requirements, written consent to conduct the study was obtained from the company. In addition, ethical clearance to conduct the study was obtained from the University of South Africa.

The purposively selected individuals were requested to participate in the study of their own free will. Survey questionnaires, together with the written consent form and covering letter, were sent to all the participants using the company's e-mailing system. It was emphasised that all the questionnaire responses would be treated with the utmost confidentiality and that group trends would be reported instead of individual scores.

The participants were encouraged to be honest in their responses to the survey questions and a guarantee was made that their views and responses would not have any adverse impact on their employment with the company. The participants were also informed that they were free to withdraw from the study at any point. The researcher was available to answer any questions related to the study and to place the participants at their ease throughout the research process. Written consent to participate in the study was obtained from each participant and stored separately from the completed survey questionnaires in order to ensure the anonymity of the participants. The completed questionnaires were kept in a locked cupboard in line with company policy and government regulations.

# 3.2.2.4. Statistical analyses

The Statistical Programme for Social Sciences (SPSS, version 20, 2011) was used to analyse the data. There are two major divisions of the field of statistics, namely, descriptive statistics and inferential statistics. Descriptive statistics allow for the organisation and summary of data into key statistics and graphs and comprise an important initial step in understanding data (Breakwell, Hammon, & Fife-Schaw, 2012). Descriptive statistics include means and standard deviations. The means are obtained by calculating the average across different variables while the standard deviation is defined as the average amount by which scores in a distribution differ from the mean.

Descriptive statistics allow for a description of the sample but do not allow for general statements about the population of interest. Inferential statistics were used in this study to address the research hypotheses as inferential statistics allow for inferences from the data to the population (Field, 2005). In order to address the first hypothesis which sought to determine whether there was a positive and significant relationship between the gender, race and level of qualifications of the individuals, their graduate skills and attributes, self-perceived employability and satisfaction with the factors influencing their retention, a Pearson Product-moment correlation was performed.

A correlation indicates a linear relationship between variables (Breakwell et al., 2012). The correlation value may be interpreted as follows with the sign of the correlation coefficient (+/-) indicating the direction of the relationship (Phyllis, Supino, Jeffrey, & Borer, 2012). A positive correlation coefficient means that, as the value of one variable increases, the value of the other variable increases and vice-versa. On the other hand, a negative correlation coefficient indicates that, as one variable increases, the other decreases, and vice-versa (Phyllis et al., 2012). The actual value of the correlation indicates the size of the relationship (practical effect). For the purposes of this study Cohen's (1992) indication of effect size was used, namely, a small effect at r = .10, medium effect at r = .30 and large effect at r = 0.5 or higher.

The second research hypothesis focused on the predictive ability of the graduate skills and attributes of individuals and their self-perceived employability on their satisfaction with the factors influencing their retention. A stepwise regression analysis was chosen to investigate this hypothesis. According to Field (2005), a simple regression analysis attempts to predict an outcome variable from a single predictor variable whereas multiple regressions seek to predict an outcome from several predictors. The latter applied to this current study.

The third hypothesis focused on exploring the nature of the relationship between self-perceived employability and satisfaction with retention factors, when moderated by graduate skills and attributes. Hierarchical moderated regressions were used to determine the interaction effect between employability and graduate skills and attributes in predicting satisfaction with retention factors.

The fourth research hypothesis focused on the differences between demographic and sociographic groups in terms of the test variables. A Student's t-test and the analysis of variance (ANOVA) procedures were used to address this hypothesis. When comparing two groups, the Student's t-test is regarded as the appropriate test to use. This test is known as the Student's t-test or the independent group's t-test because the test statistic follows the t distribution under the null hypothesis (Supino & Borer, 2012). An ANOVA is used when comparing the means of three or more groups. For the purposes of this study the t-test was used to compare the test scores of men and women while the ANOVA was used to investigate the differences in scores between people with different qualifications. It is important to note that the sample in this study consisted of a predominantly homogeneous group in terms of age (17–29 years = 96%) and race (black participants = 93%) and, thus, the study was interested in exploring the differences between males and females and the level of qualifications of the participants only.

The p-value (significance value) is calculated in conjunction with most test statistics and is the guideline that researchers use to determine whether research results are significant. In order to guard against a Type 1 error, the null hypothesis will be rejected only where the significance level  $p \le .05$ . The most frequently used cut-off benchmark is used for the level of significance of .05. For the purposes of this study it was decided to set the significance value at a 95% confidence interval level ( $p \le .05$ ).

### 3.3. RESULTS

The following section discusses the statistical results by examining the descriptive, correlational and inferential analysis which was conducted in order to address the research aims.

## 3.3.1. Descriptive statistics and correlations

# 3.3.1.1. Internal consistency reliability

Table 3.4 shows that the internal reliability coefficients of the subscales of the Graduateness Skills and Attributes Scale ranged between  $\alpha$  = .58 (presenting/applying information skills) and  $\alpha$  = .92 (scholarship). The Cronbach's alpha coefficients for the presenting/applying information skills and ethical/responsible behaviour subscales were lower than the recommended guideline of  $\alpha$  = .70.

However, in terms of the social sciences a Cronbach's alpha of .60 is regarded as an acceptable level of internal consistency reliability for broad research purposes (Hair et al., 2010; Nunnally & Bernstein, 1994). The Cronbach's alpha of .58 was regarded as acceptable for the purposes of this research because the value was close to that of .60.

The General Employability Scale obtained an overall high Cronbach's alpha coefficient ( $\alpha$  = .84) while the Cronbach's alpha coefficients of the Retention Factor Scale ranged between  $\alpha$  = .67 (job characteristics) and .94 (overall scale). Before the reliabilities were computed for each of the subscales of the Retention Factor Scale, a number of items were reverse scored. These included D15, D16, D25, D26, D28, D32, D36, D37, D38 and D39. Although item D33 initially loaded positively after the negative questions were rescaled, it loaded negatively and affected the internal reliability of the career opportunities subscale. It was, therefore, also rescaled.

### 3.3.1.2. Means and standard deviations

As illustrated in Table 3.4, the participants obtained overall relatively high mean scores on the graduate skills and attributes, with the highest scores on ethical/responsible behaviour (M = 5.04; SD = .58) and global/moral citizenship behaviour (M = 4.80; SD = .46) and the lowest scores on scholarship (M = 4.48; SD = .60) and enterprising skills (M = 4.41; SD = .61). The mean score for general employability was also relatively high (M = 4.66; SD = .71).

In terms of the retention factors, Table 3.4 revealed that the mean scores obtained were also relatively high with the highest scores being obtained on the supervisor support (M = 4.70; SD = .97) and training and development opportunities (M = 4.52; SD = 1.03) subscales. The lowest mean score was obtained on the compensation (M = 3.78; SD = .99) subscale.

### 3.3.1.3. Common method variance and correlations

## (i) Common method variance

In view of the cross-sectional design of the study and the fact that the requisite data collected was self-reported data which was collected by means of the same questionnaires during the same period of time, it was necessary to address concerns about common method variance. Accordingly, before calculating the correlation coefficients, Harman's one-factor test was conducted to test the presence of the common method effect in the graduate attributes and skills, general employability and retention factor scales. Common method variance (a variance that is attributed to the measurement method rather than the constructs which are relevant to the research study) may cause systematic measurement error, they may further bias the estimates of the true relationship between the theoretical constructs, and they may either inflate or deflate the observed relationships between the constructs, thus leading to both Type I and Type II errors (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The guidelines proposed by Podsakoff et al (2003) were taken into account in the interpretation of the results.

The three scales were each subjected to an exploratory factor analysis by using unrotated principal component factor analysis, principal component analysis with varimax rotation, and principal axis analysis with varimax rotation to determine the number of factors necessary to account for the variance in the variables.

The results revealed that the single factor that had emerged for the graduateness skills and attributes scale accounted for 29% only of the covariance among the variables. In terms of the general employability measure, the single factor solution revealed that the one factor accounted for 40% of the covariance among the variables, thus suggesting the presence of more than one factor. However, because the study was interested in assessing general employability as an overall factor, no further analysis was conducted in order to detect the presence of a second factor. The general employability measure also comprised 11 items only and it was regarded as acceptable to treat the measure as a single factor. In terms of the retention factor scale, the single factor solution showed that the one factor accounted for 32% only of the covariance among the variables. These results showed that the relationship among the variables of the three scales respectively was not primarily the result of common method variance.

## (ii) Correlations

As depicted in Table 3.4, the correlations between the subscales of the graduate skills and attributes scale ranged between  $r \ge .44$  and  $r \le .80$  ( $p \le .00$ ; moderate to large practical effect). The bi-variate correlations among the RFS subscales ranged between  $r \ge .29$  and  $r \le .83$  ( $p \le .00$ ; small to large practical effect). The work/life balance subscale did not correlate significantly with the compensation, job characteristic, supervisor support and career opportunities subscales while the job characteristics subscale did not correlate with the organisational commitment subscale. These findings were considered in the interpretation of the results.

The correlation analysis also addressed the first research hypothesis which sought to determine whether a positive and significant relationship existed between the graduate skills and attributes of individuals, their self-perceived employability and their satisfaction with the factors influencing their retention.

Table 3.4 showed that the variables of the graduate skills and attributes scale (GSAS) were all positively and significantly associated with the general employability variable ( $r \ge .40$  and  $r \le .43$  ( $p \le .00$ ; moderate practical effect). The values were all below the threshold value for multicollinearity concerns ( $r \ge .85$ ). The GSAS variable presenting/applying information skills correlated positively and significantly with the retention factor scale (RFS) job characteristics (r = .21; p = .03; small practical effect) only and negatively with compensation (r = -.21; p = .03; small practical effect). Ethical/responsible behaviour correlated positively with job characteristics (r = .26; p = .01; small practical effect); supervisor support (r = .20; p = .05; small practical effect), and organisational commitment (r = .21; p = .03; small practical effect).

Continuous learning correlated positively with job characteristics (r = .20; p = .05; small practical effect). However, none of the RFS variables correlated significantly with general employability. The biographical variables of gender, race and qualification level were used as control variables. Nevertheless, Table 3.4 showed that the biographical variables did not have significant associations with the variables of the three scales, with the exception of gender and general employability (r = -.24; p ≤ .01; small practical effect) and work/life balance (r = .21; p ≤ .05; small practical effect); and race and career opportunities (r = -.24; p ≤ .05; small practical effect). Accordingly, the influence of the biographical variables on the associations between the graduate skills and attributes, general employability and satisfaction with retention factors was regarded as negligible.

The correlation results provided partial evidence only in support of research hypothesis H4: There is, thus, a positive and significant relationship between the gender, race, level of qualification of individuals, their graduate skills and attributes, self-perceived employability and satisfaction with the factors influencing their retention. In short, the results provided evidence that graduate skills and attributes positively related to general employability, and that the graduate skills and attributes and general employability did not significantly relate to the participants' satisfaction with retention factors. Significant associations were observed only between some of the retention factors and graduate skills and attributes, namely job characteristics and presenting/applying information skills, ethical/responsible behaviour and continuous learning; presenting/applying information skills and compensation and ethical/responsible behaviour and organisational commitment. However, these associations were small in practical effect.

Table 3.4
Descriptive Statistics, Reliability Coefficients and Bi-Variate Correlations: All Variables

	Variables	М	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
!	Gender Race Qualification																									
	Scholarship	4.48	.60	- 1.1 1	.07	.02	(.92)																			
	Problem solving/decisio	4.49	.65	•			.92** *	(.82)																		
i	n making skills Enterprising	4.41	.61				.93**	.80**	(.79)																	
	skills Analytical thinking skills	4.63	.85				.81**	.62**	.66**	(.89)																
}	Global/moral citizenship	4.80	.46	.08	- .00 3	.02	.81** *	.82** *	.71** *	.63** *	(.90)															
	Interactive skills	4.79	.50		Ü		.77** *	.77** *	.68** *	.60** *	.96** *	(.87)														
	Presenting/ applying info skills	4.60	.56				.73** *	.73** *	.67** *	.53** *	.82** *	.72** *	(.58)													
	Ethical/respons ible behaviour	5.04	.58				.54** *	.58** *	.44** *	.45** *	.71** *	.54** *	.47** *	(.66)												
	Life-long learning	4.62	.55	- .08	04	15	.81** *	.82** *	.75** *	.52** *	.83**	.81** *	.70** *	.56** *	(.87)											
	Goal-directed behaviour	4.58	.55	.00			.72** *	.66** *	.66** *	.48**	.75** *	.73** *	.84**	.49** *	.95** *	(.77)										
	Continuous learning orientation	4.67	.64				.78** *	.75** *	.75** *	.50** *	.82** *	.79** *	.67** *	.57** *	.92** *	.75** *	(88.)									
	General employability	4.66	.71	- .24 **	.04	.07	.48** *	.43** *	.42**	.44**	.53** *	.50** *	.43**	.43**	.44** *	.40**	.43**	(.84 )								
i	Retention factors	4.18	.70	- .00	04	11	.03				.03				.03			.08	(.94)							
	Compensation	3.78	.99	2 - .11	.10	14	10	13	10	08	16	18	21*	03	08	07	11	04	.83**	(.93)						
	Job characteristics	4.24	1.00	.12	.08	05	.14	.13	.15	.10	.15	.06	.21*	.26**	.15	.10	.20*	.09	.50** *	.25*	(.67)					
	Training and development opportunities	4.52	1.03	.03	15	- .00 3	.06	.06	.06	.02	.11	.07	.10	.17	.09	.02	.16	.07	.82** *	.53** *	.39**	(.89)				
	Supervisor support	4.70	.97	.16	.15	.17	.03	.01	.01	.09	.09	.06	02	.20*	02	11	.09	.01	.62** *	.33**	.40**	.47** *	(.80)			
	Career opportunities	4.13	.66	- .06	- .24 *	.02	.02	.08	.01	02	.10	.11	.10	.13	.08	.08	.09	.12	.77** *	.45** *	.35**	.68** *	.37** *	(.76)		
	Work/life balance	4.13	1.21	.21	05	02	03	03	01	04	.05	.06	.00	.03	.03	.03	.01	15	.35**	.12	.02	.26**	.16	.15	(.84	
! !	Organisational commitment	4.12	1.29	- .06	08	11	.05	.07	.02	.05	.07	.02	.01	.21*	.09	.10	.06	02	.69** *	.62** *	.14	.53** *	.23*	.46** *	.17	(

Notes: N = 100. \*\*\* $p \le .001$ ; \*\*  $p \le .01$ ; \* $p \le .05$ . Reliability coefficients are indicated in brackets.

### 3.3.2. Inferential statistics

In order to investigate the second empirical aim of the study, each of the retention factors were used as dependent variables in linear regression models with the GSAS and GEM variables as independent variables.

## 3.3.2.1. Stepwise regression analysis

The second empirical research aim sought to assess whether the graduate skills and attributes of individuals and their self-perceived employability significantly predict their satisfaction with the factors influencing their retention (H2). A stepwise regression analysis was performed in terms of each RFS subscale (that is, seven regression models were computed) with the GSAS and general employability variables as the independent variables and the RFS subscales as the dependent variables. The stepwise regression procedure defines an *a posteriori* order based on the relative uniqueness of the variables in the sample at hand. The procedure is designed to select from the group of independent variables in each model the one variable at each stage which makes the largest contribution to  $R^2$ . The program stops admitting independent variables into the equation when no independent variable makes a contribution at  $p \le 0.05$  (Tabachnick & Fidell, 2007).

The stepwise regression models in terms of the following RFS variables did not yield any significant results: training and development opportunities, supervisor support, career opportunities and work/life balance. This is not surprising as the correlation analysis, presented in Table 3.4, indicated no significant relationship between these retention factors subscales and the subscales of the GSAS and general employability. Three significant stepwise regression models only were yielded. These included compensation, job characteristics and organisational commitment as the dependent variables. The outcome of the stepwise regression analysis for each of these three RFS variables is presented in Table 3.5 (compensation), Table 3.6 (job characteristics) and Table 3.7 (organisational commitment).

Table 3.5.

Stepwise Regression Analysis Results: Compensation as Dependent Variable and Presenting/Applying Information Skills as Independent Variable

	Unstandardised Coefficients				р	Model Summary				
	В	Std. Error	Beta	-	-	F	р	R Square	Adjusted R Square	
(Constant)	5.5	0.81		6.76	.00	4.55	.04	.04	.04	
Presenting/applying info skills	37	.18	21	-2.13	.04					

As shown in Table 3.5, the stepwise regression results indicated that only one of the subscales of the GSAS (presenting/applying information skills) significantly predicted compensation. In line with the negative correlation presented in Table 3.4, the beta value ( $\beta = -.21$ ) was negative for presenting/applying information skills. While the model is significant at the 95% level (p = 0.04), the independent variable (presenting/applying information) predicts approximately 4% only ( $R^2 = .04$ ; P = .04; small practical effect) of the variance in the dependent variable.

Table 3.6 presents the result from the stepwise regression analysis for job characteristics. The stepwise regression analysis revealed that only ethical/responsible behaviour ( $\beta = .26$ ) predicted the job characteristics significantly. The adjusted R<sup>2</sup> value of 0.06 indicated that the model predicted approximately 6% of the variance in the dependent variable.

Table 3.6.

Stepwise Regression Analysis Results: Job characteristics as Dependent Variable and Ethical/Responsible Behaviour as Independent Variable

	Unstandardised Standardised t Coefficients Coefficients		p		Model Summary					
	В	Std. Error	Beta			F	р	R Square	Adjusted R Square	
(Constant)	1.99	.85		2.35	.02	7.09	.01	.07	.06	
Ethical/responsible behaviour	.45	.17	.26	2.66	.01					

Table 3.7 presents the result from the stepwise regression analysis for organisational commitment. The stepwise regression analysis revealed that only ethical/responsible behaviour ( $\beta = .26$ ) predicted the job characteristics significantly. The adjusted  $R^2$  value of 0.06 indicated that the model predicted approximately 6% of the variance in organisational commitment.

Table 3.7.

Stepwise Regression Results: Organisational Commitment as Dependent Variable and Ethical/Responsible Behaviour as Independent Variable

	Unstandardised Coefficients				p		Mode	Model Summary		
	В	Std. Error	Beta			F	р	R Square	Adjusted R Square	
(Constant)	1.99	.85		2.35	.02	4.55	.04	.07	.06	
Ethical/responsible behaviour	.45	.17	.26	2.66	.01					

The stepwise regression analysis provided partial support for research hypothesis H2: The graduate skills and attributes of individuals and their self-perceived employability significantly and positively predict their satisfaction with the factors influencing their retention. In short, the results revealed that presenting/applying information skills significantly and negatively predicted compensation and ethical/responsible behaviour significantly and positively predicted job characteristics and organisational commitment. General employability did not act as a significant predictor of the participants' satisfaction with retention factors.

## 3.3.2.2. Moderated hierarchical regression analysis

The third empirical research aim sought to assess whether the graduate skills and attributes of individuals significantly moderated the relationship between their self-perceived employability and their satisfaction with the factors influencing their retention (H3). Testing research hypothesis H3 involved the following steps:

Step 1: Assessing the interaction effects of the GSAS higher order factors (scholarship, global/moral citizenship and life-long learning) in relation to general employability

Step 2: Assessing the interaction effects of the GSAS higher order factors (scholarship, global/moral citizenship and life-long learning) and general employability in relation to the retention factors.

Step 3: Interaction effects of scholarship and global/moral citizenship in relation to general employability

Table 3.8 presents the results of the moderated hierarchical analysis of the GSAS higher order factors (scholarship, global/moral citizenship and life-long learning) in relation to general employability (dependent variable). In view of the small sample size (N = 100), the significance level was set at p = .10 for interpreting the results of the moderated hierarchical analysis.

Table 3.8.

Moderated Regression Analysis Examining the Interactions between Graduate Skills and Attributes and General Employability

Predictor variables	В	SE	ß	f <sup>2</sup>
Model 1				
Global/moral citizenship	.64	.23	.42***	
Scholarship	.14	.17	.12	
Global/moral citizenship x	.15	.18	.07	
scholarship				
Model statistics				
$R^2$	.27			.03
F	13.34***			
Model 2				
Life-long learning	.23	.19	.18	
Scholarship	.35	.18	.30**	
Life-long learning x	.28	.17	.15*	
scholarship				
Model statistics				
R <sup>2</sup>	.24			
F	11.14***			

Notes: N = 100. \*\*\*  $p \le .01$ ; \*\*  $p \le .05$ ; \* $p \le .10$ 

Table 3.8 shows that, in terms of the main effects, global/moral citizenship (model 1) acted as a significant positive predictor of general employability ( $\beta = .42$ ;  $p \le .01$ ) and scholarship (model 2) acted as a significant predictor of general employability ( $\beta = .30$ ;  $p \le .05$ ). Scholarship also acted as significant moderator of the global/moral citizenship – general self-perceived employability relation ( $\beta = .18$ ;  $\beta \le .07$ ). No significant interaction effect was detected in terms of scholarship in the global/moral citizenship – general employability relation (model 1).

In terms of the relationship between life-long learning and general employability (model 2), scholarship only acted as significant moderator in the life-long learning- general employability relation (G = .15;  $p \le .09$ ). The model explained 24% ( $R^2 = .24$ ;  $\Delta R^2 = .02$ ; Fp = .09;  $f^2 = .03$ ; small practical effect) of the variance in general employability.

A simple slope test was conducted to investigate the nature of the significant interactions. As illustrated in Figure 3.8, scholarship (model 2) significantly moderated the relationship between life-long learning and general employability. The relationship between life-long learning (independent predictor variable) and general employability (dependent/criterion variable) was significantly stronger for those participants with high levels of scholarship skills and attributes as compared to those with low levels of scholarship skills and attributes. This suggests that scholarship skills and attributes may predispose the individual toward engaging in behaviours that contribute to his or her general employability in the life-long learning/employability relation.

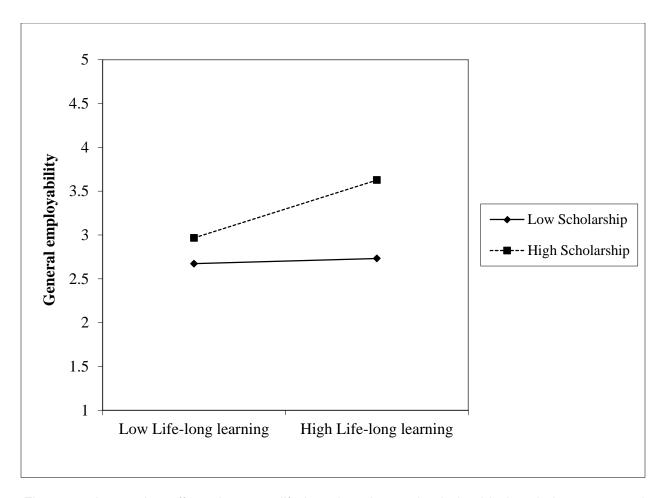


Figure 3.8 Interaction effects between life-long learning and scholarship in relation to general employability

Step 2: Interaction effects of scholarship, global/moral citizenship, life-long learning and general employability in relation to retention factors

Step 2 assessed the interaction effects of scholarship, global/moral citizenship, life-long learning and general employability in relation to retention factors. Three regression models were performed. As illustrated in Table 3.9, none of the models was significant.

Table 3.9.

Moderated Regression Analysis Examining the Moderating Effect of Graduate Skills and Attributes in the General Employability/Retention Factor Relation

Variables	Model 1	Model 2	Model 3	
	ß	ß	ß	
General employability	02			
Global/moral citizenship	06			
General employability x	.21*			
global/moral citizenship				
R <sup>2</sup>	.05			
F	.75			
General employability		01		
Scholarship		05		
General employability	x	.26**		
scholarship				
R <sup>2</sup>		.08		
F		1.07		
General employability			06	
Life-long learning			.01	
General employability	x		.17	
life-long learning				
R <sup>2</sup>			.04	
F			.54	

Notes: N = 100. \*\*\*  $p \le .01$ ; \*\*  $p \le .05$ ; \* $p \le .10$ 

The moderated hierarchical regression results did not provide supportive evidence for research hypothesis H3: The graduate skills and attributes of individuals significantly moderate the relationship between their self-perceived employability and their satisfaction with the factors influencing their retention.

In summary, the scholarship graduate skills and attributes had a significant interaction effect in the life-long learning/employability relation, but no interaction effects in the employability/retention factors relation.

## 3.3.3. Inferential statistics: tests for significant mean differences

This section seeks to address the following hypothesis (H4): Individuals of different gender and qualification levels differ significantly regarding their graduate skills and attributes, self-perceived employability and satisfaction with retention factors.

The sample in the study consisted of a predominantly homogeneous group in terms of age (17 - 29 years = 96% - 96 participants) and race (black participants = 93% - 93 participants). Accordingly, the study was interested in exploring differences between males and females and the level of qualifications of individuals only.

#### 3.3.3.1. Gender

The differences between males and females were investigated using a t-test for independent means. The results are presented in Table 3.10. Levene's test for equality of means is also included in the table, in addition to the t-test results. Levene's test for equality of variance found that equal variances could be assumed for all but two subscales, namely, interactive skills and work-life balance. The amended t-test values, for equal variances not assumed, were used for these scales.

It was found that males and females differed significantly on the GEM (p = .02). However, there were no significant differences that could be established between males and females on the GSAS scale. In terms of retention factors, males and females differed in terms of one retention factor, namely, work–life balance (p = .25). The mean scores of men and women are presented in Table 3.11 for these two significant results only.

Table 3.10.

Comparison of Gender Groups on GSAS, GEM and RFS: T-test for Independent Means

		Levene's Equality of '		t-test for	Equality of	Means
		F	Sig.	t	df	Sig. (2- tailed)
	Graduate Skills a	and Attributes	Scale			
Problem solving/decision making skills	Equal variances assumed	1.80	.18	1.47	98	.14
Enterprising skills	Equal variances assumed	.70	.41	1.67	98	.08
Analytical thinking skills	Equal variances assumed	.25	.62	.53	98	.60
Interactive skills	Equal variances not assumed	7.54	.01	17	84.95	.87
Presenting/applying information skills	Equal variances assumed	1.00	.32	.18	98	.86
Ethical/responsible behaviour	Equal variances assumed	.12	.73	26	98	.80
Goal-directed behaviour	Equal variances assumed	1.12	.29	1.39	98	.17
Continuous learning	Equal variances assumed	.00	.97	.66	98	.51
	Graduate Emp	loyability Meas	sure			
GEM	Equal variances assumed	.024	.88	2.41	98	.02
	Retention	Factor Scale				
Compensation	Equal variances assumed	2.23	.14	.82	98	.42
Job characteristics	Equal variances assumed	3.34	.07	-1.03	98	.31
Training and development opportunities	Equal variances assumed	.44	.51	34	98	.74
Supervisor support	Equal variances assumed	.22	.64	-1.41	98	.16
Career opportunities	Equal variances assumed	.03	.86	.24	98	.81
Work/life balance	Equal variances not assumed	4.65	.034	-2.28	92.23	.03
Organisational commitment	Equal variances assumed	3.72	.06	.77	98	.45

Men scored significantly higher than women on the GEM (men mean = 4.83, women mean = 4.50). However, women scored significantly higher than men in terms of work-life balance (men mean = 3.86, women mean = 4.40). Table 3.11 presents the means for males and females where significant differences were observed between the GEM and RFS subscales.

Table 3.11.

Means of Males and Females on the GEM and RFS Subscales where Significant Differences were Found

Gender		N	Mean	Std. Deviation
GEM	Male	49	4.83	.68
	Female	51	4.50	.70
Work/life balance	Male	49	3.86	1.30
	Female	51	4.40	1.05

## 3.3.3.2. Qualification level

The qualification groups included the following categories: Matric (n = 2), Diploma (n = 8), Degree (n = 49) and Postgraduate degree (n = 40). In view of the small sample sizes, the categories for Matric, Diploma and Degree/postgraduate degree were combined for the purposes of the analysis.

An ANOVA test was performed to compare the scores of these three groups on the subscales. The results are presented in Table 3.12. The table shows that none of the subscales showed any significant differences between the levels of qualification (p > .05).

Table 3.12.

Comparison of Qualification Levels on GSAS, GEM and RFS: Analysis of Variance.

	t-test fo	or Equality of	Means
Graduate Skills and	Mean Square	F	Sig.
Problem solving/decision making skills	.21	.50	.61
Enterprising skills	.20	.53	.59
Analytical thinking skills	.48	.66	.52
Interactive skills	.06	.23	.72
Presenting/applying information skills	.21	.60	.54
Ethical/responsible behaviour	.05	.16	.86
Goal-directed behaviour	.54	1.78	.17
Continuous learning	.60	1.50	.23
Graduate Employ	ability Measure		
GEM	.04	.08	.93
Retention Fa	ctor Scale		
Compensation	.83	.88	.42
Job characteristics	.95	.97	.38
Training & development opportunities	.23	.21	.81
Supervisor support	2.19	2.38	.10
Career opportunities	.17	.23	.80
Work/life balance	.62	.42	.66
Organisational commitment	.69	.42	.66

In summary, the tests for significant mean differences provided supportive evidence for H4 in that males and females were found to be significantly different with regard to general employability. In terms of retention factors, males and females were found to be significantly different with regard to work/life balance. No significant differences were found between males and females in terms of graduate skills and attributes.

Thus, in terms of qualification levels, there were no significant differences found for all three of the measuring instruments.

# 3.3.4. Decisions regarding the research hypotheses

The statistical analysis of the data and the decisions taken regarding the research hypotheses are explained in Table 3.13. The criterion  $p \le .05$  confidence level was used as a basis on which either to accept the hypotheses or to reject the null hypotheses. Due to the small sample size (N = 100) the significance level was set at p = .10 for interpreting the results of the moderated hierarchical analysis.

In terms of H1, the null hypothesis was rejected because significant relationships that met the criteria set were observed. In terms of H2, the null hypothesis was also rejected. The third hypothesis was rejected as no correlations could be established between self-perceived employability and retention factors. The fourth hypothesis was accepted as some significant differences were observed in instances in which the criteria set were met. In summary, three hypotheses were accepted and one rejected in the study.

Table 3.13.

Overview of Decisions Taken Regarding the Research Hypotheses

#	Hypotheses	Supportive	Decision
		evidence	
H1	There is a positive and significant relationship between	Partial supporting	Accepted
	individuals' gender, race, level of qualification, graduate skills	evidence	
	and attributes, self-perceived employability and their satisfaction		
	with the factors influencing their retention.		
H <sub>0</sub> 1	There is no positive and significant relationship between		Rejected
	individuals' gender, race, level of qualification, graduate skills		
	and attributes, self-perceived employability and their satisfaction		
	with the factors influencing their retention.		
H2	The graduate skills and attributes and self-perceived	Partial supporting	Accepted
	employability significantly and positively predict their satisfaction	evidence	
H <sub>0</sub> 2	with the factors influencing their retention.  The graduate skills and attributes and self-perceived		Rejected
1102	employability do not significantly and positively predict their		Rejected
	satisfaction with the factors influencing their retention.		
Н3	The graduate skills and attributes significantly moderate the	No supporting	Rejected
	relationship between their self-perceived employability and their	evidence	
	satisfaction with the factors influencing their retention.		
H₀3	The graduate skills and attributes do not significantly moderate		Accepted
	the relationship between their self-perceived employability and		
	their satisfaction with the factors influencing their retention.		
H4	Individuals of different gender and qualification levels differ	Partial supporting	Accepted
	significantly regarding their graduate skills and attributes, self-	evidence	
	perceived employability and satisfaction with retention factors.		
H <sub>0</sub> 4	Individuals of different gender and qualification levels do not		Rejected
	differ significantly regarding their graduate skills and attributes,		
	self-perceived employability and satisfaction with retention		
	factors.		

## 3.4. DISCUSSION

The objectives of the study were to: (1) investigate the nature and direction of the relationship between the gender, race, level of qualifications, graduate skills and attributes, employability and satisfaction with retention factors in a sample of graduate trainees in a retail organisation (H1),

(2) explore whether graduate skills and attributes and self-perceived employability significantly and positively predict satisfaction with the factors influencing retention (H2), (3) explore the nature of the relationship between the independent variable (self-perceived employability) and the dependent variable (retention factors satisfaction) when moderated by graduate skills and attributes (moderating variable) (H3), (4) assess whether individuals of different gender and qualification levels differ significantly regarding their graduate skills and attributes, self-perceived employability and satisfaction with retention factors (H4).

Overall, the results showed that general self-perceived employability is more a function of graduateness than of retention and that graduateness influences satisfaction with retention factors.

## 3.4.1. The biographical profile of the sample

The sample consisted of a predominantly homogeneous group in terms of age (17–29 years = 96%) and race (black participants = 93%). Thus, the age group in the sample represented the emerging adulthood life stage – the 18 to 29 year old age period (Arnett, 2000; 2015). Arnett argues that the emerging adulthood stage is distinct from adolescence and young adulthood and is characterised by change and the exploration of possibilities. In industrialised societies, young people have exchanged settling into permanent adult roles in their early twenties to obtaining higher levels of education. This is typically followed by their finding employment, as opposed to parenthood and marriage (Arnett, 2000; 2015). The majority of the participants in the sample were starting out in their careers and they had a postgraduate degree.

The sample was evenly distributed between males (49%) and females (51%). The sample distribution in terms of gender and race (predominantly black people) was representative of the affirmative action/employment equity strategy of the organisation. The majority of the participants had a minimum of a university degree and had been employed for less than five years with the organisation. Aligning to this fact, most of the participants were at the operational level within the organisation, with very few in middle to executive management.

In terms of the graduateness skills and attributes, the participants scored relatively highly. The ethical/responsible behaviour scores were the highest with a mean score of 5.04, while the scores for the dimension of enterprising skills were the lowest with a mean score of 4.41. General employability was treated as a single measure and the scores were high overall with a mean score of 4.66.

The retention factors mean scores were also relatively high, with the highest mean score obtained for supervisor support at 4.70 and the lowest score for compensation at 3.78.

As a subset of graduate skills and attributes or graduateness (Coetzee, 2012), employability is viewed as an important driver of the self-directed career behaviours which assist individuals to secure and retain employment (Coetzee & Stoltz, 2015; Schreuder & Coetzee, 2011). The high scores of the participants had implications for retention practices in this specific organisation. The majority of the participants of the study were aged below 30. High levels of graduateness and employability potentially implied that this group of employees would believe they were sufficiently skilled to secure and retain employment. This, in turn, may mean that they are a flight risk to the organisation.

Accordingly, suitable and sustainable programmes are required to effectively develop, engage and retain this group of employees (Bluen, 2013). It may also be inferred that this group of employees posed a higher retention risk because they were in the emerging adult phase in which self-exploration and discovery are dominant activities (Arnett, 2015). In addition, the literature review also indicated that the dominant characteristics of the 21st century world of work, in particular, the higher mobility of employees, may exacerbate this effect (Coetzee & Roythorne-Jacobs, 2012).

Bluen (2013) explains that it is more difficult for organisations in emerging markets to compete effectively with their global counterparts for high potential talent. The competition for high potential talent in emerging markets such as South Africa, Brazil and India is so rife that it has resulted in poaching practices between multinational companies (Bluen, 2013). In some instances younger graduate professionals are able to command high salaries which make them expensive both to attract and retain. Accordingly, the low compensation scores with regard to the retention factors measure are an issue of concern.

# 3.4.2. The relationship between gender, race, qualification levels, graduate skills and attributes, self-perceived employability and retention factors

# 3.4.2.1. Significant and noteworthy relationships

The participants' graduate skills and attributes were positively associated with their general selfperceived employability. This, in turn, suggests those participants who felt confident about their graduate skills and attributes were also more likely to feel confident about their employability. This finding is in agreement with the assertion of Coetzee et al. (2012) that employees in the 21st century world of work are faced with making choices about both their careers and their development independent of their employers. In light of this finding, it appears reasonable to assume that that those participants who, for example, felt confident about their problem solving and decision making skills would also view themselves as more employable. This further corroborates the view of Rothwell and Arnold (2007) that life-long learning, effective job search skills and individual knowledge/skills are all characteristics of employable individuals. A positive relationship was also hypothesised between graduate skills and attributes and general employability based on the literature review. Coetzee and Stoltz (2015) and Lumley et al. (2011) found that certain psychological attributes as well as the ability of individuals to be adaptable and proactive contributed to their retention within organisations. In view of the fact that graduateness may be defined in a number of ways, including personal attributes, transferable and generic skills, it would have seemed plausible that its relationship with general employability could be hypothesised.

The graduate skills and attributes showed some positive associations with the participants' satisfaction with retention factors. The results suggested that those participants who scored highly on the personal attribute of presenting/applying information skills were also likely to be less satisfied with their salary and benefits than they otherwise have been. Nielson and Smith (2014) posit that personality traits, specifically extraversion, have an indirect impact on satisfaction with salaries. This is corroborated by Spurk and Abele (2011) who also found that the big five personality traits (openness, conscientiousness, extraversion, agreeableness and introversion), with the exception of one, exert both a direct and an indirect influence on annual salary. Extroverts were identified as being more likely to be successful in their careers and to earn higher salaries as compared to introverts. Both the study of Nielson and Smith (2014) and that of Spurk and Abele (2011) acknowledge that multiple factors and variables affect the relationship between personality traits and compensation (Spurk & Abele, 2011).

The study results further indicated that the higher the respondents scored on ethical/responsible behaviour, the higher they also scored on their satisfaction with their job characteristics and the support provided by their supervisors while they were also likely to be highly committed to the organisation. This finding corresponds with the research conducted by Obalola, Aduloju, and Olowokudejo, (2012) which found that ethical values were significant predictors of organisational commitment. Thus, organisations which foster a culture of ethical business practices are more likely to realise positive organisational outcomes (Obalola et al., 2012).

Those respondents who scored high on continuous learning were also likely to be highly satisfied with the characteristics of their jobs. Maurer (2000) posits that successful learning and development interventions which are implemented by organisations depend on the level of interest and participation on the part of employees. Employees who believe that their level of skill in relation to the job is important are more likely to review their capabilities frequently and to engage in more learning and development activities (Maurer, 2000; Raemdonck, Gijbels, & Van Groen, 2014).

In addition, complex tasks within a role are viewed as providing an opportunity to learn and increase mastery in particular tasks and this may result in improved performance compared to that of their colleagues (Maurer, 2000). A learning orientation is characteristic of the knowledge worker economy and facilitates the deployment of transferable skills in a constantly changing organisational context (Raemdonck et al., 2014). Raemdonck et al. (2014) posit that learning within the organisational context occurs as a result of the interaction between job characteristics and the individual concerned. Job characteristics have also recently been found to contribute to positive outcomes such as self-confidence, well-being and active learning behaviour (Raemdonck et al., 2014).

# 3.4.2.2. Statistically non-significant and counter-intuitive findings

The general employability of the participants did not significantly relate to the participants' satisfaction with retention factors. Contrary to the research literature, none of the retention factors scale variables correlated significantly with general employability. Thus, general employability did not act as a significant predictor of the participants' satisfaction with retention factors. Based on the literature review, it was hypothesised that employees with higher levels of employability would also have higher levels of graduate skills and attributes and that this would lead to their retention in organisations.

Thus, it is clear that organisations should expend considerable effort on trying to attract and retain these employees in order to remain competitive in a constantly changing business environment (Gupta, 2014). Notwithstanding the apparent support in the literature for hypothesis 2, the study was not able to find evidence for both these assertions. The results suggest that general self-perceived employability is more a function of graduateness than of retention, while graduateness positively relates to retention factors.

It is imperative that the global/moral citizenship skills and attributes of graduates are taken into account in the design of retention practices related to compensation, job characteristics and organisational commitment.

# 3.4.3. Graduate skills and attributes as a moderating variable between self-perceived employability and retention factors

It was not possible to establish a relationship between self-perceived employability and retention factors. The results indicated no interaction effects between the self-perceived employability and graduate skills and attributes of the participants in relation to their satisfaction with the retention factors. There was limited evidence in the literature review to suggest that the graduateness and employability of individuals may relate to their satisfaction with retention factors.

No correlations were found between any of the subscales of the retention factors scale and the graduate employability measure. A strong positive relationship was hypothesised but could not be proved.

However, the results indicated significant interaction effects between the life-long learning and scholarship skills and attributes and general employability. These findings suggest that the scholarship skills and attributes may predispose the individual toward engaging in behaviours that contribute to his or her general employability in the life-long learning/employability relation. Scholarship skills and attributes refer to the ability of an individual to connect theory with practical knowledge in the way in which the individual approaches problem solving in either society or in the organisational context (Coetzee, 2014). Coetzee posits that scholarship includes cognitive processes such as analysing information, making decisions, creative thinking and reflective and critical thinking.

Furthermore, Coetzee suggests that the characteristics of lifelong learners involve a commitment to continuous reflection on new knowledge gained in order to advance the understanding of the world. During reflection, new knowledge is critically evaluated against prior experiences while goal-directedness is used to proactively engage in the acquisition of new knowledge. Coetzee (2014) found that graduate attributes such as a continuous learning orientation, goal-directed behaviour and enterprising skills related to increased academic self-directedness. In addition, research conducted by Botha et al. (2015) indicates that individuals with high levels of employability are future-focused, independent and committed to lifelong learning.

It may, therefore, be concluded that the results suggest that graduate skills and attributes are more a function of employability than of retention.

## 3.4.4. Significant differences between the relevant biographical variables

## 3.4.5.1. Gender

The present study showed that no significant differences that could be established between males and females regarding their graduate skills and attributes. On the other hand, research conducted by Coetzee (2012) showed that the female participants scored consistently significantly higher than the males on the eight graduateness subscales.

In terms of employability, the study found that the males and females differed significantly in respect of the levels of employability; with the men scoring significantly higher than the women on the GEM with a mean of 4.83, while women had a mean score of 4.50.

Contrary to this finding, Rothwell and Arnold (2007) found that women demonstrated a statistically significant higher self-perceived employability as compared to men. This was mainly in terms of external employability. However, in terms of internal employability, the differences between males and females were not found to be statistically significant. In their study Van der Heijden et al. (2009) found a negative relationship between gender and employability in their participants younger than forty, with men scoring higher than women. This result corroborates the findings of this study.

In terms of retention factors, the males and females differed in terms of one retention factor only, namely "work-life balance" with the women scoring significantly higher than the men with a mean score of 4.40, while the mean score of the men was 3.86. According to Govaerts et al. (2011), the research conducted into gender has been mainly inconclusive when considering the influence of gender on retention. Nevertheless, Kodikal et al. (2012) reported that some studies have found females to demonstrate a higher intent to leave compared to males while the findings of other studies were to the contrary. Govaerts et al. (2011) also reported that some research has shown no relationship between turnover and gender.

## 3.4.5.2. Qualification level

The results of the study showed that there were no significant differences on all the scales as influenced by the participants' level of qualifications. This finding is in alignment with the findings of the study conducted by Rothwell et al. (2009), namely, that there were no statistically significant differences in the participants' self-perceived employability scores as based on their level of qualifications. This finding aligns to a degree with the findings of Rothwell and Arnold (2007) that there were no statistically significant differences between those participants who had degrees and those who did not have degrees. This trend was observed for both internal and external employability. In their study, Kodikal et al. (2012) found that more educated employees displayed a higher inclination to seek new job opportunities as compared to their counterparts with lower levels of education.

## 3.4.5.3. Statistically non-significant and counter-intuitive findings

The present study indicated no significant differences regarding the self-perceived strength of graduate skills and attributes between the male and female participants. This finding is contrary to the literature review which revealed that females tend to score significantly higher than males in terms of graduate skills and attributes (Coetzee, 2012). According to Govaerts et al. (2011), the findings of studies have been mainly inconclusive as regards retention and gender.

In relation to level of qualifications, Rothwell and Arnold (2007) found that the level of qualifications made no significant difference to the level of employability of individuals. On the other hand, Kodikal et al. (2012) found that individuals with higher levels of qualifications had a higher retention risk compared to individuals with lower levels of qualifications. This study found no significant relationships between qualification levels and graduate skills and attributes and employability.

## 3.4.5. Conclusions: implications for practice

The overall findings of the study provide evidence that graduate skills and attributes relate positively to general employability. This finding may potentially have implications in respect of the way in which organisations attract and engage employees who are in the emerging adulthood phase. Graduates demonstrating high levels of graduate skills and attributes (self-perceived graduateness) and high self-perceived employability are likely to be viewed by organisations as high potential employees. This may, in turn exacerbate the competition as regards talent in a global community that is characterised by a scarcity of skills, the higher career mobility of employees than before and the brain drain.

Although general employability did not significantly relate to the participants' satisfaction with retention factors, it was positively associated with the participants' graduate skills and attributes.

The relationship between life-long learning and general employability was significantly stronger for those participants with high levels of scholarship skills and attributes as compared to those with low levels of scholarship skills and attributes. This suggests that scholarship skills and attributes may predispose the individual toward engaging in behaviours that contribute to his or her general employability in the life-long learning/employability relation.

The study further provided evidence that the global/moral citizenship graduate skills and attributes related positively to some of the retention factors: presenting and applying information skills which relate to strong communication skills positively predicted satisfaction with compensation, while ethical/responsible behaviour related positively to satisfaction with job characteristics and organisational commitment.

When considering that the participants' self-perceived graduateness (strengths regarding their graduate skills and attributes) is positively associated with their self-perceived employability, management should take note of how the graduate trainees' graduateness influence their satisfaction with compensation, job characteristics and their organisational commitment. Joao and Coetzee (2011) indicated that both job satisfaction and organisational commitment play an important role in influencing the intention of employees to leave their organisations. Research has shown that, as compared to employees with high job satisfaction and organisational commitment, employees who are experiencing low job satisfaction and organisational commitment are more likely to intend to leave their organisations and this, in turn, makes them a higher retention risk than may otherwise have been the case (Joao & Coetzee, 2011).

It is believed that the findings of this study will contribute valuable knowledge to the existing body of knowledge and that these findings will provide a basis upon which further questions may be asked in order to obtain a better understand of the associations between graduateness, employability and retention of graduates than is presently the case. The conclusions drawn from the findings are discussed in more detail in Chapter 4. The findings of the study also offer some guidelines that practitioners may use to inform the attraction, selection and retention practices relating to graduates. These recommendations are discussed in the following chapter.

# 3.4.6. Limitations of the study

The main limitations of the study relate to the size and representativeness of the sample and to the generalisation of the findings to the wider South African population. The research methodology used a non-probability, purposive sampling strategy. This strategy is characterised by limitations related to the size and representativeness of the sample and the generalisability of the findings. These limitations are further exacerbated by the biographical profile of the sample which resulted in limited diversity in the data which was collected. It should further be noted that the small sample size resulted in small practical effects in a number of the statistical analyses conducted. These limitations will be discussed in more detail in Chapter 4. Nevertheless, the knowledge contributed by this study provides a sound foundation on which to further investigate the relationships between the main variables, graduate skills and attributes and employability and how these variables influence the retention of graduates in industry. The obvious paucity of research in into these variables is a good reason for further investigation which would, in turn, contribute to the generation of new knowledge.

## 3.4.7. Recommendations for future research

In view of the limitations mentioned above, the core recommendations for future studies would be to ensure that the research limitations which were identified are addressed. A random sampling methodology would enable the generalisability of the findings and their application to a wider population and an increased diversity in data would enable a deeper statistical analysis than was the case in this study. The literature review revealed that employability is made up of two components (internal and external) and it is, thus, further recommended that this fact be taken into account in the gathering and analysis of data. These recommendations will be discussed further in Chapter 4.

## 3.5. CHAPTER SUMMARY

This chapter discussed the key focus of the study, its context and the trends observed in the literature review. This was followed by a presentation of the outcomes of the statistical analyses in light of the hypotheses which had been formulated. The study findings were interpreted and a comprehensive discussion ensued during which key conclusions were highlighted. The limitations of the study were discussed as were recommendations for future research. Chapter 4 contains a more comprehensive discussion of the research findings, the conclusions drawn, the limitations of the study as well as the value add of the study to the retention practices of organisations.

## **CHAPTER 4: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS**

This chapter discusses the key conclusions which were drawn based on the outcomes of the present study, the limitations of the study and also recommendations for the practical application of the findings for improving retention practice, as well as future research in the field.

#### 4.1. CONCLUSIONS

This section contains a comprehensive discussion on the way in which the conclusions were formulated based on both the literature review and the empirical aims of the study.

#### 4.1.1. Conclusions in relation to the literature review

The three main aims of the literature review were to (1) conceptualise graduate skills and attributes, self-perceived employability and retention factors from a theoretical perspective and to conceptualise the theoretical relationships between these concepts. (2) to explore how age, race, gender and qualification levels influence the graduate skills and attributes, self-perceived employability and retention factors of individuals and (3) to critically evaluate the implications of the relationships between the main variables under study with regard to retention practices.

4.1.1.1. Literature review aim one: conceptualise graduate skills and attributes, self-perceived employability and retention factors from a theoretical perspective and to conceptualise the theoretical relationships between these concepts.

The literature review revealed a paucity of research in the South African context concerning a study of these three constructs. The outcomes of the literature review were based on logical linkages which emerged from the various studies which were reviewed. It was further clear from the literature review that the concept and definition of graduate skills and attributes requires standardisation as there appeared to be several variations of the way in which this concept is conceptualised and interpreted globally. Nevertheless, it was found that, in many ways, these interpretations and meanings appeared, ultimately, to allude to similar elements with differences regarding where the emphasis is placed. In other words, significant overlap was observed.

It was further noted from the literature review that certain of the definitions alluded to linkages between graduate skills and attributes and employability in some of the definitions, for example, the definition proposed by Steur et al. (2012). This linkage is further supported by Coetzee (2011, 2014) and McNeil et al. (2012). These studies all view graduate skills and attributes as indicators of employability. It would, therefore, appear plausible that a strong positive relationship between the two concepts may be hypothesised. In terms of employability, similar trends were observed in the literature relating to the lack of clarity in the conceptualisation and measurement of the concept. Linkages between employability and graduate skills and attributes are also supported by Dacre Pool and Qualter (2013), Rothwell and Arnold (2007) and De Vos et al. (2011), with these researchers positing that employability results from the acquisition of the knowledge, skills and abilities which are considered important by employers.

In terms of retention, it emerged from the literature review that there was, in fact, consensus in the way in which the concept is defined and conceptualised. The majority of definitions make reference to the following main elements: efforts by an organisation / to prevent high performing individuals / from leaving / in order to meet organisational objectives and remain competitive. However, there appear to be few theoretical models and frameworks for measuring the concept empirically.

For the purposes of this study graduate skills and attributes were defined as those generic, transferable meta-skills and personal attributes which contribute to the employability and work readiness of an individual (Coetzee, 2012). Graduateness may be regarded as an indicator of the quality of learning outcomes achieved at university and the relevance of the skills acquired by students to the world of work (Coetzee et al. 2012). According to Coetzee et al. (2012) student graduateness as viewed by the University of South Africa's (UNISA) College of Economic and Management Sciences (CEMS), consists of the following skills which, in turn, make up key constructs in the graduateness model: problem-solving/decision-making skills, enterprising skills and analytical skills (Scholarship), ethical and responsible behaviour, presenting and applying information skills and interactive skills (Global and moral citizenship) and, finally, continuous learning orientation and goal-directed behaviour (Lifelong learning). This definition of graduate skills and attributes was found to be aligned with the intentions of this study as it is both broad and it has been used in the South African context.

Coetzee's framework of graduate skills and attributes contains characteristics similar to those proposed by Steur et al. (2012) in their model of graduateness; except that the model chosen for the purposes of this study is based on the hypothesis that reflective thinking is linked to all the other domains as indicated in Coetzee's framework of student graduateness.

Employability is defined as the extent to which an individual may obtain the new employment that they desire or sustain their current employment (Rothwell & Arnold, 2007). This definition does not deny the multifaceted nature of employability as it emerged from the literature review (discussed above). This definition of employability was chosen for the purposes of this study as it provides a method for measuring the concept as well as previous data that may have been referred to. It is acknowledged that the concept of employability has its foundations in several attributes, including; individual knowledge and skills, lifelong learning, effective job search skills and the display of career management behaviours (Rothwell & Arnold, 2007).

Rothwell and Arnold (2007) developed the self-perceived employability scale. This employability framework takes into account the fact that employability comprises more than just individual attributes. Labour market factors, both internal and external, influence self-perceived employability. Employability is also focused on an individual's current assessment of how the individual they believe they can navigate the employment landscape in the future (Rothwell & Arnold, 2007). The self-perceived employability measure is based on the definition of employability as proposed by Rothwell and Arnold (2007) and is made up of 11 items which are designed to test various aspects of the employability model. The model consists of four quadrants along the following four dimensions: internal labour markets, external labour markets, personal attributes as well as occupational attributes. Emphasis was placed on the dimensions of the external and the internal labour markets.

Staff retention may be regarded to as the effort an organisation applies in order to keep in its employment those employees it has evaluated positively and who would otherwise voluntarily resign (Mengel, 2001). This definition was also adopted in the study conducted by Van Dyk et al. (2013) who further posited that organisations should aim to retain high performing, knowledgeable and skilled employees in order to maintain competitive advantage. McKeown (2002) defines retention as the systematic effort by an organisation to keep its current top performing employees and address their diverse needs through a series of policies and practices. The retention factors model of Döckel (2003) was adopted for the purposes of this study.

The model includes the following retention factors which are believed to induce organisation commitment based on an individual's satisfaction, namely, compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work/life balance and organisational commitment (Van Dyk & Coetzee, 2012). For the purposes of the study, seven of the eight factors were chosen, namely, compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, work–life balance and organisational commitment.

There appears to be a lack of specific research on the relationship between graduate skills and attributes, self-perceived employability and retention. Although various research papers focus on each of these concepts they are linked to other variables. Overall the literature review supported the theoretical linkages between graduate skills and attributes, self-employability and retention factors. However, it was not possible to find any research that has specifically studied the relationship between self-perceived employability and retention factors. According to Van der Heijden et al. (2009), enhancing the employability of employees has positive outcomes for both the employees and the organisation. Increasingly employees are required to display a broader competence package or employability than previously in order to successfully sustain their competence in a fast changing organisational context. In the constantly changing 21st century world of work, it appears plausible that, if individuals leave tertiary education with a higher set of skills and attributes which are also transferable, the more adaptable and useful they will be in a volatile organisational landscape.

4.1.1.2. Literature review aim two: explore how age, race, gender and qualification levels influence the graduate skills and attributes, self-perceived employability and retention factors of individuals.

The literature review revealed that biographical variables such as age, race, gender and level of qualifications impact on graduate skills and attributes, employability and retention factors. Overall the findings from the literature review as regards this second aim were both diverse and inconsistent and, in a number of instances, contrary to the findings of this study.

The findings of the literature review revealed inconsistencies in the relationships between the three main concepts of graduate skills and attributes, self-perceived employability and retention factors and the biographical variables of age, gender, race and level of qualifications. In some studies the female participants scored consistently significantly higher than the males on the

eight graduateness variables while the Indian participants scored higher than other race groups on seven of the factors (except for analytical thinking). In a study conducted in South Africa, participants from the coloured ethnic group scored significantly higher than the other groups when it came to the analytical thinking variable while the African participants scored significantly lower than other race groups on all of the eight graduateness factors.

Another study by Van Der Heijden et al. (2009) revealed a statistically significant negative relationship between age and overall employability. The afore mentioned study further showed that, the younger the age group, the higher the levels of self-perceived employability and, the older the age group, the lower the level of self-perceived employability. This, in turn, implies that, as compared to younger people, older people possess lower confidence with regard to finding a job outside their current organisation. In terms of gender, a study by Rothwell et al. (2009) found that women had a statistically significantly higher self-perceived employability compared to men, although mainly in terms of external employability. However, in terms of internal employability, the differences between males and females were not statistically significant. A study conducted by Rothwell et al. (2009) found that there were no statistically significant differences in the self-perceived employability of postgraduate students, while another study found that a negative relationship between gender and employability in the participants who were younger than forty, with men scoring higher than women.

Rothwell and Arnold (2007) found that there were no statistically significant differences between their participants who had degrees and those who did not have degrees. This trend was observed both for internal and external employability. A study conducted by Kodikal et al. (2012) found that demographic factors such as age, tenure, level of education, level of income, job category and gender appeared to influence employee retention. In particular, a negative relationship was found between age, tenure and income level and turnover intention. Other studies have found that younger employees displayed the highest risk (highest risk) of leaving their current organisations while older employees tended to have a lower intention to leave their organisations.

According to Govaerts et al. (2011), the research relating to gender is mostly inconclusive where it refers to the influence of gender on retention. However, Kodikal et al. (2012) report that some studies have found females to have higher intention to leave as compared to males; while other research have showed the contrary. Govaerts et al. (2011) also reported that some research shows no relationship between turnover and gender. In terms of level of education,

Kodikal et al. (2012) indicate that the more educated employees demonstrate a higher inclination to seek new job opportunities compared to their counterparts with lower levels of education.

# 4.1.1.3. Literature review aim three: to critically evaluate the implications of the relationship between the variables under study with regard to retention practices.

As indicated previously, the literature review did not yield much in terms of the practical implications of graduate skills and attributes and employability for the retention of employees. Nevertheless, it is possible to make theoretical assumptions, linkages and conclusions in this regard. One such theoretical conclusion is that higher employability levels appear to influence the extent to which younger employees consider employment outside of their organisation. The literature review does not clarify that intention to leave actually results in attrition. These observations may imply that organisations should pay particular attention to their younger, female employees and design talent attraction, engagement and retention programmes that address the needs of this specific talent segment.

An understanding of the relationship between graduate skills and attributes may contribute valuable insights into the development of talent attraction programmes. This study has provided some insights into the subscales of graduate skills and attributes which predict satisfaction with specific retention factors. In addition, the understanding that there are strong positive relationships between graduate skills and attributes and self-perceived employability may inform talent retention practices, particularly in view of the finding from the literature review that younger, female employees tend to display a higher inclination to consider leaving their organisations compared to other employees. Coetzee and Pauw (2013) suggest that training and development, which is a retention factor, may be viewed by employees as an indication that the organisation values them and is interested in their advancement. It is, thus, plausible that, if the organisation provides employees with training opportunities that enhance their skills and attributes, this would add to their overall employability and, subsequently, to their retention value to the organisation.

# 4.1.2. Conclusions in relation to the empirical study

The empirical study set out to achieve the following five main aims: firstly, to investigate the nature and direction of the relationship between the gender, race, level of qualifications, graduate skills and attributes, employability and satisfaction with retention factors in a sample of graduate trainees in a retail organisation; secondly, to explore whether graduate skills and attributes and self-perceived employability significantly and positively predict satisfaction with factors influencing retention: thirdly, to investigate the nature of the relationship between the independent variable (self-perceived employability) and the dependent variable (retention factors satisfaction) when moderated by graduate skills and attributes (moderating variable); fourthly, to assess whether individuals from different gender and levels of qualification significantly differ regarding their graduate skills and attributes, self-perceived employability and satisfaction with retention factors. Finally, the empirical study aimed to identify the implications of the relationships between the variables under study with regard to retention practices and to formulate the appropriate recommendations for both the field of industrial and organisational psychology and for future research.

4.1.2.1. Empirical aim one: to explore the nature and direction of the relationship between age, gender, race, level of qualifications, graduate skills and attributes, employability and satisfaction with retention factors in a sample of graduate trainees in a retail organisation in South Africa.

The following conclusions were made based on the empirical evidence.

- a) Graduate skills and attributes relate positively and significantly to self-perceived employability.
- The results of the study showed that all the variables of the graduate skills and attributes (GSAS) correlated significantly and positively with self-perceived employability (GEM). In other words, the participants who scored highly on the GSAS were more likely to score highly on the GEM as compared to those participants who did not score highly on the GSAS.
- b) Graduate general employability did not relate positively to the participants' satisfaction with retention factors.

- Significant relations were observed only between: job characteristics and presenting/applying information skills; ethical/responsible behaviour and continuous learning; presenting/applying information skills and compensation and ethical/responsible behaviour and organisational commitment.
- c) Relations between gender, race and level of qualifications
- The study found that there were no significant associations between the biographical variables of gender, race, and qualification levels and the variables of the three survey questionnaires used to collect data during the study. However, the following exceptions were noted: significant associations between gender and general employability and work/life balance and between race and career opportunities. Accordingly, the influence of biographical variables on the associations between graduate skills and attributes, general employability and satisfaction with retention factors was regarded as negligible.
- 4.1.2.2. Empirical aim two: to explore whether graduate skills and attributes and self-perceived employability significantly and positively predict satisfaction with factors influencing retention.
  - Graduate self-perceived employability does not significantly and positively predict satisfaction with factors influencing retention.
  - The results revealed that presenting/applying information skills significantly and negatively predicted compensation while ethical/responsible behaviour significantly and positively predicted job characteristics and organisational commitment.
  - The results suggested that self-perceived employability is more a function of graduateness than of retention. Graduateness is positively associated with retention factor satisfaction. It is, thus, essential that the global/moral citizenship skills and attributes of graduates are considered in the design of retention practices related to compensation, job characteristics and commitment.

- 4.1.2.3. Empirical aim three: to explore the nature of the relationship between the independent variable (self-perceived employability) and the dependent variable (retention factors satisfaction) when moderated by graduate skills and attributes (moderating variable).
  - Graduate attributes and skills do not moderate the relation between employability and satisfaction with retention factors.
  - However, it was noted that the scholarship graduate skills and attributes had a significant interaction effect on the life-long learning-employability relationship but no interaction effects on the employability-retention factors relationship. In other words, the participants with high scholarship skills and attributes demonstrated a stronger relationship between life-long learning and general employability. This, in turn, suggests that scholarship attributes and skills may predispose individuals towards behaviours that contribute toward their employability skills in terms of the relationship between employability and life-long learning.
- 4.1.2.4. Empirical aim four: to assess whether gender and level of qualifications significantly influence graduate skills and attributes, self-perceived employability and satisfaction with retention factors.
  - Males and females do not differ significantly in terms of their graduate skills and attributes.
  - The overall results showed that males and females differed significantly with regards to their general employability.
  - Males and females were found to be significantly different with regard to work-life balance and their satisfaction with retention factors.
  - In terms of qualification levels, no significant differences were found for all three of the measuring instruments.

# 4.1.3. Conclusions regarding the central hypothesis

In terms of the central hypothesis, it may be concluded that there is a positive and significant relationship between the graduate skills and attributes of individuals and their general employability. However, employability did not predict the participants' satisfaction with retention factors. In addition, there was no supportive evidence that the graduate skills and attributes of individuals moderate the relationship between their general employability and satisfaction with retention factors. There was partial evidence in relation to males and females differing in terms of their general employability and satisfaction with retention factors. In conclusion, the study results provided only partial supportive evidence in support of the central hypothesis.

# 4.1.4. Conclusions regarding the contributions of the study to the field of industrial and organisational psychology

The observations conclusions drawn from both the literature review and the empirical study may potentially contribute useful knowledge to the field of industrial psychology and human resources and to the understanding of the implications of the relationships between the main variables under study with regard to retention practices. The literature review provided a sound foundation on which to clarify the conceptualisation of the key constructs of the study and to acknowledge the gaps that still exist in existing literature in relation to graduate skills and attributes, general employability and retention factors. The literature review also enabled the identification of both the theoretical relationships between the key constructs and differences based on gender and level of qualification.

It was concluded from the literature review that practitioners in the field of industrial and organisational psychology need to be aware that graduate skills and attributes serve as indicators of an individual's level of general employability. Accordingly, a higher level of graduateness may indicate a more work-ready and employable graduate and one who possesses more than just discipline specific competence. This knowledge may, in turn, add value to the formulation of talent attraction strategies for graduate development programmes in the future and this may result in the higher person—job and person—environment fit (Hardin & Donaldson, 2014) which may facilitate the retention of talent. Furthermore, the literature review revealed that higher levels of self-perceived employability have been shown to play a role in assisting employees to cope with the demands of the constantly changing organisational landscape of the 21st century world of work.

There were, however, several inconsistencies in the literature review as regards the influence of biographical variables on graduate skills and attributes, general employability and satisfaction with retention factors.

The empirical study provided evidence of a positive and significant relationship between graduate skills and attributes and general employability and this, in turn, adds new information to the field of I/O psychology, specifically in the South African retail context. The empirical study found significant relationships between graduate skills and attributes and specific retention factors. The results also showed that general self-perceived employability is more a function of graduateness than of retention and that graduateness influences satisfaction with retention factors. It is recommended that the global/moral citizenship skills and attributes of graduates are considered in the design of retention practices relating to compensation, job characteristics and commitment.

The assessment instruments used in the study were found to be reliable while the internal validity of these instruments ranged from adequate to high. This is in line with the data which exists for the same instruments in the South African context.

## 4.2. LIMITATIONS

This section discusses the limitations identified in the study and relating to both the literature review and the empirical study.

## 4.2.1. Limitations of the literature review

The major limitation of the literature review is the paucity of research in the South African context and in which the relationships between graduate skills and attributes, self-perceived employability and retention factors are explored. Several studies exist which focus on each of the concepts referred to in this study but in the context of other variables. It was, thus, not always possible to make direct linkages between the findings from the literature review and the findings from the empirical study. The fluidity of the concepts under study may also be considered as a limitation because the lack of clarity in their conceptualisation may result in both misinterpretation and validity issues.

It was found that, when it came to employability as a concept, some studies focused specifically on internal self-perceived employability while others did not differentiate. Ideally, this study could have followed a similar process and unambiguously clarified the type of employability under investigation.

## 4.2.2. Limitations of the empirical study

This section discusses the perceived limitations of the empirical study. The limitations include the sampling methodology, the sampling frame used for the study and the generalisability of the results.

The research method involved a non-probability, purposive sampling technique which targeted a particular group of employees in a specific organisation. This, in turn, resulted in a homogenous sampling frame which minimised the effect of certain statistical tests. The sample was not able to yield the required richness in diversity in respect of biographical information by virtue of its composition, namely, a majority of unmarried, black Africans between the ages of 17 and 29. It is, thus, not possible to extrapolate the results to explain other similar situations in view of the very specific sampling method used and which yielded a relatively specific and small population sample. The researcher targeted employees in a retail organisation and who had been employed through a specific training programme. This, in turn, yielded a smaller than expected sample size as a result of a number of factors such as geographic location and also the resignations of potential participants from the organisation.

The study was exploratory in nature and, therefore, it provided a platform from which the three key concepts could be investigated but without necessarily aiming to prove cause and effect. The study has provided a viable platform for further investigations using different population groups, industry sectors and other relevant segments of society. Although it was not possible to draw final conclusions from the findings of the study, it has provided a sound foundation for future research. The results from the study may be used as a basis on which to further validate the study's findings in respect of graduate skills and attributes, self-perceived employability and retention factors in organisations in the South African context.

## 4.3. RECOMMENDATIONS

This section presents recommendations based on the findings of the study to practitioners in the field and for future research purposes.

## 4.3.1. Practitioners in the field

The findings of the study indicate that organisations may potentially benefit from understanding the relationship between graduate skills and attributes, self-perceived employability and the potential influence on the retention of graduates. Based on the conclusions of the study, the following practical recommendations are tabled to assist practitioners:

- organisations that run graduate development programmes and other similar programmes geared towards attracting, developing and retaining entry level talent should consider using the graduate skills and attributes scale in their talent acquisition processes. The scores obtained could be used to measure the level of graduateness which has been shown to be an indicator of levels of employability. It has been suggested that higher employability levels are an important driver of the self-directed career behaviours which assist individuals to secure and retain employment (Schreuder & Coetzee, 2011). A considerable amount of investment, both financial and otherwise, goes into graduate trainee programmes and, thus, the graduate attributes scale and employability measure could offer valuable insights into, as well as a basis on which, to predict the staying power of graduate trainees until the organisation realises a return on its investment.
- The study found that scholarship graduate attributes and skills have a moderating effect in the relationship between lifelong learning and employability. The capacity of graduates to engage in autonomous critical thinking and problem solving as well as their analytical skills and enterprising skills are regarded as important for employers while also differentiating between successful and unsuccessful employees. This may further enhance the selection of employees who, as compared to other employees, guarantee a higher likelihood of success on the job, based on their scholarship scores.
- Based on the findings of the study, it is further suggested that organisations should consider designing flexible talent management policies which would enable the tailored engagement of various talent segments within the organisation.

The results of the study indicated that those participants who scored highly on presenting/applying information skills were found to be less likely to be satisfied with the compensation retention factor as compared to those participants with lower scores on presenting/applying information skills. The value of using the graduate skills and attributes scale as part of the selection process may potentially highlight the retention risk of particular candidates. This may, in turn, further inform the design of appropriate and relevant retention strategies, such as ensuring well-designed roles for those candidates who score high on ethical/responsible behaviour as this has been shown to foster the commitment of such candidates to the organisation.

• It is also recommended that organisations investigate work-life balance programmes to support female employees in the work-place as females scored significantly higher than males with regards to the work-life balance retention factor. By taking into account the fact that males scored significantly higher than females with regards to their employability, it would be advisable to consider developing talent management and engagement programmes that may assist to improve the employability of women. This may also potentially promote equity in the work place in terms of both the gender representation within management structures and the fair compensation of women.

## 4.3.2. Future research

Based on the findings of this study, the conclusions drawn and the limitations identified, the following recommendations are made for future research:

There is an opportunity for further research to be conducted in the South African context to increase the current understanding of the relationship between graduate skills and attributes, self-perceived employability and retention factors. This study focused primarily on a group of graduate trainees who had been employed by a retail organisation between 2007 and 2013. However, the non-probability, purposive sample was limited and was found to be too homogenous during the statistical analysis. The sampling frame could have yielded a maximum of 240 potential participants, a significant number of whom would probably have left the organisation. The majority of the respondents were young African professionals between the ages of 17 and 29. It is, therefore, recommended that future studies be conducted using a larger and more diverse random sample to enable the extrapolation of the results.

Three instruments were used in the study in order to capture raw data. However, it would appear that the participants perceived the survey questionnaire as too long and as intimidating and onerous. This, in turn, also had a negative impact on the participation rate, resulting in fewer people responding than may otherwise have the case. Future researchers could consider designing an integrated instrument which would, hopefully, enhance the experience of the research participants.

# 4.4. INTEGRATION OF THE STUDY

The study investigated the relationship between graduate skills and attributes, self-perceived employability and retention factors. The results suggest that there are relationships between the three variables which may be useful in the design of talent management, learning and development programmes and also retention practices.

The literature review suggested the existence of a relationship between graduate skills and attributes and general employability. The changing landscape of the world of work and one which is characterised by the transfer of the responsibility for career development from employer to employee, is resulting in the higher mobility of employees than was previously the case. In addition, as compared to other industries, the retail industry has been known to experience higher employee turnover rates as a result of the physical and environmental conditions experienced in the industry. Consequently, the retail industry has not been able to attract and retain suitably qualified and talented graduates. It has also been observed that concerns exist around whether or not tertiary education adequately prepares graduates for the realities of the world of work. The importance of graduates being able to apply a set of generic or transferable skills in addition to their discipline specific knowledge was identified through the literature review.

The empirical study provided partial statistical support for the central research hypothesis. The study found a positive and significant relationship between the graduate skills and attributes of individuals and their self-perceived employability. However, there was no evidence to suggest that employability had an effect on participants' satisfaction with retention factors. In addition, there was no supportive evidence that the graduate skills and attributes of individuals moderate the relationship between their general employability and satisfaction with retention factors. However, the study provided evidence of positive associations between graduateness and satisfaction with retention factors.

The study found partial evidence in relation to differences between males and females as well as individuals with different levels of qualifications in terms of their graduate skills and attributes, general employability and satisfaction with retention factors.

In conclusion, the findings of the study provided insights into the way in which the relationship between graduate skills and attributes, self-perceived employability and retention factors may be of valuable assistance in the development of effective talent attraction, engagement and retention practices.

## 4.5. CHAPTER SUMMARY

This chapter discussed in detail the conclusions reached on the basis of both the literature review and the empirical study. The limitations identified in the study were explained and recommendations suggested for practitioners in the field as well as researchers as regards future research in a similar field. A final integration of the chapter provided a synopsis of the areas in which the study either provided support or did not provide support for the research hypotheses and, in particular, the central hypothesis stated at the beginning of the study to explore the relationship between the graduate skills and attributes of individuals, their self-perceived employability and their satisfaction with retention factors.

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