

**JOB EMBEDDEDNESS, WORK ENGAGEMENT AND TURNOVER INTENTION OF STAFF IN A  
HIGHER EDUCATION INSTITUTION**

by

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10 DECEMBER 2012

## DECLARATION

I, Ndayiziveyi Takawira, student number 30521009, declare that this dissertation of limited scope entitled, “**Job embeddedness, work engagement and turnover intention of staff in a higher education institution**”, is my own work, and that all the sources that I have used or have quoted from have been indicated and acknowledged by means of complete references. The dissertation has not in part or in full, been previously submitted for any other degree or examination at this or any other university.

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

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**Ndayiziveyi Takawira**

**10 DECEMBER 2012**

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## **SUMMARY**

### **JOB EMBEDDEDNESS, WORK ENGAGEMENT AND TURNOVER INTENTION OF STAFF IN A HIGHER EDUCATION INSTITUTION**

by

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The objective of this study was: (1) to determine the relationship between job embeddedness (measured by the Job Embeddedness Scale), work engagement (measured by the Utrecht Work Engagement Scale), and turnover intention (measured by the Turnover Intention Scale); and (2) to determine whether employees from different groups, namely age, race, gender, marital status and tenure differ significantly in their levels of job embeddedness, work engagement and turnover intention. A quantitative survey was conducted on a non-probability purposive sample (N = 153) of staff in a higher education institution.

Correlational analyses revealed significant relationships between job embeddedness, work engagement and turnover intention. Multiple regression analyses showed that organisation links and dedication negatively predicted the participants' turnover intention. Significant differences between age, race, gender, marital status and tenure were also found. The findings contribute valuable knowledge to the field of Career Psychology and can be applied in the retention of employees in the higher education institution. The study concludes with recommendations for future research and practice.

#### **KEY TERMS**

Dedication; employee retention, intellectual capital, job embeddedness; retention practices; sacrifice; turnover intention; vigour; work engagement.

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## **CHAPTER 1: SCIENTIFIC OVERVIEW OF THE RESEARCH**

This dissertation focuses on the relationship between job embeddedness, work engagement and turnover intention in the South African higher education context. In this chapter, the background and motivation for the research are discussed leading to the formulation of the problem statement, research questions and research aims. The paradigm perspective that guides the research is then explained, followed by a discussion of the research design and the research methods, with reference to the various steps in the research process. Finally, the chapter layout is provided.

### **1.1 BACKGROUND TO AND MOTIVATION FOR THE RESEARCH**

The context of the research is the retention of critical human capital in the South African higher education environment. More specifically, the research focuses on the relationship dynamics between job embeddedness, work engagement and turnover intention. Research has shown that job embeddedness and work engagement are key variables that influence employees' turnover intentions (Allen, 2006; Burton, Holtom, Sablinski, Mitchell & Lee, 2010; Halbesleben & Wheeler, 2008). Investigating the relationship dynamics between these three constructs may ultimately contribute new knowledge that could be utilised to inform retention practices aimed at retaining critical human capital in the South African higher education environment.

Organisations today are experiencing new challenges as external forces such as changing demographics, globalisation, technology and an increasingly diverse workforce are requiring management to proactively develop effective talent management strategies in an effort to remain competitive (Koyuncu, 2006; Whitfield & Landeros, 2006). Retention of talent both in South Africa and globally is becoming more critical in a world where the organisation's intellectual capabilities are fast becoming the key source of maintaining competitive advantage (Macey & Schneider, 2008; Powell & Snellman, 2004; Ryder, 2010). Furthermore, an increasing number of organisations are realising that they need to release the untapped potential of their employees if they are to compete successfully in an increasingly demanding global economy (Burke & Cooper, 2008; Burke & El-Kot, 2010; Lawler, 2008). In this regard, recognising the forces that keep employees in their current employment is critical in attracting and retaining talented staff (Lawler & Finegold, 2000; Michaels, Handfield-Jones & Axelrod, 2001).

Socio-economic and political strategies implemented by governments which are competing in the global economy are impacting increasingly on the provision of higher education (Makhanya, 2012). Furthermore, new labour market demographics, globalisation and competitive pressures have

become essential for businesses to be effective (Marchington & Wilkinson, 2008). Higher education plays a critical role in the creation of knowledge for future talent development and socio-economic improvement of South Africa as a whole (Van den Berg, Manias & Burger, 2008). However, higher education institutions are particularly vulnerable to losing their highly qualified employees to well-paid offers from the private sector and headhunting from other higher education institutions (Ngobeni & Bezuidenhout, 2011). Therefore, it is critical for these institutions to retain the intellectual capital that will make it possible to achieve service delivery to all stakeholders, including students, government and the community as a whole (Coetzee & Rothman, 2004; Van den Berg *et al.*, 2008).

Research has shown that job embeddedness and work engagement have emerged in the current world of work as constructs that may significantly influence employees' turnover intention (Halbesleben & Wheeler, 2008; Mitchell, Holtom & Lee, 2001a). According to Pfeffer (2005), talent retention is fast becoming more essential as the organisation's human capital increasingly becomes the key source of competitive advantage. Furthermore, a growing awareness of shifts in the characteristics of the workforce is creating a greater urgency for organisations to focus more attention and energy on retaining skilled employees as well as keeping them actively engaged and embedded in their jobs (Frank, Finnegan & Taylor, 2004). It is evident that knowledge of the relationship between job embeddedness, work engagement and turnover intention is important because such knowledge may assist organisations in developing effective retention practices.

Employee retention refers to an effort by an employer to keep talented employees in order to meet the organisation's objectives (Frank *et al.*, 2004). Turnover, however, is mostly used to describe the unplanned loss of workers who voluntarily leave when the employer would prefer to keep them (Frank *et al.*, 2004). This unplanned turnover is associated with higher labour costs, loss of job-specific skills and company knowledge, low morale, poor customer satisfaction and lower financial performance. This results in the disruption of efficient management of the organisation owing to the replacement of knowledgeable and experienced employees, thereby hampering the organisation's effectiveness (Dess & Shaw, 2001; Garino & Martin, 2007; Robbins, Odendaal & Roodt, 2009).

Turnover diminishes the organisation's return on investment and is especially difficult for an organisation because significant investments have been made in recruitment, selection, induction and training (Kammeyer-Mueller & Wanberg, 2003). Moreover, organisations report that turnover's greatest impact is lost organisational knowledge and lower employee morale, two areas that directly affect team and organisational productivity (Frank *et al.*, 2004). Few institutions can afford to employ, train and allow their most talented employees to leave, when it is difficult to find better

replacements. It is therefore vital for organisations to be able to make informed decisions about taking action that results in the reduction of turnover (Hillmer, Hillmer & McRoberts, 2004).

In this study, job embeddedness is defined as “the combined forces that keep a person from leaving his or her job” (Yao, Lee, Mitchell, Burton & Sablynski, 2004, p.159). Mitchell, Holtom, Lee, Sablynski and Erez (2001b) conceptualise job embeddedness as including one’s links to other aspects of the job (people and groups), perceptions of person-job fit and the sacrifices involved in leaving the job. According to Burton *et al.* (2010), job embeddedness helps minimise the impact of negative shocks that cause a person to start thinking about leaving an organisation.

In the context of the present study, the focus is on the positive aspects of job embeddedness, that is, –the forces that keep people satisfied with and engaged in their jobs. Job embeddedness captures a view of the employee-employer relationship, and employees who are highly embedded in their jobs may be less absent, work harder, perform better and engage in organisational citizenship behaviours more than less embedded employees (Mitchell *et al.*, 2001b). Moreover, being embedded in an organisation is associated with less intent to leave and actual leaving. Research has found a significant negative relationship between job embeddedness and turnover intention (Allen, 2006; Crossley, Bennet, Jex & Burnfield, 2007; Halbesleben & Wheeler, 2008; Holtom & O’Neill, 2004; Mallol, Holtom & Lee, 2007). In addition, job embeddedness seems to predict turnover above and beyond combinations of perceived desirability and ease of movement measures (e.g. job satisfaction, organisational commitment, job alternatives and job search). Thus, job embeddedness appears to assess turnover more than the prediction of major variables in almost all major models of turnover (Mitchell *et al.*, 2001a).

For the purposes of this study, work engagement entails “a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption” (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002, p.74). According to Saks (2006), work engagement is associated with the individual’s attitudes, intentions, and behaviours. Engaged employees are therefore likely to be more attached to their organisation and would have lower propensity to leave the organisation than disengaged employees (Schaufeli & Bakker, 2004). This view is supported by several researchers who found that work engagement is negatively related to turnover intention (Bakker & Demerouti, 2007; Du Plooy & Roodt, 2010; Harter, Schmidt, & Hayes, 2002; Lee & Shin, 2005). Furthermore, work engagement is related to positive organisational outcomes such as job satisfaction, motivation, a decline in intentions to quit, employee well-being and health (Koyuncu, Burke & Fiksenbaum, 2006; May, Gilson & Harter, 2004; Rothmann & Jordaan, 2006; Schaufeli & Bakker, 2004; Sonnentag, 2003). Finally, a meta-analysis of 7939 business units in 36 companies from

United States of America by Harter *et al.* (2002) found a significant positive relationship between work engagement and business outcomes (i.e. customer satisfaction and loyalty, profitability, turnover and safety) - hence the relevance of this research.

Turnover intention is the manifestation of “the (subjective) probability that an individual will change his or her job within a certain time period” (Souza-Poza & Henneberger, 2002, p.1). Since intention to stay or leave is an indication of future plans, a better understanding of intention may make it possible to introduce changes to influence this intent before actual turnover (Chan & Morrison, 2000).

Several researchers have investigated the relationship between job embeddedness, work engagement and turnover intention (Allen, 2006; Halbesleben & Wheeler, 2008; Harter *et al.*, 2002; Lee, Mitchell, Sablinski, Burton & Holtom, 2004). Halbesleben and Wheeler (2008) found a significant relationship between job embeddedness, work engagement and turnover intention which is supported by the research of Burton *et al.* (2010) and Schaufeli & Bakker (2004). Thus, recognition of the effects of job embeddedness and work engagement on turnover can ultimately inform organisations in managing turnover, which in turn leads to considerable benefits such as a decline in the intention to quit and the retention of human intellectual capital (Maetz, Griffeth, Campbell & Allen, 2007) - hence the relevance of this investigation. It is therefore imperative that the relationship between job embeddedness, work engagement and turnover intention in the higher education context be considered when developing retention practices.

In addition to the relationship found between job embeddedness, work engagement and turnover intention, research has identified differences between age, race and gender groups. More specifically, Ngobeni and Bezuidenhout (2011) reported a significant relationship between age and gender. Findings of studies measuring differences between the job embeddedness of race groups embeddedness (Gong, Chow & Ahlstrom, 2011), and differences between the work engagement of marital status and tenure groups (Barkhuizen & Rothmann, 2006) are inconsistent. In view of the preceding findings, this study will explore how people from various biographical groups (age, race, gender, marital status and tenure) differ with regard to job embeddedness, work engagement and turnover intention. An understanding of the differences between biographical groups is essential in the diverse culture of South Africa.

## 1.2 PROBLEM STATEMENT

Against the aforementioned background, it appears that job embeddedness and work engagement and their influence on employees' turnover intention should be considered to inform retention practices. Higher education institutions depend on their employees' skills, knowledge and abilities for the effective delivery of services, and retaining talented employees has thus become a vital factor for these institutions (Naris & Ukpere, 2010). It is thus necessary for organisations to consider the relationship between job embeddedness, work engagement and turnover intention in the formulation of their retention strategies. Despite the potential value that can be added by knowledge of the variables of relevance to this study, the problem is that it is not clear from the literature how these three variables are interrelated in the South African higher educational context. Furthermore, there seems to be a paucity of research addressing employee job embeddedness, work engagement and turnover intention in the higher education context. In addition, there is little information available on how people from different age, race, gender, marital status and tenure groups both in South Africa and abroad, differ with regard to job embeddedness, work engagement and turnover intention. Hence, the insight gained into the relationships between these constructs that are relevant to this study could assist organisations in implementing more effective retention practices for retaining talented employees.

The research problem will be addressed by assessing the relationship between job embeddedness, work engagement and the turnover intention of individuals employed in the higher education context. The purpose of the study is to gain knowledge of this relationship in order to make recommendations for retention practices for employees in higher education institutions. In addition, the findings will also permit future studies to further explore the value of information generated by this study for a better understanding of the role of these factors in retaining employees from different age, race, gender, marital status and tenure groups.

The following general research question that requires further research emerges from the above-mentioned problem statement:

What is the relationship between job embeddedness, work engagement and turnover intention in the higher education context and do people from different age, race, gender, marital status and tenure groups differ in respect of these three variables?

### **1.2.1 Research question with regard to literature review**

In terms of the literature study, the following specific research questions will be addressed in this study:

**Research question 1:** How is “job embeddedness” conceptualised in the literature?

**Research question 2:** How is “work engagement” conceptualised in the literature?

**Research question 3:** How is “turnover intention” conceptualised in the literature?

**Research question 4:** Does a theoretical relationship exist between job embeddedness, work engagement and turnover intention?

**Research question 5:** What are the implications of the theoretical relationship between job embeddedness, work engagement and turnover intention for retention practices in the higher education context?

### **1.2.2 Research question with regard to the empirical study**

In terms of the empirical study, the following specific research questions will be addressed:

**Research question 1:** Does a statistically significant relationship exist between job embeddedness, work engagement and turnover intention as manifested in a sample of respondents in a South African higher education institution?

**Research question 2:** Do job embeddedness and work engagement significantly predict turnover intention?

**Research question 3:** Do age, race, gender, marital status and tenure groups differ significantly in respect of their job embeddedness, work engagement and turnover intention?

**Research question 4:** What recommendations can be formulated for the practice of industrial and organisational psychology and organisational retention practices, and for further research based on the findings of this study?

### **1.3 AIMS**

From the above research questions, the following aims are formulated.

#### **1.3.1 General aim of the research**

The general aim of this research is to explore the relationship between job embeddedness, work engagement and turnover intention in the higher education context, and to determine whether individuals from different age, race, gender, marital status and tenure groups differ significantly in respect of these three variables.

#### **1.3.2 Specific aims of the research**

The specific aims are formulated for the literature review and the empirical study as set out below.

##### *1.3.2.1 Literature review*

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

**Research aim 1:** To conceptualise job embeddedness from a theoretical perspective.

**Research aim 2:** To conceptualise work engagement from a theoretical perspective.

**Research aim 3:** To conceptualise turnover intention from a theoretical perspective.

**Research aim 4:** To conceptualise the nature of the theoretical relationship between job embeddedness, work engagement and turnover intention.

**Research aim 5:** To outline the implications of the theoretical relationship between job embeddedness, work engagement and turnover intention variables for retention practices in the higher education context.

##### *1.3.2.2 Empirical study*

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

**Research aim 1:** To investigate the statistical relationship between job embeddedness, work engagement and turnover intention as manifested in a sample of participants employed in a South African higher education institution.

**Research aim 2:** To assess whether job embeddedness and work engagement significantly predict turnover intention.

**Research aim 3:** To determine whether age, race, gender, marital status and tenure groups differ significantly regarding their job embeddedness, work engagement and turnover intention.

**Research aim 4:** To formulate recommendations for the discipline of industrial and organisational psychology, in particular with regard to retention practices and further research.

#### *1.3.2.3 Central hypothesis*

The central hypothesis for this study is formulated as follows:

A statistically significant relationship exists between job embeddedness, work engagement and turnover intention. Job embeddedness and work engagement significantly and negatively predict turnover intention. Furthermore, people from different age, race, gender, marital status and tenure groups will differ statistically and significantly in terms of their job embeddedness, work engagement and turnover intention.

As guided by the findings of the research literature explored in the background to this study, the following research hypotheses are presented and will be empirically tested in this research:

H1<sub>0</sub>: There is no significant relationship between job embeddedness, work engagement and turnover intention.

H1<sub>a</sub>: There is a significant relationship between job embeddedness, work engagement and turnover intention.

H2<sub>0</sub>: Job embeddedness and work engagement do not significantly and negatively predict turnover intention.

H2<sub>a</sub>: Job embeddedness and work engagement significantly and negatively predict turnover intention.

H3<sub>0</sub>: People from different age, race, gender, marital status and tenure groups will not differ significantly in respect of their job embeddedness, work engagement and turnover intention.

H3<sub>a</sub>: People from different age, race, gender, marital status and tenure groups will differ significantly in respect of their job embeddedness, work engagement and turnover intention.

## **1.4 PARADIGM PERSPECTIVE**

Based on the intended goal of this research, the term “paradigm” refers to the explicit or implicit representation of reality (Jordaan & Jordaan, 1995). According to Mouton and Marais (1996), a paradigm perspective refers to the intellectual climate or the multiple meta-theoretical assumptions, beliefs and values which are fundamental to the theories and methodologies in this research.

### **1.4.1 The intellectual climate**

Thematically, the literature survey of job embeddedness, work engagement and turnover intention will be presented from the humanistic and open systems paradigm. The empirical study of job embeddedness, work engagement and turnover intention will be presented from the positivist research paradigm.

#### *1.4.1.1 Literature review*

The literature on job embeddedness, work engagement and turnover intention will be presented from the humanistic and open systems paradigm. The humanistic paradigm places emphasis on personal choices, self-determination, conscious experiences and self-actualising potential for personal growth (Joseph, 2008). The basic assumptions underlying the humanistic paradigm are as follows: (1) it is necessary to understand the individual’s life experiences, including conscious experiences that shape and give meaning to being in the world; (2) individuals strive to become all that they are capable of in order to reach their full potential; (3) awareness of genuine feelings and subjective experiences that help the individual to make meaningful choices in life is important; (4) individuals are free and autonomous and thus capable of making personal choices and they are personally responsible for the consequences of that freedom; and (5) human beings are inherently good and should be valued as having basic worth (Nevid, Rathus & Greene, 2006).

The humanistic theory is relevant to this study as it assumes that individuals are free and autonomous. They are thus capable of making personal choices to stay and be embedded in an organisation and take personal responsibility for engaging in their work and thus achieving the business outcomes of the organisation (Joseph, 2008; Nevid *et al.*, 2006).

The systems approach focuses on interrelationships between parts, all of which work together towards a defined purpose. These parts depend on each other for input and output and in so doing, the whole system uses feedback to determine if a desired goal has been achieved (Kutilek, Gunderson & Conklin, 2002). The open systems paradigm assumes that individuals act interdependently and are in constant interaction with their environment. The flow of inputs and processes in the system gives rise to outputs that reflect the outcomes of an act or series of acts by individuals, groups or an organisation (Ivancevich & Matteson, 2002). In this study, the behaviour of individuals or groups (subsystems) with skills and knowledge is embedded in the organisation and they engage in their work to produce the organisation's outputs (e.g. employee retention and organisational effectiveness).

#### *1.4.1.2 Empirical study*

The empirical study of job embeddedness, work engagement and turnover intention will be presented from the positivist research paradigm. The positivist paradigm seeks to discover causal laws, careful empirical observation and value-free research (Neuman, 2007). The positivist paradigm contributes to the following fundamental assumptions: (1) it provides an objective observable social reality against which researchers can compare their claims and ascertain truth; (2) only phenomena that can be observed are used, which leads to the production of credible data; (3) it generally involves hypothesis generation and testing; (4) research is assumed to be value free, thus free of subjective bias, and objectivity will be achieved; and (5) the real causes of social scientific outcomes can be determined reliably and validly (Johnson & Onwuegbuzie, 2004; Saunders, Lewis & Thornhill, 2007). This study will be grounded in the preceding assumptions in order to ensure an objective analysis of the empirical evidence. The study is aligned with the positivist assumptions that behaviour is measurable and quantifiable, and that statistical analysis is achievable.

#### **1.4.2 Meta-theoretical statements**

According to Mouton and Marais (1996), it is generally accepted that no scientific finding can be decisively proven on the basis of empirical research data. Although the meta-theoretical assumptions applicable to this research have been clearly described based on the theories and methodological strategies, they are not tested in the research. This research will focus on the industrial and organisational psychology disciplinary context. The following meta-theoretical statements are relevant:

#### 1.4.2.1 *Industrial and organisational psychology (IOP)*

Industrial and organisational psychology is defined as a field of psychology that involves studying human behaviour in the work context and the use of psychology principles to change work behaviour (Riggio, 2009). The objective of industrial and organisational psychology is to understand human work behaviour and apply that knowledge to improve the psychological condition of workers and their work behaviour in order to maximise organisational effectiveness (Ivancevich & Matteson, 2002). Work engagement involves a positive, fulfilling state of mind, commonly characterised by vigour, dedication and absorption, whereas job embeddedness is associated with a combination of forces that keep an individual in the job and are thus relevant to the field of industrial and organisational psychology (Lee & Mitchell, 1994; Schaufeli *et al.*, 2002). The study of the relationship between job embeddedness, work engagement and turnover intention could contribute to new knowledge in order to promote employee retention that is associated with organisational effectiveness. The current study and understanding of job embeddedness and work engagement can lead to the development of programmes that may lead to positive business outcomes (i.e. employee retention and organisational effectiveness).

#### 1.4.2.2 *Theoretical models*

In this study, the literature survey covered theories relating to the constructs job embeddedness, work engagement and turnover intention. The literature survey on job embeddedness is presented in terms of the theory of Mitchell *et al.* (2001b). Furthermore, the literature survey on work engagement is presented in terms of the theory developed by Schaufeli *et al.* (2002). Finally, the literature survey on turnover intention is presented in terms of the unfolding model of voluntary turnover which is part of the theory formulated by Lee and Mitchell (1994).

#### 1.4.2.3 *Conceptual descriptions*

The conceptual descriptions that are relevant to this study are defined as set out below.

##### a. *Employee retention*

In this study, employee retention refers to an effort by an employer to keep talented employees in order to meet the organisation's objectives (Frank *et al.*, 2004).

*b. Job embeddedness*

In context of this study, job embeddedness refers to “the combined forces that keep a person from leaving his or her job” (Yao *et al.*, 2004, p.159). Mitchell *et al.* (2001a) conceptualise job embeddedness as including one’s links to other aspects of the job (people and groups), perceptions of person-job fit and the sacrifices involved in leaving the job. Links are based on the extent to which people are linked to other people or activities on the job and in the community, the extent to which their jobs and communities fit in with aspects in their life spaces and the sacrifice a person would have to make should he or she give up employment (Yao *et al.*, 2004; Mitchell *et al.*, 2001a). In this study, job embeddedness refers to the positive on-the-job experiences that keep individuals in the organisation.

*c. Work engagement*

In this study, work engagement refers to “a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption” (Schaufeli *et al.*, 2002, p.74). As implied in the definition, work engagement consists of three dimensions, namely vigour, dedication and absorption. Vigour refers to having high levels of energy and mental resilience when working and the ability to invest effort in one’s work, persisting even in challenging times. Dedication refers to a strong involvement in one’s work which results in experiencing a sense of significance, passion, being inspired and having pride in one’s work. Finally, absorption is a state of being fully concentrated and absorbed in one’s work such that one has difficulty disconnecting from work (Schaufeli & Salanova, 2007). In this study, work engagement refers to the dedication and investment of efforts in one’s work in an organisation.

*d. Turnover intention*

In the context of this study, turnover intention is the reflection of “the (subjective) probability that an individual will change his or her job within a certain time period” (Souza-Poza & Henneberger, 2002, p.1). Turnover intention thus refers to individuals’ intention to quit the organisation.

## **1.5 RESEARCH DESIGN**

A quantitative design with a focus on descriptive, correlational and inferential analyses will be used to achieve the research objectives and to test the research hypotheses. According to Babbie and Mouton (2001), a research design is a framework that sets out a plan on how the researcher is

going to collect and analyse data in order to address the problem that is being investigated. Furthermore, the objective of the research design involves planning, structuring and implementing the study in order to maximise the validity of the findings (Terre Blanche, Durrheim & Painter, 2006).

### **1.5.1 Validity and reliability**

Both internal and external validity are significant for the quality and meaningfulness of a research design (Riggio, 2009). For internal validity to be maximised in this study, the literature review will be structured utilising relevant theories and models relating to the current study using appropriate, meaningful and valid measuring instruments (Gregory, 2007). External validity ensures that the findings of the research project are generalised to the population from which the sample originated (Salkind, 2009). However, a non-probability purposive sample will be utilised here, and generalising to the general population will therefore be limited. The validity and reliability of the instruments will be established for this study.

According to Mouton and Marais (1996), the central consideration of validity relating to collecting data is that of reliability and its significance in the application of a valid measuring instrument applied to different groups in different circumstances but yielding the same observations. The reliability of this study will be enhanced by utilising the Job Embeddedness Scale (Mitchell, *et al.*, 2001b), the Utrecht Work Engagement Scale (Schaufeli *et al.*, 2002) and the Turnover Intention Scale (Mitchell *et al.*, 2001b). These instruments have been shown to be reliable in previous studies (Bergiel, Nguyen, Clenney & Taylor 2009; Mitchell *et al.*, 2001b; Rothmann & Jordaan, 2006; Schaufeli *et al.*, 2002).

### **1.5.2 Research approach**

A cross-sectional quantitative research approach will be used for this study. A quantitative research approach refers to a study that collects evidence in the form of numbers in order to answer a given research question (Neuman, 2007). The literature review and empirical study are descriptive in nature. The study is considered descriptive as it explores and describes the theoretical relationship between the three variables so as to provide recommendations for employee retention. Thereafter, the research will empirically investigate the statistical relationship between these three variables by means of descriptive, correlational and inferential statistical analyses.

The empirical aspect of the study utilises a cross-sectional survey design to collect quantitative primary data by using self-administered questionnaires in order to achieve the objectives of this study (Leedy & Ormrod, 2005). The unit of analysis refers to the units (i.e. individuals, groups, organisations or society categories) on which variables are measured and a distinction is made between the characteristics, conditions, orientations and actions of individuals, groups or organisations (Neuman, 2007). In this study, the unit of analysis for the primary aim of exploring the relationship between job embeddedness, work engagement and turnover intention is the group. The unit of analysis for the secondary aim is the sub-group in order to examine differences between age, race, gender, marital status and tenure groups.

### **1.5.3 Ethical considerations**

Ethical considerations are vital in research, and researchers should give ethical aspects the necessary consideration during all the various phases of the research project. Lack of commitment to ethical considerations can adversely affect the credibility of the research, the autonomy of the researchers, the quality of the research or the rights of the participants. The following principles need to be considered: (1) respect and protection of participants' rights; (2) causing no harm to participants; (3) a positive contribution towards the welfare of people, and (4) consent for participation in the research should be voluntary and informed and all information and records obtained should be considered anonymous and confidential (Terre Blanche *et al.*, 2006).

Procedures of the research ethics committee of the institution involved in the study will be adhered to and permission to conduct the research will first be obtained. The participants will be informed of voluntary, anonymous participation and withdrawal at any time during the research project. By completing the research questionnaire and returning it to the researcher, it will be accepted that full consent to the researcher was given and that responses may be used for research purposes only. The responses will be treated in an anonymous and confidential manner and they will in no way be negatively influenced by the information obtained during the research process. The data will be stored in the institution where only the statistician and researcher will have access, using a secretly generated code.

## **1.6 RESEARCH METHOD**

As illustrated in figure 1.1, the research method consists of a literature review, to conceptualise the relevant concepts, and an empirical study, to operationalise the variables included in the study.

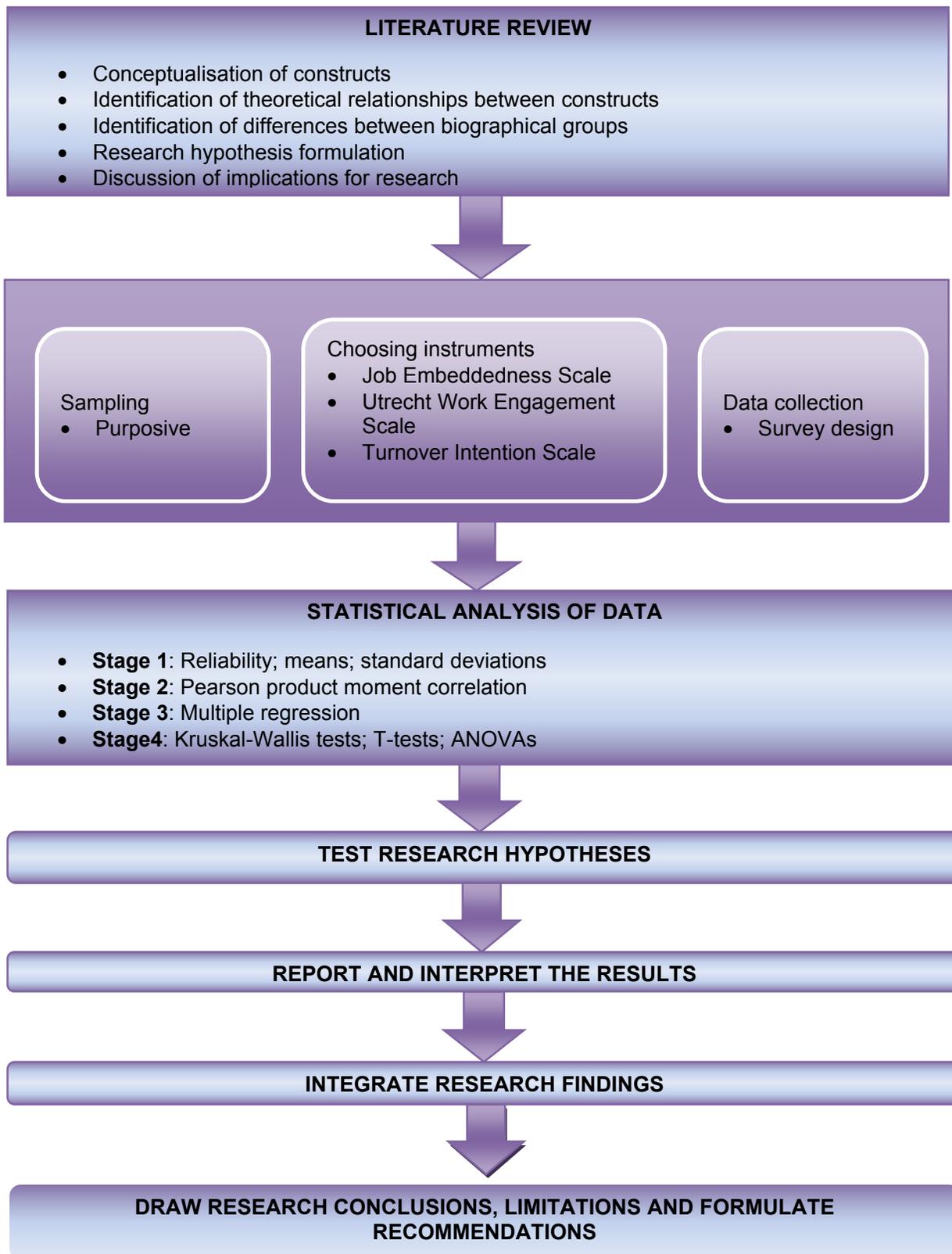


Figure 1.1: Flow diagram of research method

### **1.6.1 Phase 1: Literature review**

The literature review focuses on exploring the constructs of job embeddedness, work engagement and turnover intention. The general aim of the literature study is to establish a theoretical link in the relationship between job embeddedness, work engagement and turnover intention and to identify differences between biographical groups. These relationships are explored in order to determine the implications of the theoretical relationship for employee retention practices.

### **1.6.2 Phase 2: Empirical study**

The empirical study will be presented in the form of a research article in chapter 3. The research article outlines the core focus of the study, the background to the study, trends from the research literature, the potential value added by the study, the research design (research approach and research method), the results, a discussion of the results, the conclusions, the limitations of the study and recommendations for practice and future research. Chapter 4 integrates the research study and discusses the conclusions, limitations and recommendations in more detail.

## **1.7 CHAPTER LAYOUT**

The chapters of this dissertation will be presented as set out below.

Chapter 1 provides a scientific orientation to the research by discussing the background to and motivation for the research, the problem statement, the research questions and aims, the paradigm perspective guiding the research and the research methods.

Chapter 2 conceptualises the constructs of job embeddedness, work engagement and turnover intention from a theoretical perspective. The practical implications of the relationship between these constructs for retention and development in the higher education context will be discussed.

In chapter 3, the research findings will be presented in the form of a scientific research article.

Chapter 4 concludes the study by drawing conclusions, discussing the limitations of the study and making recommendations for future research.

## **1.8 CHAPTER SUMMARY**

This chapter discussed the background to the study, identified the problem statement, objectives and aims, discussed the paradigm perspective and research design and provided the chapter layout.

Chapter 2 addresses the literature research aims and discusses the constructs of job embeddedness, work engagement and turnover intention.

## **CHAPTER 2: LITERATURE REVIEW: JOB EMBEDDEDNESS, WORK ENGAGEMENT AND TURNOVER INTENTION**

Chapter 2 addresses the literature research aims and conceptualises the constructs job embeddedness, work engagement and turnover intention. The practical implications of the theoretical relationship between these constructs are explained by means of relevant models.

### **2.1 JOB EMBEDDEDNESS**

In this section, job embeddedness is conceptualised and the job embeddedness model (Mitchell *et al.*, 2001b) discussed. The section concludes with a discussion of the variables influencing job embeddedness and the implications for talent retention.

#### **2.1.1 Conceptualisation**

Job embeddedness is defined as “the combined forces that keep a person from leaving his or her job” (Yao *et al.*, 2004, p. 159). Mitchell *et al.* (2001b) conceptualises job embeddedness as including one’s links to other aspects of the job (e.g. people and groups), the perception of person-job fit and the sacrifices involved in leaving the job. Job embeddedness, which is a relatively new construct that was developed by Mitchell *et al.* (2001b), represents a broad collection of factors that influence an employee’s decision to remain in or leave an organisation.

Many people stay in organisations as a result of connections they have to people (e.g. co-workers or network groups), or activities like the company golf team or sponsored community engagement activities (Mitchell *et al.*, 2001a). A study by Friedman and Holtom (2002) suggests that the more connected people are professionally and socially through, say, joining network groups, the more likely they are to stay in their organisation. Thus leaving a job often requires individuals to sacrifice or give up perks, routines or social networks of projects with which they have grown familiar (Mitchell *et al.*, 2001a). Mitchell *et al.* (2001b) suggest that people who are embedded in their jobs have less intent to leave and do not leave as readily as those who are not embedded. This view is supported by Allen (2006) who found that on-the-job embeddedness is negatively related to turnover. The study by Holtom and O’Neill (2004) also shows that being embedded in an organisation is associated with reduced intent to leave and actual leaving.

According to Mitchell *et al.* (2001a), job embeddedness differs from traditional models of turnover in that it is aimed at employee retention instead of employee turnover. This view is supported by

Mitchell and Lee (2001) who found that job embeddedness predicts turnover beyond job attitudes and core variables from traditional models of turnover. Thus, the focus is how to keep people in an organisation, rather than how to keep them moving to different organisations (Mitchell *et al.*, 2001a). A study by Mitchell and Lee (2001) highlights the fact that highly embedded and satisfied employees search alternative employment less than unembedded employees. However, the potential downside of job embeddedness is that people who feel stuck in an unfavourable job may lose motivation, experience frustration and even engage in counterproductive workplace behaviour (Crossley *et al.*, 2007). In the context of the present study, the focus is on the positive aspects of job embeddedness, that is, the forces that keep people satisfied with and engaged in their jobs.

### **2.1.2 The Job Embeddedness Model**

The theoretical foundation for job embeddedness is derived from Lewin's (1951) embedded figures and field theory. According to Mitchell and Lee (2001), embedded figures are immersed in this theory's background. As these images are attached to their background in various ways, they become hard to separate causing the embedded figures to become part of the surrounding model. Allen (2006) postulates that in field theory (Lewin, 1951), behaviour is a function of the field or life space of the individual, including the person and the psychological environment as it exists for that individual. Hence, some aspects of the individual's life are embedded and connected in this field and the effects of a given stimulus are dependent on the nature of this field (Mitchell *et al.*, 2001b).

Based on Lewin's (1951) ideas, Mitchell *et al.* (2001b) describes job embeddedness as a net or web in which an individual can become entangled. Thus, an employee who is highly embedded has many links that are close together. According to Holtom, Mitchell and Lee (2006), a person who is highly embedded (e.g. has close friends, whose employer provides day care and is a lead manager of a critical project) would experience more disruption in the web if he or she were to sever ties at the central intersection in the web. Conversely, a person who has a job that is relatively isolated, (e.g. few friends or connections to a project or people) will experience less disruption in his or her web should he or she decide to leave (Holtom *et al.*, 2006).

Mitchell and Lee (2001) identified the critical aspects of job embeddedness as the extent to which people have links to people on the job or their community; the extent to which they fit or are a good match with their job and community; and the ease with which they would have to give up or sacrifice things if they were to leave their job. Job embeddedness therefore consists of three dimensions: "fit" with the job, organisation and community; "links" to other people, teams and groups and the "sacrifice" associated with changing jobs. According to Mitchell *et al.* (2001b), and

as illustrated in figure 2.1, these three dimensions form a three-by-two matrix which is associated with an individual's organisation and his or her community, further suggesting six sub-dimensions: fit-organisation, fit-community, links-organisation, links-community, sacrifice-organisation and sacrifice-community. Researchers have found that when job relocation is not a factor, organisational dimensions better predict employee retention than does the community dimensions (Allen, 2006; Lee *et al.*, 2004). Thus, in this study, the investigation of job embeddedness is limited to the organisational dimensions.

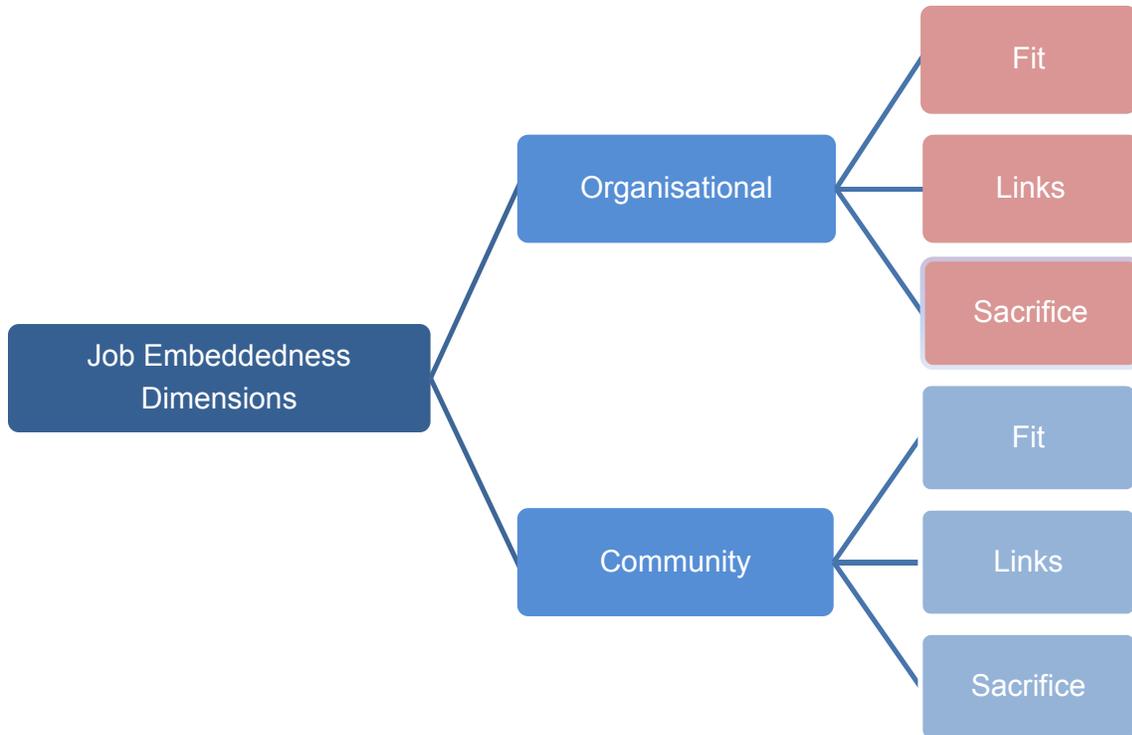


Figure 2.1: Dimensions of job embeddedness (based on Mitchell *et al.*, 2001b, pp. 1104–1105)

### 2.1.2.1 Fit

Fit refers to an employee's perceived compatibility of comfort with the organisation as well as his or her job. According to the theory (Mitchell *et al.*, 2001b), an employee's personal values, career goals and plans for the future should fit with the larger corporate culture and the demands of his or her immediate job (e.g. skills, abilities and job knowledge). Mitchell *et al.* (2001b) argue that the better the fit, the higher the likelihood that an employee will feel professionally and personally tied to the organisation. According to Ng and Feldman (2007), high levels of embeddedness may

indicate that the individual's career has been progressing well, but embeddedness can also mean a lower likelihood of discovering and taking advantage of other career opportunities.

#### 2.1.2.2 *Links*

According to Mitchell *et al.* (2001b), links are formal or informal connections between an employee and the organisation or other employees. Job embeddedness suggests that a number of strands connect an employee and his or her family, psychological and financial web that includes work and non-work friends, groups, the community, and the physical environment where they live. As the number of these links increases, embeddedness is greater and the larger the number of links between the person and the web, the greater the likelihood that an employee will stay in the organisation (Holtom *et al.*, 2006).

#### 2.1.2.3 *Sacrifice*

According to Mitchell *et al.* (2001b), sacrifice captures the perceived cost of material or psychological benefits that may be forfeited by leaving the job. For example, an employee might experience personal loss such as giving up colleagues or interesting projects when leaving an organisation. There are less visible, but still important potential sacrifices suffered by leaving an organisation (e.g. opportunities for advancement, flexible work hours and job stability). In addition, various advantages accrue to individuals who stay long enough in an organisation. For example, sabbatical leave is granted after five years of employment at several universities. Thus, taking a new job elsewhere could mean giving up these accrued advantages.

Each of the three dimensions (fit, links and sacrifice) has organisational and community components, which are summarised in table 2.1.

Table 2.1

*Job embeddedness definitions (adapted from Holtom & Inderrieden, 2006)*

<b>Construct</b>	<b>Description</b>
Job embeddedness	Job embeddedness represents a broad array of influences on employee retention. The critical aspects of job embeddedness are (a) the extent to which the job and community are similar to or <i>fit</i> with the other aspects in a person's life space, (b) the extent to which this person has <i>links</i> to other people or activities, and (c) the ease with which links can be broken, that is, what the person would <i>sacrifice</i> if he or she were to leave. These aspects are important both on (organisation) and off (community) the job (Holtom & Inderrieden, 2006).
Fit-organisation	Fit-organisation reflects an employee's perceived compatibility of comfort with an organisation. The person's values, career goals and plans for the future must fit with the larger corporate culture as well as the demands of the immediate job (e.g. job knowledge, skills and abilities).
Fit-community	Fit-community captures how well a person perceives he or she fits the community and surrounding environment. The religious climate, weather, facilities or general culture of the location in which the person resides are relevant to perceptions of community fit.
Links-organisation	Links-organisation considers the formal and informal connections that exist between an employee, other people or groups in the organisation.
Links-community	Links-community recognises the significant influence that family, marital status or other social institutions exercise on individuals and their decision-making.
Sacrifice-organisation	Sacrifice-organisation captures the perceived cost of material or psychological benefits that may be forfeited by leaving one's job. For example, leaving an organisation would probably involve personal losses (e.g. giving up colleagues, projects or perks). The more an employee gives up when leaving, the more difficult it is to sever employment with the organisation.
Sacrifice-community	Sacrifice-community is mostly an issue if one has to relocate. Leaving a community that is attractive and safe and where one is liked or respected can be difficult. Of course, one can change jobs but stay in the same home. But even then, various conveniences like an easy commute or flexitime may be lost by changing jobs.

Empirical research by Mitchell *et al.* (2001b) established that people who are embedded in their jobs have less intent to leave and are less likely to leave than those who are not embedded in their jobs.

### **2.1.3 Variables influencing job embeddedness**

Some variables have been identified as precursors to job embeddedness and these will be discussed in the next section.

#### *2.1.3.1 Age*

Tanova and Holtom (2008) suggest that older employees are less likely to change jobs. This view is supported by Reitz, Anderson and Hill (2010) who found that older more embedded nurses are more likely to remain employed in their current organisation.

#### *2.1.3.2 Race*

A study by Mallol *et al.* (2007) identified job embeddedness as a predictor of employee retention across culturally diverse populations. In a cultural diversity and job embeddedness study, Gong *et al.* (2011) reported that speaking the employee's mother tongue may be associated with recognition from other colleagues, which may lead to a higher sense of fit, more informal links between employees and better relations with supervisors, leading to higher job embeddedness.

#### *2.1.3.3 Gender*

Tanova and Holtom (2008) found that male participants are more likely to leave their jobs compared to female participants. This view is supported by Lev and Koslowsky (2012), who suggested that females are more attached to their jobs. However, Shafique, Qadeer, Ahmad and Rehman (2011) did not find differences in job embeddedness and intention to leave between male and female employees.

### **2.1.4 Implications for retention**

A research study by Holtom and Inderrieden (2006) indicates that "job stayers" were found to have the highest levels of job embeddedness, which suggests the buffering role of job embeddedness. Therefore, establishing or increasing job embeddedness can increase retention, and organisations

should be proactive about increasing job embeddedness among their employees. Some researchers have also found that on-the-job embeddedness is a predictor of turnover and subsequently reduces turnover (Allen, 2006; Crossley *et al.*, 2007).

A study by Allen (2006) proposed that socialisation strategies may enable organisations to actively embed new employees. Allen (2006) thus suggests that involving experienced employees in the socialisation process as role models, mentors or trainers could directly reduce newcomer turnover. In addition, job embeddedness may be increased by providing newcomers with positive feedback, structured orientation activities and clear information about the stages of the socialisation process.

Lee *et al.* (2004) suggest that job embeddedness can be established by developing a sense of belonging, establishing deep ties between employees, and that deepening social capital may increase retention and job performance. Furthermore, organisations can be proactive about job embeddedness; links can be increased by using flexible work policies, teams and long-term projects; sacrifice can be increased by connecting job and organisational rewards to tenure; and fit can be increased by matching employees' knowledge, skills, abilities, and attitudes with a job's requirements (Holtom & Inderrieden, 2006). Tanova and Holtom (2008) also indicated that managers can establish mentoring programmes to strengthen the links that employees have with others in the organisation.

Bergiel *et al.* (2009) proposed that several strategies from a diversity of human resource practices (e.g. supervisor support and growth opportunities) can be used to build deeper links, make a better fit and create greater potential sacrifices for employees should they decide to look for or pursue other employment opportunities.

## **2.2 WORK ENGAGEMENT**

This section conceptualises work engagement and will provide an overview of the model of work engagement by Bakker and Demerouti (2007). The section concludes with a discussion of the variables influencing work engagement and the implications for talent retention.

### **2.2.1 Conceptualisation**

Work engagement entails “a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption” (Schaufeli *et al.*, 2002, p.74). Work engagement is an emerging trend towards a “positive psychology” that focuses on human strengths and optimal functioning

rather than weakness and malfunctioning (Seligman & Csikszentmihalyi, 2000). The concept of work engagement was first introduced by Kahn (1990), who defined it as being different from other constructs such as job involvement, commitment or intrinsic motivation. Engagement then grew with burnout researchers (Maslach, Schaufeli & Leiter, 2001), and more currently with Schaufeli *et al.* (2002). According to Saks (2006), work engagement is associated with the individual's attitudes, intentions and behaviours. Engagement affects the mindset of employees with proactive behaviour such as personal initiative and pursuit of learning (Rothmann & Rothmann, 2010; Sonnentag, 2003). Engaged workers are more creative, more productive and more willing to go the extra mile (Bakker & Demerouti, 2008).

In the academic literature, a number of definitions have been provided. Kahn (1990, p. 694) defines engagement as "the harnessing of organisation members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively and emotionally during role performance". According to Kahn (1990), engaged employees are physically involved in their tasks, be it alone or with others, cognitively attentive and emotionally connected to others when performing their work. Conversely, personal disengagement refers to "the uncoupling of selves from work roles; in disengagement, people withdraw and defend themselves physically, cognitively, or emotionally during role performance" (Kahn, 1990, p.694). Kahn (1990, 1992) therefore views work engagement as being psychologically present during role performance.

Rothbard (2001, p.656) also refers to work engagement as a psychological presence but goes on to state that engagement has two critical components, namely attention and absorption. Attention refers to "cognitive availability and the amount of time one spends thinking about a role" whereas, absorption "means being engrossed in a role and refers to the intensity of one's focus on a role". Engagement is further defined by burnout researchers as the positive antitheses or simply the opposite of burnout. Maslach *et al.* (2001) state that engagement is the opposite end of the three burnout dimensions and is characterised by energy, involvement and a sense of effectiveness. Gonza'lez-Roma', Schaufeli, Bakker and Lloret (2006) found that emotional exhaustion and cynicism (the core dimensions of burnout) and vigour and dedication (the core dimensions of engagement) are the opposite of each other. Thus high levels of vigour and dedication are indicative of engagement. Based on the theoretical view that work engagement is on the opposite end of a continuum from burnout and cannot be adequately measured by the Maslach Burnout Inventory (Maslach & Jackson, 1986), a work engagement standardised instrument, the Utrecht Work Engagement Scale (UWES), was therefore developed by Schaufeli *et al.* (2002). The UWES is of relevance to the present research.

Schaufeli *et al.* (2002) explored the positive psychological state of mind of employees and found engagement to be a multidimensional construct. For the purposes of this study, work engagement entails “a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption” (Schaufeli *et al.*, 2002, p.74). Engaged employees are passionately involved in their jobs and work with great enthusiasm for the success of their organisation (Markos & Sridevi, 2010). According to Schaufeli *et al.* (2002), work engagement is a persistent and broad affective cognitive state that is not focused on any object, event or behaviour of an individual. Vigour is characterised by high levels of energy and mental resilience when working, the readiness to invest effort in one’s work, and persisting even in difficult times. Hence employees who feel great vigour at work are highly motivated by their job and are likely to remain persistent when encountering difficulties at work (Mauno, Kinnunen & Ruokolainen, 2006).

Dedication is characterised by a strong involvement in one’s work, coupled with experiences of a sense of significance, passion, inspiration and pride in one’s work. The final dimension of work engagement, absorption, is characterised by being fully concentrated and deeply engrossed in one’s work, a state characterised by time passing quickly and having difficulty detaching oneself from work (Schaufeli *et al.*, 2002). Being fully absorbed in one’s work comes close to the concept of “flow” which is characterised by little conscious control over actions, where individuals narrow their attention to specific stimuli, and lose the sense of consciousness about “selves” as they would with a specific activity (Csikszentmihalyi, 1990). However, flow is a more complex concept that includes many aspects and refers to a particular, short-term peak experience rather than a more pervasive and persistent state of mind as is the case with work engagement (Schaufeli *et al.*, 2002).

Work engagement has important implications for employee performance. According to a study by Gallup (2007), disengaged employees were estimated to exhibit low productivity and cost the U.S. economy between 334 and 431 billion US dollars and between 4.9 and 6.7 billion US dollars annually in Singapore. Conversely, engaged employees have a sense of energetic and positive connection with their work activities, which allows them to bring their full potential to the job (Bakker & Leiter, 2010). Work engagement is a relevant concept for employee well-being and work behaviour for numerous reasons (Sonnentag, 2003). Bakker and Demerouti (2008) suggest at least four reasons why engaged workers perform better than non-engaged workers. Firstly, engaged employees often experience positive emotions, which could be the reason why they tend to be more productive. Moreover, happy people are more sensitive to opportunities at work, are more outgoing and helpful to others and are more confident and optimistic (Cropanzano & Wright, 2001; Schaufeli & Van Rhenen, 2006).

Secondly, research suggests that engagement is positively related to health, which could imply that engaged workers are better able to perform well and report less psychosomatic health or mental problems (Bakker & Demerouti, 2008; Demerouti, Bakker, De Jonge, Janssen & Schaufeli, 2001; Schaufeli & Bakker, 2004; Shirom, 2003). Thirdly, engaged employees work more productively, because they have the ability to create their own resources. Xanthopoulou, Bakker, Demerouti and Schaufeli (2007) found in their study of highly skilled Dutch technicians that personal resources (optimism, self-efficacy, and organisational-based self-esteem) result in higher levels of work engagement. Lastly, engaged employees influence their colleagues by communicating their optimism, positive attitudes and proactive behaviours, thus creating a positive team climate and consequently perform better as a team (Bakker & Demerouti, 2008). It is thus important to study work engagement because it is related to positive individual and organisational outcomes (Schaufeli & Salanova, 2007, 2008).

According to Van den Berg *et al.* (2008), higher education institutions can benefit from work-engaged employees as this may result in higher output from academics that are energised and willing to work harder. Furthermore, Schaufeli *et al.* (2001) describe engaged employees as having the following characteristics: they are individuals who take the initiative and self-direct their lives; generate their own positive feedback and encourage themselves; are engaged outside of their employment; have values and norms that are in agreement with those of the organisation they work for; and although they become fatigued, this is inherently linked to an overall sense of satisfaction; they may become burnt out, but are able to detach themselves from the situation; and they are not enslaved to their jobs, tending to also pursue outside interests. Thus engaged employees have a sense of energy and affective connection with their work activities. They also see themselves as having the ability to deal competently with the demands of their jobs (Schaufeli *et al.*, 2002).

### **2.2.2 Theoretical model**

An assumption of the Job Demand-Resources Model (JD-R model) is that certain specific occupational characteristics are associated with well-being which makes it possible to model these characteristics into two broad categories, namely job demands and job resources (Demerouti *et al.*, 2001; Rothmann & Jordaan, 2006). According to Bakker and Demerouti (2008), two assumptions can be drawn from job demands and resources. The first assumption is that job resources such as social support from colleagues and supervisors, performance feedback, skill variety and autonomy, start a motivational process that leads to work engagement, and subsequently to higher

performance. In addition, job resources reduce demands and stimulate personal growth and development. The second assumption is that job resources become more noticeable and gain their motivational potential when employees are confronted with high job demands such as emotional demands, workload and physical demands.

Bakker and Demerouti (2007) maintain that job and personal resources are mutually related and that personal resources can be independent predictors of work engagement. Consequently, employees who score high on optimism, self-efficacy, resilience and self-esteem are capable of mobilising their job resources, and are commonly more engaged in their work. Based on the JD-R model of work engagement represented in figure 2.2 below, both job and personal resources foster work engagement. Moreover, when job demands are high, job and personal resources predominantly have a positive impact on work engagement. Work engagement, in turn, has a positive impact on organisational outcomes (e.g. job performance and turnover). In particular, Harter *et al.* (2002) found that with higher levels of work engagement, staff turnover is diminished. Ultimately, employees who are engaged and perform well are capable of creating their own resources, which then fosters work engagement all over again creating a positive gain spiral (Bakker & Demerouti, 2008).

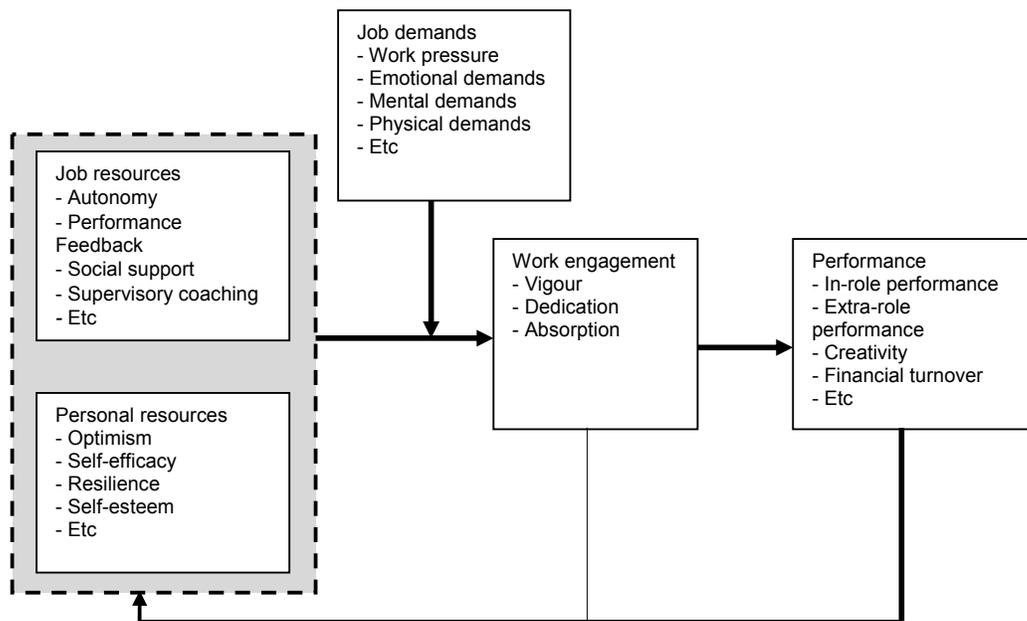


Figure 2.2: The JD-R model of work engagement (based on Bakker and Demerouti, 2007, 2008, p.218)

An empirical study by Lee and Shin (2005) demonstrates that all the dimensions of work engagement are negatively correlated with turnover intention. This view is supported by Burke, Koyuncu, Jing and Fiksenbaum (2009), who found that work engagement negatively predicts intent to quit.

### **2.2.3 Variables influencing work engagement**

Given the importance of work engagement for both the individual and the organisation, some researchers have explored the influence of certain demographic variables on the process of work engagement, and in particular, the variables of age and gender have often been linked to work engagement (Bezuidenhout & Cilliers, 2011; Burke & El-Kot, 2010; Schaufeli & Bakker, 2003).

#### *2.2.3.1 Age*

Schaufeli, Bakker and Salanova (2006) suggest that work engagement tends to be slightly higher among older workers, but these differences are small. However, no statistically significant differences were found in the work engagement of academics of different age groups (Barkhuizen & Rothmann, 2006).

#### *2.2.3.2 Race groups*

Jones and Harter (2005) found that at low levels of work engagement, members of different racial groups reported a lower tendency to remain with the organisation than members of the same racial group.

#### *2.2.3.3 Gender*

Regarding gender, men seem to be more engaged in their work than women (Schaufeli & Bakker, 2003). Schaufeli and Bakker (2003) reported that men scored significantly higher than women on all the dimensions of engagement: vigour, dedication and absorption. Burke and El-Kot (2010) conducted a study among managers and professionals in Egypt and found that men and single employees reported higher levels of work engagement. However, Gorter, Te Brake, Hoogstraten and Eijkman (2008) reported no significant gender differences in the mean scores of dentists.

#### 2.2.3.4 Job level and qualification

Barkhuizen and Rothmann (2006) indicated that academics with different qualifications differ in relation to their level of absorption. Specifically, these authors found that academics in possession of doctoral degrees are more absorbed in their jobs than those with a four-year degree or honours. This view is supported by Gilbert (2001), who suggested that highly qualified workers tend to be more absorbed in their work such that it becomes more psychologically central, thus making it difficult for them to detach themselves from the task at hand. Barkhuizen and Rothmann (2006) also established that professors are significantly more dedicated to their work than senior lecturers and more absorbed in their work than junior and senior lecturers.

#### 2.2.4 Implications for retention

Work engagement has important implications for employee performance. The energy and focus intrinsic in work engagement allow employees to bring their full potential to the job. This energetic focus improves the quality of their core work responsibilities. Engaged employees appear to have the capacity and the motivation to concentrate completely on the task at hand. In addition, they seem to proactively approach their work by responding to unique opportunities as well as developing new knowledge (Bakker & Leiter, 2010).

Engaged employees are likely to be more attached to their organisation and may have a lower propensity to leave the organisation (Schaufeli & Bakker, 2004). This view is supported by several researchers who reported that work engagement is positively related to organisational outcomes such as job satisfaction, motivation, a decline in the intention to quit, employee well-being and health (Koyuncu *et al.*, 2006; Rothmann & Jordaan, 2006). Several studies also identified significant positive relationship between work engagement and organisational outcomes (i.e. job satisfaction, customer satisfaction, profitability, loyalty, motivation, productivity and lower turnover intention) (Bakker, Demerouti & Schaufeli, 2003; Bakker, Schaufeli, Leiter & Taris, 2008; Harter *et al.*, 2002; Schaufeli & Bakker, 2004).

Research by Saks (2006) suggests that employees who perceive higher organisational support are more likely to respond with greater levels of engagement in their jobs and in the organisation; employees who are provided with jobs that are high on the job characteristics are more likely to reciprocate with greater work engagement. Thus, engaged employees are more likely to have a high quality relationship with their employer, resulting in more positive attitudes, intentions and behaviours.

Bakker and Demerouti (2008) indicate that promoting work engagement in the workplace cannot only be a liberating experience that gives choice and control to the individual, but also allows individuals to arm themselves with the right skills and attitudes and engage in a continuous programme of personal career development. Shimazu and Schaufeli (2009) concur that career planning and development in modern organisations boil down to increasing employability. This can be achieved by ensuring continuous personal and professional development, whereby employees rely more on their own initiative to keep developing themselves throughout their careers, and ultimately keep their levels of engagement high.

Research by Rothmann and Rothmann (2010) established that job resources, namely growth opportunities (i.e. variety, learning opportunities and autonomy), organisational support (i.e. relationship with the manager, participation, communication, role clarity and information), social support and advancement, play significant roles in promoting work engagement. These findings are in agreement with those of Schaufeli and Bakker (2004) who claim that job resources play either an intrinsic motivational role by nurturing the employee's growth, learning and development or an extrinsic motivational role by being instrumental in achieving work goals.

Barkhuizen and Rothmann (2006) conclude that in order to promote work engagement it is important that employees have the resources to do their work such as challenging tasks; acknowledging and rewarding good performance; coaching employees by helping them with goal setting; and promoting work engagement by stimulating self-efficacy beliefs. Shimazu and Schaufeli (2009) suggest training programmes in organisations that aim to increase work engagement by focusing on building efficacy beliefs that serve as a kind of self-motivating mechanism. In addition, Burke and El-Kot (2010) indicate that organisations can increase levels of work engagement by creating supportive work experiences (e.g. control, rewards and recognition) that are consistent with effective human resource management practices.

### **2.3 TURNOVER INTENTION**

This section conceptualises turnover intention and provides an overview of the unfolding model of voluntary turnover by Lee and Mitchell (1994). The section concludes with a discussion of the variables influencing turnover intention and the implications for talent retention.

### 2.3.1 Conceptualisation

Turnover intention is defined as the manifestation of “the (subjective) probability that an individual will change his or her job within a certain time period” (Sousa-Poza & Henneberger, 2002, p.1). Turnover as a voluntary occurrence or event is defined as the “individual movement across the membership boundary of an organisation” (Price, 2001, p.600). Contrary to turnover, turnover intentions are not definite and while they are often associated with job search behaviour, this is not always the case (Sousa-Poza & Henneberger, 2002). From the organisation’s perspective, employee turnover creates both tangible and intangible costs. Tangible costs include recruitment, selection, training or the costs of temporary staff, whereas intangible costs involve the effect of turnover on organisational culture, employee morale, social capital and organisational memory (Morrell, Loan-Clarke & Wilkinson, 2004).

The study of turnover has a rich theoretical and empirical history in which multiple models have contributed to advance understanding of its complexity (Griffeth, Hom & Gaertner, 2000). Although models and measures have differed, the results tend to converge on the importance of dissatisfaction, perceived alternatives, intention to search and the intention to quit as four core antecedents of voluntary turnover (Steel, 2002). Most of the current theory and research on voluntary turnover originates from the ideas of March and Simon (1958) on the perceived ease and desirability of leaving one’s job.

March and Simon (1958) initially identified job satisfaction as a drive for voluntary turnover, and later, Price and Mueller (1981) developed a comprehensive model by adding organisational commitment as a drive for intent to leave. During the periods of 1985 to 1995, research was based on the organisation’s macro variables such as organisational culture and person-organisation fit and more sets of attitudes relating to emotional exhaustion and job insecurity were incorporated into the traditional job attitudes of satisfaction as predictors of turnover (Holtom *et al.*, 2008). However, a meta-analysis by Griffeth *et al.* (2000) suggests that organisational and attachment variables have relatively little explanatory power, explaining only 4 to 5% of the variance in turnover behaviour. The consistent, but weak links between attitude, perceived alternative search and turnover suggest that many other meaningful topics may influence turnover behaviour (Mitchell *et al.*, 2001b).

In response to these disappointing findings, Lee and Mitchell (1994) used image theory from psychology (Beach & Mitchell, 1987) to develop the unfolding model of voluntary turnover. Consequently, the end of the period up to 1995 saw the introduction of a new theory model

regarding the turnover process which Lee and Mitchell (1994) coined “the unfolding model of turnover”.

### **2.3.2 Theoretical model**

Lee and Mitchell (1994) argued that an alternative theory was needed to explain how people leave organisations. These authors based their model on the image theory proposed by Beach (1990) to formulate the unfolding model of turnover. The unfolding model demonstrates that, for many, the decision to leave is not the gradual build-up of negative attitudes but rather the result of a shock, or some event that is important enough to overcome the existing apathy (Lee & Mitchell, 1994). In addition, the unfolding model refers to different psychological paths that people follow when they decide to leave an organisation and the central contribution of this approach is that it has shifted from an assumption that turnover is always an evaluative and rational process to a broader model of how decisions are actually made (Harman, Lee, Mitchell, Felps & Owens, 2007). According to Mitchell and Lee (2001), image theory suggests that when deciding to leave one’s job, leaving may occur in an impulsive way, whereas in other cases, leaving may take place according to a performed plan. Furthermore, image theory also suggests that one’s values and goals images can be central to the process of evaluating one’s current job or alternative jobs and that compatibility could be the key to understanding this evaluation process (Mitchell & Lee, 2001).

As indicated in table 2.2, the unfolding model introduces the notion of automated scripts into the turnover process (path 1); model incorporated shocks (positive, neutral or negative) as catalysts to turnover (path 1, 2, and 3); contrary to the traditional single sequential process, the multiple paths of the unfolding model allow for greater explanatory power with distinct psychological processes in each path. The model highlights the possibility that job satisfaction may have no influence on the decision to quit, meaning that people who are satisfied may still leave (path 1 and 3). The relative speed of the quit decisions is immediate in paths 1 and 2 but slower in paths 3 and 4b. The unfolding model allows for the possibility that turnover could happen even in the absence of job alternatives (paths 1, 2, and 4a) (Mitchell *et al.*, 2001a).

#### **2.3.2.1 Shocks**

Lee and Mitchell (1994) define a shock as an initial, jarring event that triggers thoughts of quitting. According to Lee and Mitchell (1994), many people leave their jobs not necessarily because of negative affect such as job dissatisfaction, but because of a variety of triggering events, known as shocks. In addition, a shock can be a positive, neutral or negative event that is expected or

unexpected (e.g. being accepted to law school would be a positive, anticipated event, whereas receiving an unsolicited job offer would be a positive, unanticipated event). A study by Morrell *et al.* (2004) among nurses indicated that shocks play a significant role in many decisions to quit. These findings are supported by Holtom, Mitchell, Lee and Inderrieden (2005) who reported that 60% of voluntary turnover cases are precipitated by shocks more often than job dissatisfaction. A study by Holt, Rehg, Lin and Miller (2007) also found that 62% of the participants experienced shock before leaving the Air Force.

Table 2.2  
*The unfolding model paths of voluntary turnover (adapted from Holtom & Inderrieden, 2006, p. 437).*

Attribute	Path				
	1 Following a plan	2 Leaving without a plan	3 Leaving for something better	4A Leaving without a plan	4B Leaving for something better
Initiating event	Shock	Shock	Shock	Job dissatisfaction	Job dissatisfaction
Script plan	Yes	No	No	No	No
Relative job dissatisfaction	No	Yes	Yes	Yes	Yes
Active job search	No	No	Yes	No	Yes
Example	Planned to go to medicine school. Quit job when accepted to medicine school.	Individual was passed over for a promotion. Decided to quit.	Received an unsolicited job offer that looks better than current situation. Decided to quit.	As a result of mounting job dissatisfaction decides to quit current job without searching for another job.	Accumulated dissatisfaction results in successful job search. Finds a new job, then quits.

The following components combine to form five distinct paths for individuals as indicated in table 2.2.

### 2.3.2.2 *Scripts*

A script is a pre-existing plan of action (Lee & Mitchell, 1994). According to Holtom and Inderrieden (2006), individuals may prepare scripts that detail a plan of action that can be taken if a shock occurs based on prior experience, observation of the experiences of others, information obtained from relevant reading or through social expectations.

### 2.3.2.3 *Job search*

According to Lee and Mitchell (1994), all activities involved in looking for alternatives to the current job are regarded as part of the job search. Holtom and Inderrieden (2006) suggest that job alternatives include a variety of work and non-work options (e.g. a job offer that looks better than the current situation).

### 2.3.2.4 *Image violations*

Image violation occurs when an individual's values, goals and strategies for goal attainment do not fit with those of the organisation or those mirrored in the shock (Holtom *et al.*, 2008). Research by Holt *et al.* (2007) indicates that 84% of participants experienced image violation before separating from the organisation.

### 2.3.2.5 *Job satisfaction*

Job dissatisfaction occurs when a person feels that his or her job no longer offers the intellectual, emotional or financial benefits desired (Holtom *et al.*, 2008). Research by Holt *et al.* (2007) indicated that 83% of participants experienced low levels of job satisfaction before separating from the organisation.

Research results by Niederman, Sumner and Maertz (2007) found that an overwhelming majority of participants experienced a script, image violation and low job satisfaction. However, contrary to earlier findings on the unfolding model, the majority of participants (88%) reported following paths not among the original five theorised paths. Thus employers need to be aware of the various routes employees can take when deciding to leave their existing employment.

### **2.3.3 Variables influencing turnover intention**

Various biographical variables have been identified as possible antecedents for turnover intention. These variables will be discussed below.

#### *2.3.3.1 Age*

Ng and Feldman (2009) argue that with the significant changes in mobility patterns among employees over the past decades, the strength of the age-turnover relationship may have changed as well. This is confirmed by their results which found that the age-turnover relationship was strongest, contrary to the findings of Healy, Lehman and McDaniel (1995) who concluded that age is weakly related to turnover. A study by Ferres, Travaglione and Firms (2003) also shows that younger employees demonstrate stronger turnover intentions than older age group employees.

#### *2.3.3.2 Race*

Leonard and Levine (2006) and Wöcke and Heymann (2012) did not find consistent evidence that race has an impact on turnover. However, findings by Zatzick, Elvira and Cohen (2003) suggested that working with members of the same race reduces the likelihood of turnover.

#### *2.3.3.3 Gender*

A study by Sutherland (2002) revealed that females are 41% less likely than males to quit because they find alternative superior employment. This result is consistent with previous findings by Lyness and Judiesch (2001) among managers in a financial service organisation, which indicate that men are significantly more likely to leave the organisation than women.

#### *2.3.3.4 Tenure*

Mkavga and Onyishi (2012) revealed a significant relationship between job tenure and turnover intention.

### **2.3.4 Implications for retention**

Holt *et al.* (2007) suggest that offering training and development effectively minimises the influence of shocks by capitalising on members' desires to continually update skills and improve long-term employability which in turn creates pre-existing scripts that motivate retention rather than turnover. Ferres *et al.* (2003) suggest that management can retain talented generation-x employees by fostering mutual trust and respecting everyone's motivations and needs. Leaders should also be aware of possible generational differences in order to adapt their management style, rewards and recognition and development assignments to the individual in order to promote the best work and contribution to the organisation.

Given the research findings by Sutherland (2002) that females are less likely to quit than males, Sutherland (2002) argues that to reduce turnover, recruitment sources should be selectively targeted and screening should be more thorough to ensure a more committed workforce which is less prone to quitting. These changes to recruitment and selection policies should be complemented with changes in induction and training policies. Established talented and experienced personnel can be retained with competitive salaries which are higher than those that can be obtained elsewhere in the local labour market.

## **2.4 THEORETICAL INTEGRATION OF JOB EMBEDDEDNESS, WORK ENGAGEMENT AND TURNOVER INTENTION**

This section presents an integration of sections 2.1, 2.2, and 2.3 respectively. Imperative to this discussion are the theoretical links and differences between variables. These will be presented using the proposed model as set out below.

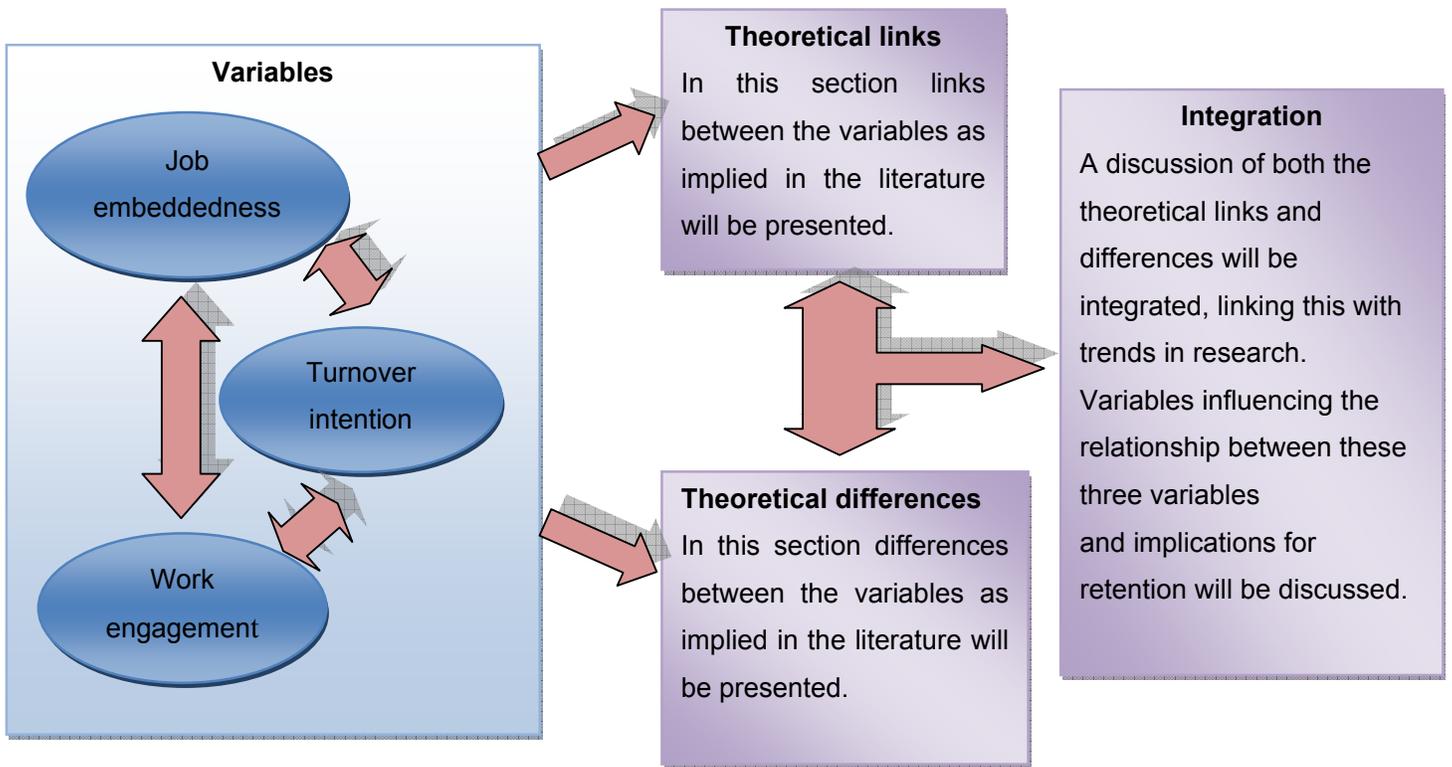


Figure 2.3: Theoretical links and differences between variables and integration

### 2.4.1 Background

The context of this research is the retention of critical human capital in the South African higher education environment. More specifically, the research focuses on the relationship dynamics between job embeddedness, work engagement and turnover intention. Higher education plays a critical role in the creation of knowledge for future skills development, social and educational improvement in South Africa (Van den Berg *et al.*, 2008). Gilbert (2000) emphasises the fact that higher education institutions require stable and productive systems, since such systems are vitally important in ensuring the country's sustainable socio-economic development.

According to Probst, Raub and Romhardt (2000), managing knowledge involves knowledge identification, acquisition, development, transfer and retention. It is widely known that the capacity to retain institutional knowledge is a key component in the knowledge economy (Powell & Snellman, 2004). Moreover, retention of knowledge benefits higher education institutions by better decision-making capabilities; reduced product development cycle time (e.g. curriculum development and research); enhanced quality of curriculum and programmes by identifying best practices; improved academic and administrative services; and reduced costs (Kidwell, Vander

Linde & Johnson, 2000). Hence in order to ensure that higher education succeeds in making a valuable contribution to the reconstruction and development of South Africa, it is critical to look after the staff employed in higher education institutions who are the human capital that will make it possible to achieve service delivery to all stakeholders, including students, government and the community as a whole (Coetzee & Rothman, 2004; Van den Berg *et al.*, 2008).

#### **2.4.2 Theoretical relationship between job embeddedness, work engagement and turnover intention**

The model in figure 2.3 provides a conceptual overview of the three constructs and how they relate to each other and summarises the relationships found in the literature discussed above, whereas table 2.3 provides a conceptual description of the theoretical relationship between job embeddedness, work engagement and turnover intention. Job embeddedness is related to the organisation and the workplace, and higher levels of job embeddedness are associated with lower intentions to leave as well as actual turnover. Work engagement is related to energy and psychological attachment to one's work. An employee who is highly engaged may find it difficult to detach from the job, because of invested energy in the job and high levels of identification with the work. Thus both job embeddedness and work engagement have been shown to be related to the retention of employees.

The theoretical integration attempts to explore whether a theoretical relationship exists between job embeddedness, work engagement and turnover intention. It is evident from the literature that a theoretical relationship does exist between these three variables. Halbesleben and Wheeler (2008) found job embeddedness and work engagement to be unique constructs and that both of these are negatively related to turnover intention. It is hypothesised that there is a significant relationship between job embeddedness, work engagement and turnover intention.

Table 2.3 illustrates the retention strategies that can be considered to enhance the job embeddedness and work engagement of employees. Theoretically, interventions that keep employees embedded in their jobs and develop an engaged workforce may lead to less intention to leave and build more effective organisations (Mitchell *et al.*, 2001b; Saks, 2006).

Table 2.3

*A theoretical comparison of job embeddedness, work engagement and turnover intention*

	<b>Job embeddedness</b>	<b>Work engagement</b>	<b>Turnover intention</b>
	Mitchell <i>et al.</i> (2001b); Yao <i>et al.</i> (2004, p. 159)	Schaufeli <i>et al.</i> (2002, p. 74)	Sousa-Poza & Henneberger (2002, p.1)
<b>Definition</b>	Job embeddedness is defined as “the combined forces that keep a person from leaving his or her job”.	Refers to “a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption”.	Turnover intention is defined as the manifestation of “the (subjective) probability that an individual will change his or her job within a certain time period”.
<b>Dimensions</b>	Links, fit and sacrifice	Vigour, dedication and absorption	Shocks, scripts, job search, image violations and job satisfaction
<b>Variables</b>	Age, race, gender, marital status and tenure	Age, race, gender, marital status and tenure	Age, race, gender, marital status and tenure
<b>Implications for retention practices</b>	<u>Intentions to stay or leave (retention factors):</u> *Role models and mentoring in the socialisation process *Positive feedback *Develop a sense of belonging *Flexible work policies	<u>Intentions to stay or leave (retention factors):</u> *Mentoring and coaching *Autonomy *Provide learning opportunities *Personal and professional development	<u>Intentions to stay or leave (retention factors):</u> *Training and development *Fostering mutual trust and respect *Adapt management style, rewards and recognition *Recruitment and selection policies that promote commitment

### 2.4.3 Biographical variables influencing job embeddedness, work engagement and turnover intention

The literature review provided an overview of how age, race, gender, marital status and tenure groups will differ in terms of their levels of job embeddedness, work engagement and turnover intention. Figure 2.3 and table 2.3 provide a theoretical integration which illustrates age, race, gender, marital status and tenure as influencing job embeddedness, work engagement and turnover intention levels.

It is evident from the literature that there are empirical evidence of differences between age, race, gender, marital status and tenure groups regarding job embeddedness, work engagement and turnover intention. Ferres *et al.* (2003) found that younger employees demonstrate stronger turnover intentions than older age group employees. In addition, Reitz *et al.* (2010) reported that the older more embedded age group are more likely to remain employed in their current organisation.

Mallol *et al.* (2007) suggest that job embeddedness is a predictor of employee retention across culturally diverse populations. Gong *et al.* (2011) found that speaking a language may be associated with recognition from other colleagues, which may lead to a higher sense of fit, more informal links between employees and better relations with supervisors, leading to higher job embeddedness.

According to Sutherland (2002), females are more likely than males to leave their organisation. Zatzick *et al.* (2003) suggest that working with members of the same race reduces the likelihood of turnover. Mkavga and Onyishi (2012) revealed a significant relationship between job tenure and turnover intention.

Burke and El-Kot (2010) found that men and single employees reported higher levels of work engagement. Lev and Koslowsky (2012) suggest that females are more attached to their jobs. It is hypothesised that people from different age, race, gender, marital status and tenure groups will differ significantly regarding job embeddedness, work engagement and turnover intention. Theoretically, interventions that help develop an embedded and engaged workforce within these five biographical variables will reduce turnover and improve organisational effectiveness.

#### **2.4.4 Implications for talent retention**

Higher education institutions depend on their employees' intellectual capabilities, knowledge and skills for efficient and effective delivery of services in order to keep abreast of new changes and achieve the strategic objectives of the institution (Naris & Ukpere, 2010). Therefore, reducing staff turnover is vital for these institutions. According to Halbesleben and Wheeler (2008), embeddedness and engagement appear to be unique constructs that contribute to less intention to leave an organisation. These authors therefore suggest that programmes to develop engagement (e.g. job redesign to increase job resources) and embeddedness (e.g. employee assistance programmes) could subsequently reduce turnover.

As noted by Schaufeli and Bakker (2004), engaged employees are likely to have a greater attachment to their organisation and a lower propensity to leave. As a result, individuals who are more engaged are likely to be in more trusting and high-quality relationships with their employer and will consequently be more likely to report more positive attitudes and intentions toward the organisation (Saks, 2006).

According to a study by Park and Gursoy (2012), the effects of work engagement on turnover are significantly moderated by generational differences and levels of work engagement are likely to vary on the basis of the generational membership of employees. Most specifically, the findings indicate that employees of younger generations, in particular millennial employees, have lower levels of engagement than older generations. Park and Gursoy (2012) propose that managers should incorporate younger employees' work preferences (e.g. meaningful, significant and fulfilling jobs) as well as their work values into human resources policies in order to retain them.

Research on turnover among women in higher education by Jo (2008) suggests the need to better understand the effectiveness of flexible work/life policies in supporting female employees who manage work and family. Moreover, an incompatible working schedule is a limitation to parenting responsibilities - hence the importance of a supportive work environment for retaining women. From the preceding theoretical integration of the literature, it follows that research on the relationship between job embeddedness, work engagement and turnover intention, as well as differences between biographical groups with regard to these constructs, may potentially inform talent retention practices.

## **2.5 CHAPTER SUMMARY**

This chapter addressed the research aims of the literature review of the study at hand. Job embeddedness, work engagement and turnover intention were conceptualised by summarising previous views and definitions obtained from the literature. The main concepts relevant to these constructs were also identified and briefly explained. The antecedents and consequences of these constructs were identified and the implications for talent retention discussed. Based on an overview of previous literature, an integrated theoretical model depicting the relationship between job embeddedness, work engagement and turnover intention was suggested.

Herewith the literature aims of the research have been achieved, namely to conceptualise

- Job embeddedness from a theoretical perspective
- work engagement from a theoretical perspective
- turnover intention from a theoretical perspective
- the theoretical relationship between job embeddedness, work engagement and turnover intention

- the implications of the theoretical relationship between job embeddedness, work engagement and turnover intention variables for retention practices in the higher education context

Chapter 3 addresses the empirical research aims and presents the research in the format of a research article.

## CHAPTER 3: \*RESEARCH ARTICLE

### JOB EMBEDDEDNESS, WORK ENGAGEMENT AND TURNOVER INTENTION OF STAFF IN A HIGHER EDUCATION INSTITUTION

#### ABSTRACT

**Orientation:** The world economy is becoming increasingly knowledge driven and intellectual capital is viewed as a strategic resource that offers a competitive advantage in organisations. The higher turnover rate in higher education and the importance of retaining staff remain a concern that has resulted in increased interest in effective retention strategies.

**Research purpose:** The objective of the study was: (1) to determine the relationship between job embeddedness (measured by the Job Embeddedness Scale) work engagement (measured by the Utrecht Work Engagement Scale) and turnover intention (measured by the Turnover Intention Scale); and (2) to determine whether employees from different age, race, gender, marital status and tenure groups differ significantly in terms of their levels of job embeddedness, work engagement and turnover intention.

**Motivation for the study:** Research on how employees' job embeddedness and work engagement influence their turnover intention and how age, race, gender, marital status and tenure groups differ in terms of these variables is important in the light of organisational concerns about retaining knowledge staff in the current higher education environment.

**Research design, approach and method:** Across-sectional quantitative survey was conducted on a non-probability purposive sample (N = 153) of academic and non-academic staff in a South African higher education institution.

**Main findings:** Correlational analyses revealed significant relationships between job embeddedness, work engagement and turnover intention. Multiple regression analyses showed that organisational links and dedication significantly and negatively predict turnover intention. Significant differences between age, race, gender and marital status groups were also found.

**Practical implications in terms of industrial organisational psychology practices:** Practitioners need to recognise how job embeddedness and work engagement influence the turnover intention of employees when designing retention strategies for various biographical groups.

**Contribution/value-added:** These findings contribute valuable new knowledge to the field of career psychology that can be applied in the retention of staff in the higher education environment.

**Key words:** Dedication; employee retention; human capital; job embeddedness; retention practices; sacrifice; turnover intention; vigour; work engagement.

\* Please note: The guidelines provided by the *South African Journal of Industrial Psychology (SAJIP)* have been used as a broad and general guideline for the framework of the research article. The research article in this chapter is therefore slightly more expanded than a typical article published in the SAJIP in order to adequately report and discuss the empirical study of the dissertation of limited scope.

### **3.1 INTRODUCTION**

The following section aims to clarify the focus and background of the study. General trends found in the literature will be highlighted, and the objectives and potential contribution of the study will be stated.

#### **3.1.1 Key focus of the study**

The global economy is fast becoming knowledge driven and intellectual capital is viewed as a strategic source that offers competitive advantage in organisations (Halawi, Aronson & McCarthy, 2005; Powell & Snellman, 2004). Retention of talent both in South Africa and globally is becoming more critical in a world where the organisation's intellectual capabilities have become a key source of maintaining competitive advantage (Macey & Schneider, 2008; Powell & Snellman, 2004; Ryder, 2010). Furthermore, an increasing number of organisations are realising that they need to release the untapped potential of their employees if they are to compete successfully in an increasingly demanding global economy (Burke & Cooper, 2008; Burke & El-Kot, 2010; Lawler, 2008). This research seeks to contribute to the extant literature on staff retention by focusing on the relationship between employees' job embeddedness, work engagement and their turnover intention. More specifically, the context of the study is staff retention in the South African higher education context.

#### **3.1.2 Background to the study**

Higher education plays a critical role in the creation of knowledge for future talent and social-economic development in the South African environment (Van den Berg, Manias & Burger, 2008). According to Coetzee and Rothmann (2004), academics are essential to societal life, since they are responsible for educating the leaders of society, as well as for conducting scientific research and furthering knowledge. However, higher education institutions have become vulnerable to losing their highly qualified knowledge workers to well-paid offers from the private sector and headhunting from other global higher education institutions (Ngobeni & Bezuidenhout, 2011). According to Probst, Raub and Romhardt (2000), managing knowledge involves knowledge identification, acquisition, development, transfer and retention. It is widely known that the capacity to retain institutional knowledge is a key component in the knowledge economy (Powell & Snellman, 2004). In this regard, recognising the forces that keep employees in their current employment is critical in attracting and retaining talented staff (Lawler & Finegold, 2000; Michaels, Handfield-Jones & Axelrod, 2001).

The retention of talented employees promotes better decision-making capabilities, reduced product development cycle time, enhanced quality of curriculum programmes based on best practices, improved academic services; and reduced turnover costs in higher education institutions (Kidwell, Vander Linde & Johnson, 2000). Therefore, higher education institutions can succeed in contributing to the socio-economic development of South Africa by retaining the critical human capital that makes it possible to provide higher education to all stakeholders, including students and society as a whole (Coetzee & Rothman, 2004; Van den Berg *et al.*, 2008).

Turnover has significant implications for the human capital of an organisation, influencing factors such as the potential cost to the organisation in terms of human capital loss and interruption of ongoing organisational activities (Smyth, Zhai & Li, 2009). Despite the potential value that can be added by knowledge of the variables of relevance to this study, it is not clear from the literature how these three variables relate, most especially in the South African higher educational context. Furthermore, there seems to be a paucity of research addressing job embeddedness, work engagement and turnover intention in higher education institutions (Du Plooy & Roodt, 2010; Netswera, Rankhumise & Mavundla, 2005). In addition, little information is available on how people from different age, race, gender, marital status and tenure groups, both in South Africa and abroad, differ with regard to job embeddedness, work engagement and turnover intention.

Research has shown that job embeddedness and work engagement have emerged in the current world of work as constructs that may significantly influence employees' turnover intention (Halbesleben & Wheeler, 2008; Mitchell, Holtom & Lee, 2001a). Employees with low levels of job embeddedness and work engagement are more likely to have a higher intention to leave as well as actually leaving the organisation (Mitchell, Holtom, Lee, Sablinski & Erez, 2001b). Findings on the relationship between job embeddedness, work engagement and turnover intention can provide organisations with knowledge of retention practices for age, race, gender, marital status and tenure groups.

Although research has suggested the role of job embeddedness and work engagement in retaining employees, inconsistency in different demographic groups' experience of job embeddedness and work engagement have been reported (Barkhuizen & Rothman, 2006; Halbesleben & Wheeler, 2008; Mallol, Holtom & Lee, 2007). Therefore, it would be valuable to gain insight into the ways in which age, race, gender, marital status and tenure groups in the South African higher education environment differ in terms of their job embeddedness, work engagement and turnover intention.

### 3.1.3 Trends from the research literature

The following section provides a brief outline of the dominant trends in the research literature on the constructs of job embeddedness, work engagement and turnover intention. Relevant theories and findings from previous literature will be used to explain these constructs.

#### 3.1.3.1 *Job embeddedness*

Job embeddedness is defined as “the combined forces that keep a person from leaving his or her job” (Yao, Lee, Mitchell, Burton & Sablinski, 2004, p. 159). Although job embeddedness consists of two dimensions, organisational and community embeddedness (Mitchell *et al.*, 2001b), researchers have found that when job relocation is not a factor, organisational dimensions better predict employee retention than do community dimensions (Allen, 2006; Lee, Mitchell, Sablinski, Burton & Holtom, 2004). Thus, in this study, the investigation of job embeddedness is restricted to the organisational dimensions. Mitchell *et al.* (2001b) conceptualise job embeddedness as including one’s links to other aspects of the job (e.g. people and groups), perception of person-job fit and the sacrifices involved in leaving the job. Job embeddedness is a relatively new construct that was developed by Mitchell *et al.* (2001b) and represents a broad collection of factors that influence an employee’s decision to remain in or leave an organisation.

According to Mitchell and Lee (2001), the critical aspects of job embeddedness are the extent to which people have links to people on-the-job, the extent to which they fit or are a good match with their jobs and the ease with which they would have to give up or sacrifice things if they were to leave their jobs. Mitchell *et al.* (2001b) suggests that the link aspects of embeddedness are formal or informal connections between an employee and other entities on the job. As the number of these links increases, the greater the likelihood becomes that an employee will stay in the organisation (Holtom, Mitchell & Lee, 2006). Fit refers to an employee’s perceived compatibility of comfort with the organisation as well as his or her job -hence a higher fit shows higher embeddedness (Holtom *et al.*, 2006). Finally, sacrifice captures the perceived cost of material or psychological benefits that may be lost by leaving the job. Thus, the higher the perceived cost, the greater the embeddedness will be (Halbesleben & Wheeler, 2008; Holtom *et al.*, 2006).

Many people stay in organisations as a result of connections they have to people (e.g. co-workers or network groups), projects they are involved in or sponsored community engagement activities (Mitchell, Holtom & Lee, 2001a). Friedman and Holtom (2002) suggest that the more connected a person is professionally and socially through social network groups, the more likely he or she is to

stay in their organisation. Therefore, leaving a job often requires individuals to sacrifice or give up perks, routines or social networks of projects with which they have grown familiar (Mitchell *et al.*, 2001a). Several studies have found that people who are embedded in their jobs have less intent to leave and do not leave as readily as those who are not embedded (Allen, 2006; Holtom & O'Neill, 2004; Mitchell *et al.*, 2000b)

According to (Mitchell *et al.*, 2001a), job embeddedness differs from traditional models of turnover in that it is aimed at employee retention instead of employee turnover. This view is supported by Mitchell and Lee (2001) who found that job embeddedness predicts turnover beyond job attitudes and core variables from traditional models of turnover. Thus, the focus is on how to keep people in an organisation, rather than on how to keep them from moving to other organisations (Mitchell *et al.*, 2001a).

Research has found a significant negative relationship between job embeddedness and turnover intention (Allen, 2006; Crossley, Bennet, Jex & Burnfield, 2007; Halbesleben & Wheeler, 2008; Holtom & O'Neill, 2004; Mallol *et al.*, 2007). In addition, job embeddedness seems to predict turnover above and beyond combinations of perceived desirability and ease of movement measures (e.g. job satisfaction, organisational commitment, job alternatives and job search). Mitchell and Lee (2001) highlight the fact that highly embedded and satisfied employees search less. However, the potential downside of job embeddedness is that people who might feel stuck in an unpleasant job could lose motivation, be frustrated or engage in counterproductive workplace behaviour (Crossley *et al.*, 2007). In the context of the present study, the focus is on the positive aspects of job embeddedness, that is, – the forces that keep people satisfied with and engaged in their jobs.

In terms of demographic factors, Tanova and Holtom (2008), for example, found that older employees are less likely to change jobs than their younger counterparts. A study by Mallol, Holtom and Lee (2007) reveals that job embeddedness may be a predictor of employee retention across culturally diverse populations. Tanova and Holtom (2008) reported that males are more likely to leave their jobs compared with their female counterparts. A study by Karatepe and Ngeche (2012) revealed that married employees are more embedded in their jobs.

### 3.1.3.2 *Work engagement*

Work engagement is an emerging concept in the psychology school of thought (Bakker *et al.*, 2008). For the purposes of this study, work engagement entails “a positive, fulfilling, work-related

state of mind that is characterised by vigour, dedication, and absorption” (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002, p.74). According to Schaufeli *et al.* (2002), work engagement is a persistent and broad affective cognitive state that is not focused on any object, event or behaviour of an individual. As indicated in the definition, engagement has three primary components. Vigour is characterised by high levels of energy and mental resilience when working, the readiness to invest effort in one’s work and persistence, even in difficult times. Thus, employees who feel great vigour at work are highly motivated by their jobs and are likely to remain persistent when encountering difficulties at work (Mauno, Kinnunen & Ruokolainen, 2006). Dedication is characterised by a strong involvement in one’s work, coupled with experiences of a sense of significance, passion, inspiration and pride in one’s work. The final dimension of work engagement, absorption, is characterised by being fully concentrated and deeply engrossed in one’s work, whereby time passes quickly and one has difficulty detaching oneself from work (Schaufeli *et al.*, 2002).

According to Saks (2006), work engagement is associated with an individual’s attitudes, intentions and behaviours. Hence engaged employees are likely to be more attached to their organisation and would have a lower propensity to leave the organisation (Schaufeli & Bakker, 2004). This view is supported by several researchers who found that work engagement is negatively related to turnover intention (Bakker & Demerouti, 2007; Du Plooy & Roodt, 2010; Harter, Schmidt & Hayes, 2002; Lee & Shin, 2005). Furthermore, work engagement is related to positive organisational outcomes such as job satisfaction, motivation, a decline in intention to quit, employee well-being and health (Koyuncu, Burke & Fiksenbaum, 2006; May, Gilson & Harter, 2004; Rothmann & Jordaan, 2006; Schaufeli & Bakker, 2004; Sonnentag, 2003). Finally, a meta-analysis of 7939 business units in 36 companies by Harter, Schmidt and Hayes (2002) reported a significant positive relationship between work engagement and business outcomes (i.e. customer satisfaction and loyalty, profitability, turnover and safety).

Work engagement in particular is a concept relevant to employee well-being and work behaviour (Barkhuizen & Rothmann, 2006). Engaged employees have a sense of energetic and positive connection with their work activities and see themselves as being able to deal completely with the demands of their jobs (Bakker, Schaufeli, Leiter & Taris, 2008). Bakker and Demerouti (2008) suggest at least four reasons why engaged workers perform better than non-engaged workers. First, engaged employees often experience positive emotions, which could be the reason why they tend to be more productive. Second, engaged people are more sensitive to opportunities at work, and are more confident and optimistic (Cropanzano & Wright, 2001; Schaufeli & Van Rhenen, 2006).

Thirdly, research suggests that engagement is positively related to health, which could imply that engaged workers are better able to perform well and report less physical and mental health problems (Bakker & Demerouti, 2008; Demerouti, Bakker, De Jonge, Janssen & Schaufeli, 2001; Schaufeli & Bakker, 2004; Shirom, 2003). Lastly, engaged employees work more productively, because they have the ability to create their own resources. Xanthopoulou, Bakker, Demerouti and Schaufeli (2007) found in their study of highly skilled Dutch technicians that personal resources (optimism, self-efficacy and organisational-based self-esteem) resulted in higher levels of work engagement.

Given the significance of work engagement for both the individual and the organisation, some researchers have explored the influence of certain biographical variables on the process of work engagement (Bezuidenhout & Cilliers, 2011; Burke & El-Kot, 2010; Schaufeli & Bakker, 2003). In particular, the variables age, gender and marital status have frequently been linked to work engagement and, more specifically, it is beginning to emerge that older employees seem to be more engaged in their work (Schaufeli, Bakker & Salanova, 2006). Moreover, higher levels of engagement were found among older students than their younger counterparts (Schaufeli *et al.*, 2002). Furthermore, Schaufeli and Bakker (2003) found that males seem to be more engaged in their work than females. Schaufeli and Bakker (2003) also suggest that males and females differ significantly in their levels of work engagement on all the sub-dimensions of work engagement. A study by Burke and El-Kot (2010) revealed that single employees tend to experience higher levels of work engagement than their married counterparts.

### 3.1.3.3 *Turnover intention*

Turnover intention is defined as the manifestation of “the (subjective) probability that an individual will change his or her job within a certain time period” (Sousa-Poza & Henneberger, 2002, p.1), whereas turnover is a voluntary occurrence or event which is defined as the “individual movement across the membership boundary of an organisation” (Price, 2001, p. 600). Contrary to turnover, turnover intentions are not definite, but are often associated with job search behaviour (Sousa-Poza & Henneberger, 2002). According to Karatepe and Ngeche (2012), employees with turnover intentions tend to render poor service and corrode organisational effectiveness. Research has shown that intent to leave an organisation is one of the strongest predictors of turnover (Riggio, 2009; Vallabh & Donald, 2001). From the organisation’s perspective, employee turnover creates both tangible and intangible costs. Tangible costs include recruitment, selection, training, adjustment time or the cost of temporary staff (Morrell, Loan-Clarke & Wilkinson, 2004). Intangible costs, which maybe more significant than the tangibles, involve the effect of turnover on

organisational culture, employee morale, and social and organisational intellectual capital (Morrell *et al.*, 2004).

According to Coetzee and Schreuder (2010), external factors such as competition for talent and the availability of alternative jobs in the local or global economy contribute to the problems of high employee turnover. However, embeddedness and engagement have become popular concepts that promote employee retention (Halbesleben & Wheeler, 2008). As an employee retention theory, job embeddedness is a combination of forces that keep an individual from leaving the job (Mitchell *et al.*, 2001b). However, work engagement represents a positive work-focused psychological state that keeps an employee in the job (Schaufeli *et al.*, 2002). In terms of demographic factors, age, race and gender have been found to be key determinants of turnover. Ferres, Travaglione and Firms (2003), for example, found younger employees demonstrate stronger turnover intentions than older age-group employees. Furthermore, according to Zatzick, Elvira and Cohen (2003), working with members of the same race reduces the likelihood of turnover. A study by Lyness and Judiesch (2001) further revealed that men are significantly more likely to leave the organisation than women. Mkavga and Onyishi (2012) revealed a significant relationship between job tenure and turnover intention.

#### *3.1.3.4 The relationship between job embeddedness, work engagement and turnover intention*

According to Halbesleben and Wheeler (2008), job embeddedness represents a build-up of certain resources (e.g. links within the organisation) that will be difficult to replace outside the organisation. Moreover, the sacrifice dimension of embeddedness reflects the idea that changing jobs risks the accumulated investment of resources. Therefore, higher sacrifices suggest higher costs in terms of resources and a move out of the organisation may require an excellent alternative worth the invested resources. Job embeddedness is more related to the organisation and the workplace, and higher levels of job embeddedness are associated with lower intention to leave as well as actual turnover. However, work engagement is more related to energy and psychological attachment to one's work. An employee who is highly engaged may find it difficult to detach from the job owing to the invested energy and high levels of identification with the job (Bakker *et al.*, 2008).

According to Mitchell *et al.* (2001b), turnover intention can be driven by lack of embeddedness and a disengaged workforce (Mitchell *et al.*, 2001b; Schaufeli & Bakker, 2004). Limited information is available on the relationship between job embeddedness, work engagement and turnover intention. However, a study by Halbesleben and Wheeler (2008) reported a significant relationship between job embeddedness, work engagement and turnover intention. In terms of job

embeddedness and turnover intention, Lee *et al.*, (2004) found that increasing job embeddedness is likely to increase retention and job performance. Mitchell *et al.* (2001b) also reported that people who are embedded in their jobs have less intent to leave the organisation. In terms of the relationship between work engagement and turnover intention, a recent meta-analysis of engagement literature found a significant relationship between engagement and turnover intention (Halbesleben, 2010). According to Schaufeli and Bakker (2004), employees who are provided with variety in their jobs, learning opportunities and autonomy will be more engaged in the work. Maslach *et al.* (2001) also reported that work engagement is associated with feelings of choice and control, appropriate recognition and rewards, supportive work community, fairness and justice.

Considering that both job embeddedness and work engagement are regarded as key constructs that drive employees' turnover decisions (Halbesleben & Wheeler, 2008), it is hypothesised that these two variables may be significantly related to turnover intention. This leads to the following hypothesis:

H<sub>1</sub>: A statistically significant relationship exists between individuals' job embeddedness, work engagement and turnover intention.

H<sub>2</sub>: Job embeddedness and work engagement significantly and negatively predict turnover intention.

In terms of demographic factors, Ferres *et al.* (2003), for example, found that younger employees demonstrated stronger turnover intentions than older age-group employees. A study by Reitz *et al.* (2010) further revealed that the older age group are more embedded and likely to remain employed in their current organisation than their counterparts. Findings reported by Mallol *et al.* (2007) further indicate that job embeddedness is a predictor of employee retention across culturally diverse populations. Zatzick *et al.* (2003) also reported that working with members of the same race reduces the likelihood of turnover. However, Leonard and Levine (2006) and Wöcke and Heymann (2012) did not find consistent evidence that race has an impact on turnover.

Jones and Harter (2005) found that at low levels of work engagement, members of different racial groups reported a lower tendency to remain with the organisation than members of the same racial group. Burke and El-Kot (2010) found that men and single employees reported higher levels of work engagement. A study by Karatepe and Ngeche (2012) further revealed that married employees are more embedded in their jobs. Lev and Koslowsky (2012) suggest that females are more attached to their jobs than their male counterparts. However, according to Sutherland (2002), females are more likely than males to leave their organisation. Shafique, Qadeer, Ahmad, and

Rehman (2011) did not find differences in job embeddedness and intention to leave between male and female employees. Mkavga and Onyishi (2012) revealed a significant relationship between job tenure and turnover intention.

In view of the foregoing, the following hypothesis can be stated:

H<sub>3</sub>: Individuals from different age, race, gender, marital status and tenure groups will differ significantly in terms of their levels of job embeddedness, work engagement and turnover intention.

#### **3.1.4 Research objectives**

The objective of the study was: (1) to determine the relationship between job embeddedness, work engagement and turnover intention; and (2) to determine whether employees from different age, race, gender, marital status and tenure groups differ significantly in terms of their levels of job embeddedness, work engagement and turnover intention.

It is essential for organisations to consider the relationship between job embeddedness, work engagement and turnover intention in designing retention strategies. Employees' job embeddedness and work engagement are starting to be recognised as important factors in retaining valuable talented employees and are seen to offer organisations a competitive advantage (Bakker *et al.*, 2008; Du Plooy & Roodt, 2010; Mitchell *et al.*, 2001a). Despite the potential value that can be added by knowledge of the variables of relevance to this study, it is not clear from the literature how these three variables relate, most especially in the South African higher educational context. Furthermore, there seems to be a paucity of research addressing employee job embeddedness, work engagement and turnover intention in higher education institutions (Du Plooy & Roodt, 2010; Netswera *et al.*, 2005). In addition, there is little information available on how people from different age, race, gender, marital status and tenure groups, both in South Africa and abroad, differ with regard to job embeddedness, work engagement and turnover intention.

#### **3.1.5 The potential value added by the study**

The findings of the present research may contribute valuable new knowledge that could be used to inform retention strategies for employees in the higher education environment. The findings may also stimulate further research to promote a better understanding of the role of these three

constructs in the retention of employees from different age, race, gender, marital status and tenure groups.

### **3.1.6 What will follow**

A discussion explaining the research design utilised in this study follows. This includes an explanation of the research approach and method used. The results will be provided, followed by a discussion of the significant findings and interpretation of the findings in the light of previous research. The conclusion will be presented and limitations identified. Finally, recommendations for future research will be made.

## **3.2 RESEARCH DESIGN**

The review of the relevant literature presented in chapter 2 and briefly outlined in the preceding introduction constitutes the foundation for the research design and methodology presented in this section. According to Babbie and Mouton (2009), a research design is a framework that sets out a plan on how the researcher is going to sample participants and collect and analyse data in order to address the problem under investigation. Furthermore, the objective of the research design involves planning, structuring and implementing the study so that the validity of the findings is maximised (Terre Blanche, Durrheim, & Painter, 2006). The research design will be explained in the section that follows by referring to the research approach and method.

### **3.2.1 Research approach**

The study utilised a cross-sectional survey design to collect quantitative primary data by using self-administered questionnaires in order to achieve the objectives of this study (Leedy & Ormrod, 2005). A quantitative research approach was deemed appropriate for this study because it provides evidence in the form of numbers which are then reported in statistical terms in order to answer a given research question (Neuman, 2007). Furthermore, the quantitative approach allows for the operationalisation of constructs in terms of specific measuring instruments in a systematic and controlled way (Mouton & Marais, 1996). A quantitative approach contributes to the reliability of the study since a defined set of rules are followed and can therefore be duplicated (Terre Blanche *et al.*, 2006).

### 3.2.2 Research method

This section will discuss the research method followed in this study in terms of the research participants, measuring instruments, research procedure and statistical analyses.

#### 3.2.2.1 Research participants

Out of a total population of 560 academics in the College of Economic and Management Sciences (CEMS) of a South African higher education institution, a non-probability purposive sample of 166 ( $N = 166$ ) participants who are professors, senior lecturers, lecturers and support professionals were requested to participate in the research study. Questionnaires were printed and prepared with a covering letter inviting voluntary and anonymous participation in the research project as well as commitment to protect confidentiality of participants. The final sample consisted of 153 ( $N = 153$ ) participants, yielding a response rate of 92%.

The final sample of participants ( $N = 153$ ) consisted of academics (professors, senior lecturers and lecturers) and support professionals in the CEMS. Owing to the fact that the College of Economic and Management Sciences enrolls the highest number of students including scarce skills in accounting and auditing professionals in the institution, it was believed that the sample would be meaningful in order to assess the potential differences between the job embeddedness and work engagement of the different demographic groups in relation to their intent to quit.

The participants were mostly aged between 26 and 35 (45%), 36 and 45 years (30%), 46 and 55 years (18%) and more than 56 years (4%), while only 3% were 25 years and younger, as shown in figure 3.1.

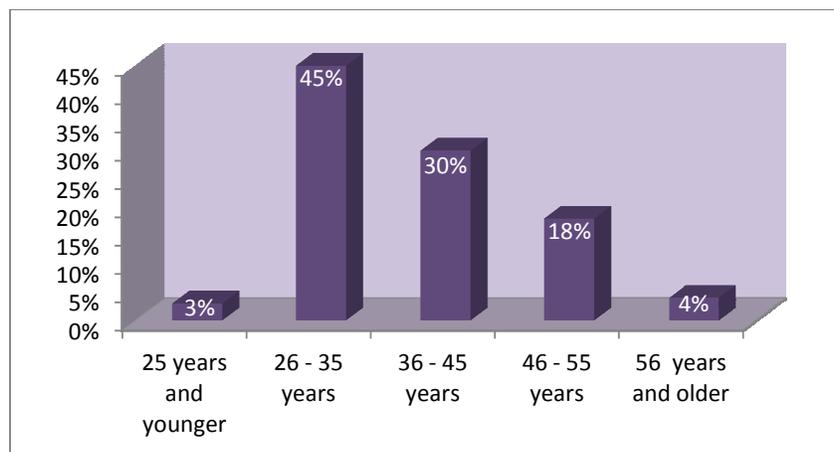


Figure 3.1: Sample distribution by age ( $N = 153$ )

In terms of race groups, blacks represented 63% (Africans 52%; coloureds 3% and Asians 8%) and whites 37% of the sample, as shown in figure 3.2.

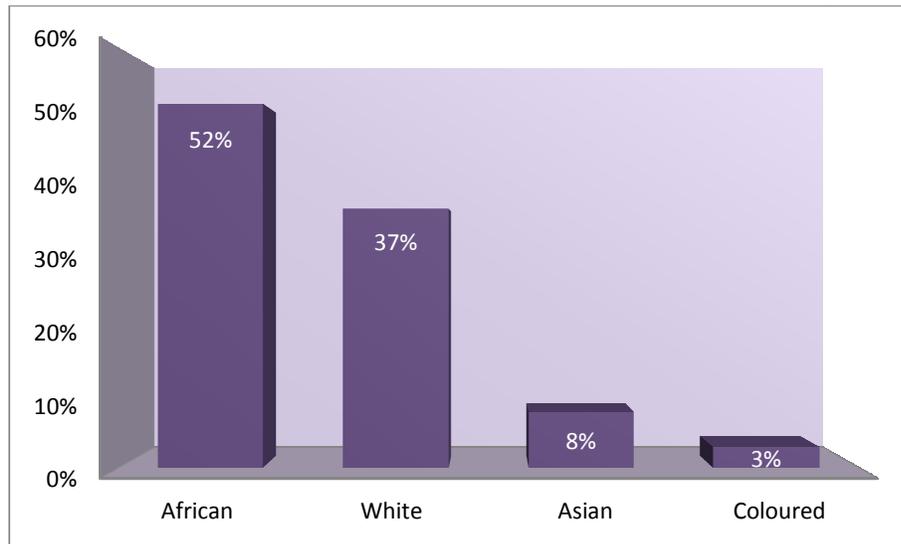


Figure 3.2: Sample distribution by race (N = 153)

In terms of gender, the sample as shown in table 3.1 and figure 3.3 was skewed towards females (at 61%) with a male participant rate of 39%.

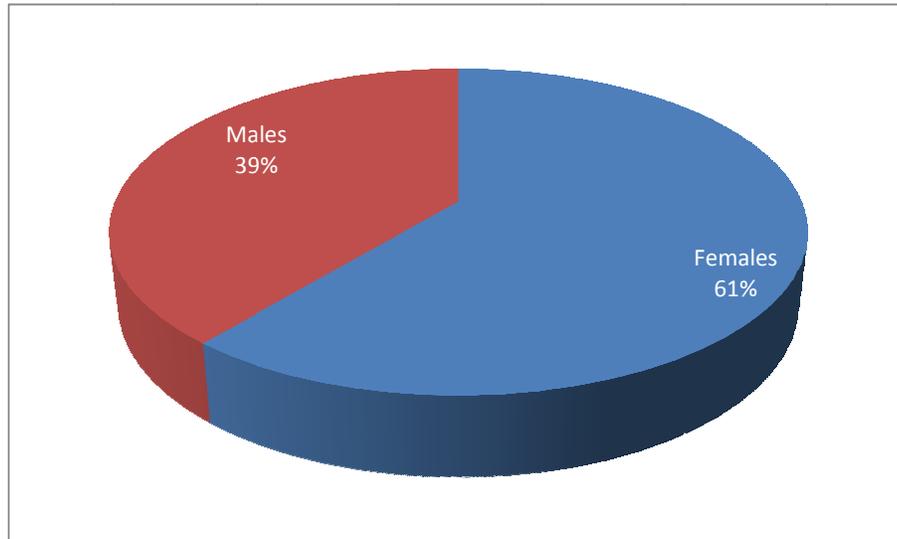


Figure 3.3: Sample distribution by gender (N = 153)

As shown in figure 3.4, most of the participants were married (66%) while singles made up 33% of the sample. Only 1% of the participants were widowed, and these participants were subsequently not included in any statistical tests comparing the results of the marital groups.

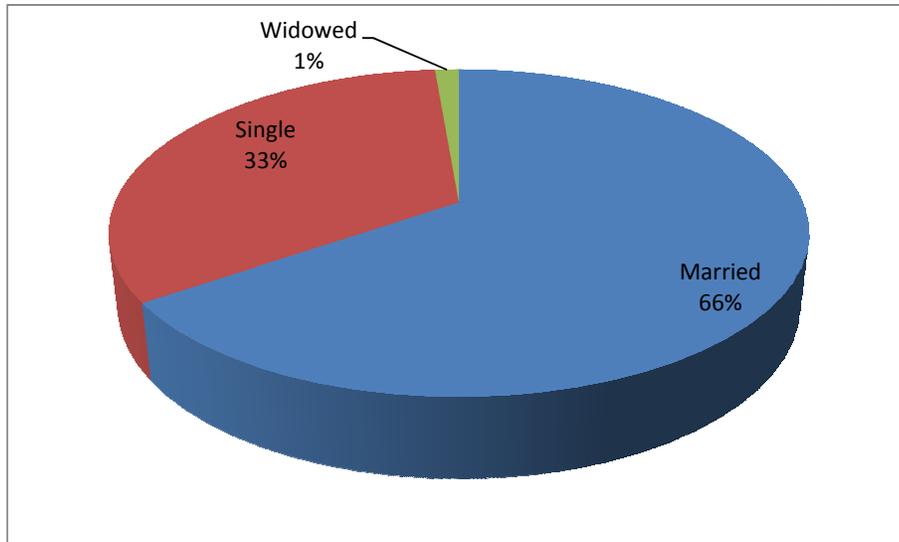


Figure 3.4: Sample distribution by marital status (N = 153)

As shown in figure 3.5, in terms of tenure, most of the participants had been in their organisation's employment for between a year to five years (54%), less than a year (12%), six to 10 years (12%), 11 to 15 years (13%), 16 to 20 years (5%) and more than 21 years (4%).

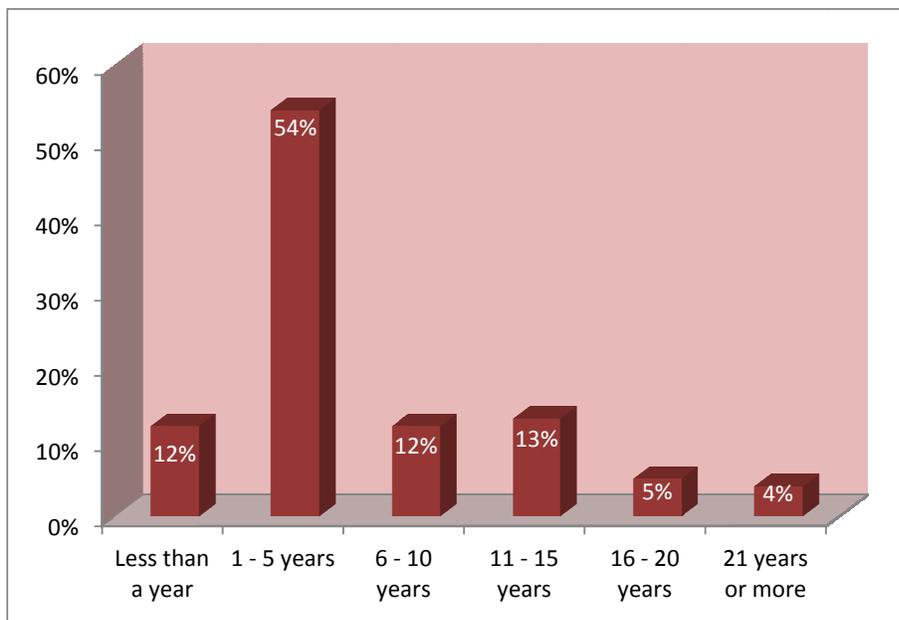


Figure 3.5: Sample distribution by tenure (N = 153)

Figure 3.6 shows that the participants' length of employment in their current position was between one and five years (59%), less than a year (19%), between six to ten years (16%) and between 11 and 15 years (5%). Only 1% had occupied their positions for between 16 and 20 years.

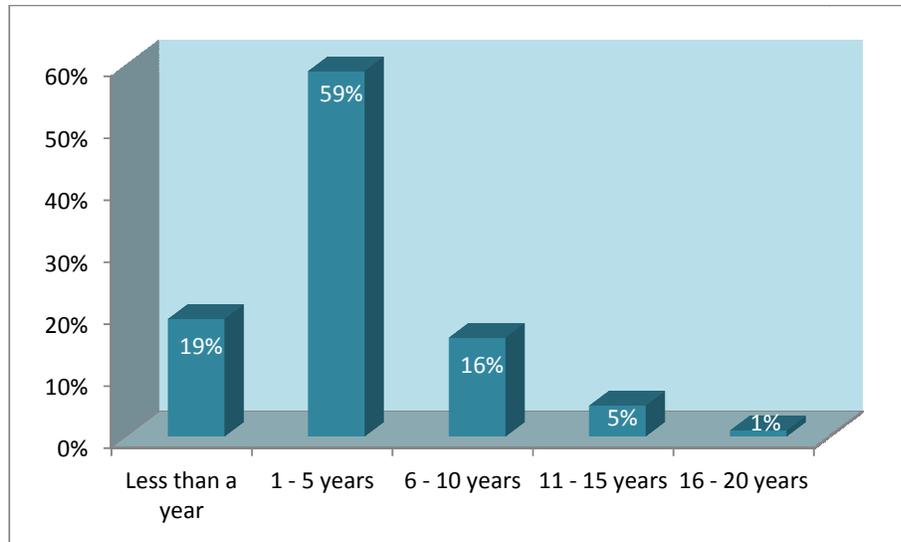


Figure 3.6: Sample distribution by length of employment in current position (N = 153)

Finally, as shown in figure 3.7, the majority of participants had a master's degree qualification (45%), followed by honours degrees (35%), PhDs (10%), degree (8%) and only 2% of the participants had matric only. Higher qualification levels are generally expected owing to the nature of work performed by the participating sample.

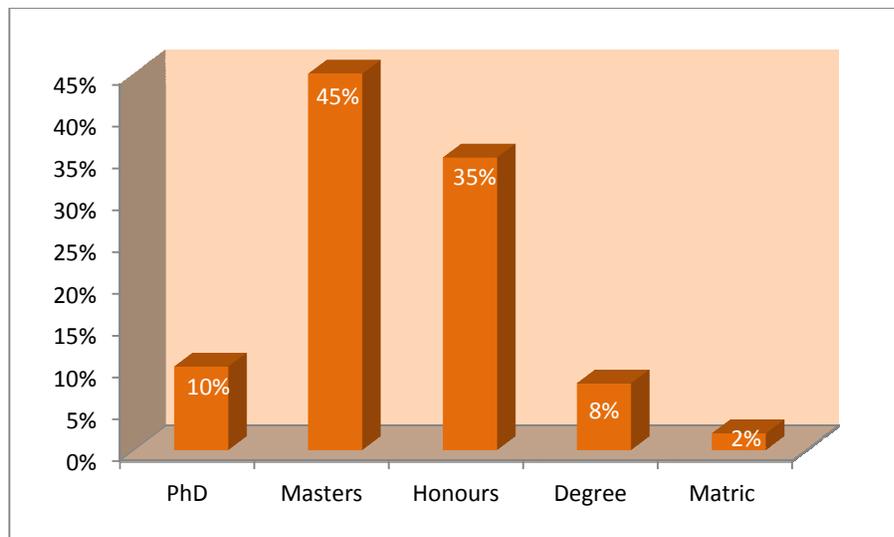


Figure 3.7: Sample distribution by qualification (N = 152)

Table 3.1  
*Biographical distribution of sample*

Item	Category	Frequency	%
Age	25 years and younger	5	3
	26 - 35 years	69	45
	36 - 45 years	46	30
	46 - 55 years	27	18
	56 + years	6	4
Race	African	80	52
	White	56	37
	Asian	12	8
	Coloured	4	3
Gender	Male	60	39
	Female	93	61
Marital status	Single	51	33
	Married	100	66
	Widowed	2	1
Tenure	Less than a year	19	12
	1 - 5 years	82	54
	6 - 10 years	19	12
	11 - 15 years	20	13
	16 - 20 years	8	5
	21 + years	5	4
Qualification	PhD	15	10
	Master's	68	45
	Honours	54	35
	Degree	12	8
	Matric	3	2
Length of employment in current position	Less than a year	29	19
	1 - 5 years	90	59
	6 - 10 years	25	16
	11 - 15 years	7	5
	16 - 20 years	2	1

In summary, the biographical profile obtained from the sample shows that the main sample characteristics are as follows: the majority of the sample was between the ages of 26 and 45 (early and mid-career) (75%), blacks represented 63% (Africans 52%; coloureds 3% and Asians 8%), females 61% , and 66% of the participants were married. Most participants (54%) had been in the organisation's employment for at least five years and (59%) had been in their current position for at least five years.

### 3.2.2.2 *Measuring instruments*

A biographical questionnaire was used to obtain data on the age, race, gender, marital status and tenure variables. The Job Embeddedness Scale based on Mitchell *et al.*'s (2001b) theory of job embeddedness, the Utrecht Work Engagement Scale based on Schaufeli *et al.*'s (2002) theory of work engagement and the Turnover Intention Scale based on Mitchell *et al.*'s (2001b) theory of turnover were used for this study.

#### a. *The Job Embeddedness Scale (JES)*

Job embeddedness was measured using the JES which was developed by Mitchell *et al.* (2001b). The JES (Mitchell *et al.*, 2001b) is a self-report instrument that includes three scales, namely links (e.g. "My co-workers are similar to me"), fit (e.g. "My job utilises my skills and talents well"), and sacrifice (e.g. "I would sacrifice a lot if I left this job"). The response scale was scored on a six-point Likert scale varying between poles of intensity, for example, from 1 ('strongly disagree') to 6 ('strongly agree'). A higher response aggregate indicates higher levels of job embeddedness.

Mitchell *et al.* (2001b) reported acceptable internal consistency reliabilities (Cronbach's alpha) for links (6 items)  $\alpha = .68$ , fit (7 items)  $\alpha = .87$  and sacrifice (10 items)  $\alpha = .86$ . Various studies have reported the validity of the JES (Burton *et al.*, 2010; Halbesleben & Wheeler, 2008; Holtom & O'Neill, 2004; Mitchell *et al.*, 2001b). The JES (Mitchell *et al.*, 2001b) consists of two dimensions, namely the organisational and community dimensions. The present study examines the organisational dimension only. Researchers have found that the organisational dimension better predicts employee retention than the community dimension (Allen, 2006; Halbesleben & Wheeler, 2008; Lee *et al.*, 2004). Acceptable internal consistency reliability links ( $\alpha = .79$ ), fit ( $\alpha = .81$ ) and sacrifice ( $\alpha = .88$ ) were yielded in the present study.

b. *The Utrecht Work Engagement Scale (UWES)*

The UWES (Schaufeli & Bakker, 2003) measures three integral aspects of work engagement. The UWES is a self-report instrument that includes three scales, namely vigour (e.g. “I am bursting with energy in my work”), dedication (e.g., “I find the work that I do full of meaning and purpose”), and absorption (e.g. “Time flies when I am working”). The response scale was scored on a seven-point Likert scale varying between poles of intensity, for example, from 0 (“never”) to 7 (“always”). A higher response aggregate indicates higher levels of work engagement. The internal consistency reliability of the three sub-scales of work engagement was obtained using the Cronbach alpha coefficient. Barkhuizen and Rothmann (2006) and Schaufeli and Bakker (2004) reported acceptable reliability coefficients for the three subscales between .68 and .91. A South African study by Storm and Rothmann (2003) reported the following alpha coefficients for the three subscales: vigour (6 items)  $\alpha = .78$ , dedication (5 items)  $\alpha = .89$  and absorption (6 items)  $\alpha = .78$ . The UWES has been validated in several countries, including South Africa (Schaufeli & Bakker, 2003; Schaufeli *et al.*, 2002; Storm & Rothmann, 2003; Yi-Wen & Yi-Qun, 2005). In terms of the present study, acceptable internal consistency reliabilities were yielded for the three sub-scales: vigour  $\alpha = .85$ , dedication  $\alpha = .88$  and absorption  $\alpha = .87$ .

c. *The Turnover Intention Scale (TIS)*

The TIS, developed by Mitchell *et al.* (2001b), was used to measure employee intentions of leaving an organisation. The TIS is a self-report instrument that includes only three items. The response scale was scored on a six-point Likert scale varying between poles of intensity, for example, from 1 (“strongly disagree”) to 6 (“strongly agree”). An example of a question from the TIS is “I intend to leave the organisation in the next 12 months”. The overall internal consistency reliability coefficient was reported as high,  $\alpha = .91$  (Halbesleben & Wheeler, 2008; Holtom & O’ Neil, 2004; Mitchell *et al.* (2001b). An acceptable internal consistency reliability of  $\alpha = .97$  was yielded in this study.

3.2.2.3 *Research procedure*

Ethical approval for the study was obtained from the higher education institution before the measuring instruments were distributed. Distribution was done using the contact information list of academics and support professionals working in the College of Economics and Management sciences, which is available for use by employees in the institution. A purposively chosen group was requested to voluntarily and confidentially participate in the research by completing the questionnaires. The participants were approached directly and were requested to complete the

questionnaires together with a covering letter explaining the purpose of the study. Informed consent was obtained and it was emphasised that participation in the study was voluntary, anonymous and confidential. The participants were asked to return the completed questionnaire to the address provided. Completed questionnaires were kept safe and the raw data were captured and transported to an SPSS data set.

#### 3.2.2.4 *Statistical analyses*

The statistical analysis was conducted using the SPSS programme Version 20.0 (SPSS, 2011). Descriptive, correlational and inferential statistics were used to analyse the data. Assumptions of normality and homogeneity of variance were considered before making the decision to use parametric or non-parametric statistics (Tredoux & Durrheim, 2006). Based on the test for normality, which was interpreted at a  $p > .05$  significance level, it was decided to use the Kruskal-Wallis test (non-parametric statistics) to assess significant differences between the means of age, race, marital status and tenure groups for the JES and TIS. In terms of homogeneity of variance, Levene's test for equal variance indicated that the responses on the UWES showed homogeneity of variance.

Rasch analysis was used to evaluate the construct validity and reliability of the scale sub-dimensions of each instrument. The Cronbach alpha coefficient was used to assess the internal consistency reliability of each of the measuring instruments. Rasch's reliability estimates have the advantage that neither sample size nor sample specifics influence the reliability (Boone & Rogan, 2005). Descriptive statistics consisted of calculating the means to determine the central tendency of the scores and the standard deviations were then calculated to identify the variation of scores (Salkind, 2009).

Pearson product-moment (zero order) correlations were calculated to assess the direction and strength of the relationship between the variables. In order to counter the probability of a type I error, it was decided to set the significance value at a 95% confidence interval level ( $p \leq .05$ ). For the purposes of this study,  $r$  values larger than .30 (medium effect) (Cohen, 1992) were regarded as practically significant.

The relationship between the three variables was further analysed by performing multiple regression analyses to explore the proportion of variance in the dependent variable (turnover intention) that is explained by the independent variables (job embeddedness and work engagement) (Tredoux & Durrheim, 2006). The value of the adjusted  $R^2$  ( $Fp \leq .05$ ) was used to

interpret the results and  $R^2$  values larger than .13 (medium effect) (Cohen, 1992; Roothman, Kirsten, & Wissing, 2003) were regarded as practically significant.

T-tests, Analysis of Variance (ANOVA) and Kruskal-Wallis were performed to test for significant mean differences between the various biographical groups' work engagement variable. The T-test was used to assess significant differences between the means of the gender groups' work engagement scores. ANOVAs were utilised to assess significant differences between the means of age, race, marital status and tenure groups' work engagement scores. The Mann-Whitney test was used to assess gender groups' job embeddedness and turnover intention scores whereas Kruskal-Wallis tests were used to assess significant differences between the means of age, race, marital status and tenure groups' job embeddedness and turnover intention scores (Tredoux & Durrheim, 2006).

### **3.3 RESULTS**

This section reviews the descriptive and inferential statistics of significant value for each scale applied.

#### **3.3.1 Descriptive statistics**

This section discusses the descriptive statistics, namely assessing the scale reliability (internal consistency reliability of the measuring instruments) and the means and standard deviations of the frequency data.

##### *3.3.1.1 Reporting of scale reliability: Rasch analysis and Cronbach's alpha coefficient*

This section provides the scale reliabilities of the following measuring instruments and subscales: the Job Embeddedness Scale (JES), Utrecht Work Engagement Scale (UWES) and the Turnover Intention Scale (TIS).

##### *a. Reporting of scale reliability: JES*

Table 3.2 summarises the Rasch statistics for the JES. The Cronbach alpha coefficient scores varied between .90 (high) and .79 (high) for the total sample (N = 153). The total JES scale obtained a Cronbach alpha coefficient of .90 (high) above the guideline of .70 (Hair, Black, Babin, & Anderson, 2010) which can be considered adequate for the purposes of the current study.

Table 3.2 shows that the item separation statistics are in line with the guidelines of  $\geq 2.00$  (Bond & Fox, 2007) for all the JES dimensions, indicating internal consistency reliability. These findings indicate that the items in the various sub-dimensions differentiate well between the measured variables. The person separation indices for the dimensions links and fit are somewhat lower than the item separation indices and also below the guidelines ( $\geq 2.00$ ) (Bond & Fox, 2007). Low person separation indicates that these sub-dimensions did not separate or discriminate well between the respondents or that the respondents misunderstood the items, or that they were reluctant to answer the questions with the required intensity.

Overall, table 3.2 shows that the infit and outfit chi-square statistics for the person and item measures are equal to or close to 1.00 (Bond & Fox, 2007), indicating that the individuals responded to the items consistently and that the JES scale items are a reliable measure of the job embeddedness construct.

Table 3.2  
*Rasch Analysis: person and item summary statistics (JES) (N = 153)*

Dimension	Infit	Outfit	Separation	Reliability	Cronbach alpha
<b>Job embeddedness</b>					
<b>Person</b>	1.03 (-.10)	1.01 (-.10)	2.73	.88	.90
<b>Item</b>	1.03 (.20)	1.01 (.00)	5.36	.97	-
<b>Link</b>					
<b>Person</b>	1.00 (-.10)	.98 (-.10)	1.87	.78	.79
<b>Item</b>	1.02 (.10)	.98 (-.20)	6.19	.97	-
<b>Fit</b>					
<b>Person</b>	1.02 (-.10)	.99 (-.10)	1.92	.79	.81
<b>Item</b>	1.04 (.30)	.99 (-.10)	5.00	.96	-
<b>Sacrifice</b>					
<b>Person</b>	1.01 (-.20)	1.00 (-.20)	2.54	.87	.88
<b>Item</b>	1.02 (.00)	1.00 (-.20)	4.26	.95	-
<b>Total scale</b>					
<b>Person</b>	1.03 (-.10)	1.01 (-.10)	2.73	.88	.90
<b>Item</b>	1.03 (.20)	1.01 (.00)	5.36	.97	-

b. *Reporting of scale reliability: UWES*

Table 3.3 summarises the Rasch statistics for the UWES. The Cronbach alpha coefficient scores varied between .95 (high) and .85 (high) for the total sample (N = 153). The total UWES scale obtained a Cronbach alpha coefficient of .95 (high), which can be deemed adequate for the purposes of the current study.

Table 3.3 shows that the person and item separation statistics are in line with the guidelines of  $\geq 2.00$  (Bond & Fox, 2007) for all the UWES dimensions, indicating internal consistency reliability. These findings indicate that the items in the various sub-dimensions differentiate well between the measured variables.

Overall, table 3.3 shows that the infit and outfit chi-square statistics for the person and item measures are equal to or close to 1.00 (Bond & Fox, 2007), indicating that individuals responded to the items consistently and that the UWES scale items are a reliable measure of the work engagement construct.

Table 3.3  
*Rasch Analysis: person and item summary statistics (UWES) (N = 153)*

Dimension	Infit	Outfit	Separation	Reliability	Cronbach alpha
<b>Work engagement</b>					
Person	1.02 (-.20)	.99 (-.20)	4.05	.94	.95
Item	1.00 (-.10)	.99 (-.20)	5.18	.96	-
<b>Vigour</b>					
Person	.97 (-.20)	.98 (-.20)	2.38	.85	.85
Item	1.01 (.10)	.98 (-.20)	4.36	.95	-
<b>Dedication</b>					
Person	.99 (-.20)	.98 (-.20)	2.57	.87	.88
Item	.99 (-.10)	.98 (-.30)	5.38	.97	-
<b>Absorption</b>					
Person	1.00 (-.10)	.99 (-.10)	2.51	.86	.87
Item	.99 (-.20)	.99 (-.10)	6.37	.98	-
<b>Total scale</b>					
Person	1.02 (-.20)	.99 (-.20)	4.05	.94	.95
Item	1.00 (.10)	.99 (.00)	5.18	.96	-

c. *Reporting of scale reliability: TIS*

The Cronbach alpha coefficient for the TIS was .97 (high) for the total sample (N = 153) which can be deemed adequate for the purposes of the current study. Rasch analysis was not used to determine the reliability of the TIS because the scale measures turnover intention by means of only three items. Item reliability could not be calculated owing to the difficulty of obtaining a good separation between categories when a scale comprises fewer than four items.

3.3.1.2 *Descriptive statistics: job embeddedness, work engagement and turnover intention*

In terms of means and standard deviations, table 3.4 shows that the total JES mean average score was ( $M = 4.50$ ;  $SD = .78$ ). Fit to the organisation obtained the highest mean score ( $M = 4.79$ ;  $SD = .78$ ), followed by sacrifice to the organisation ( $M = 4.28$ ;  $SD = .92$ ). The lowest mean score was obtained on the link to the organisation subscale ( $M = 4.27$ ;  $SD = .93$ ). The skewness and kurtosis values for the JES ranged between  $-.02$  and  $.49$  excluding the fit to organisation skewness ( $-1.12$ ) kurtosis ( $1.47$ ), thereby not falling within  $-1$  and  $+1$  normality range recommended for these coefficients (Howell, 2008).

In terms of means and standard deviations, table 3.4 shows that the total UWES mean average score was ( $M = 4.37$ ;  $SD = .90$ ). The dedication subscale obtained the highest mean score ( $M = 4.50$ ;  $SD = .97$ ) followed by vigour ( $M = 4.36$ ;  $SD = .88$ ). The lowest mean score was obtained on the absorption subscale ( $M = 4.30$ ;  $SD = .98$ ). The skewness and kurtosis values for the UWES ranged between  $-.33$  and  $.25$ , thereby falling within the  $-1$  and  $+1$  normality range recommended for these coefficients (Howell, 2008).

The TIS was measured with three items. In terms of the mean and standard deviation, table 3.4 shows that the total mean average score was ( $M = 1.98$ ;  $SD = 1.44$ ) which indicated a lower turnover intention score. The turnover intention skewness was ( $1.44$ ) and kurtosis ( $1.04$ ), thereby not falling within  $-1$  and  $+1$  normality range recommended for these coefficients (Howell, 2008).

Table 3.4  
*Means and standard deviations of the JES, UWES & TIS (N = 153)*

	Mean	SD	Skewness	Kurtosis
Job embeddedness	4.50	.78	-.91	.49
Links	4.27	.93	-.58	-.45
Fit	4.79	.78	-1.12	1.47
Sacrifice	4.28	.92	-.70	-.02
Work engagement	4.37	.90	-.51	.04
Vigour	4.36	.88	-.33	-.28
Dedication	4.50	.97	-.62	.12
Absorption	4.30	.98	-.51	.25
Turnover intention	1.98	1.44	1.44	1.04

### 3.3.2 Correlational statistics

#### 3.3.2.1 Pearson product-moment correlation analyses: JES, UWES and TIS

As illustrated in table 3.5, links, fit and sacrifice to organisation correlated significantly and positively with the work engagement sub-dimensions. The correlations varied from  $r = .39$  to  $.48$  ( $p \leq .000$ ; medium practical effect size). Links to organisation had a significant correlation of medium practical effect size ( $r \geq .30 \leq .49$ ) with vigour ( $r = .48$ ;  $p \leq .000$ ), dedication ( $r = .48$ ;  $p \leq .000$ ) and absorption ( $r = .41$ ;  $p \leq .000$ ). Fit to organisation had a significant correlation of medium practical effect size ( $r \geq .30 \leq .49$ ) with vigour ( $r = .47$ ;  $p \leq .000$ ), dedication ( $r = .47$ ;  $p \leq .000$ ) and absorption ( $r = .41$ ;  $p \leq .000$ ). Sacrifice to organisation had a significant correlation of medium practical effect size ( $r \geq .30 \leq .49$ ) with vigour ( $r = .46$ ;  $p \leq .000$ ), dedication ( $r = .45$ ;  $p \leq .000$ ) and a moderate significant correlation with absorption ( $r = .39$ ;  $p \leq .000$ ).

Table 3.5  
*Pearson product-moment correlation analyses (JES & UWES) (N = 153)*

UWES		JES	Links	Fit	Sacrifice
Vigour	<i>r</i>		.48*** ++	.47*** ++	.46*** ++
Dedication	<i>r</i>		.48*** ++	.47*** ++	.45*** ++
Absorption	<i>r</i>		.41*** ++	.41*** ++	.39*** ++

\*\*\*  $p \leq .001$  (two-tailed)

++  $r \geq .30 \leq .49$  (medium practical effect size)

As illustrated in table 3.6, links, fit and sacrifice to organisation correlated significantly and negatively with turnover intention. The correlations varied from  $r = -.30$  ( $p \leq .000$ ; medium practical effect size) to  $r = -.50$  ( $p \leq .000$ ; large practical effect size). The strongest negative significant correlation ( $r = -.50$ ;  $p \leq .000$ ) was observed between links to organisation ( $r = -.50$ ;  $p \leq .000$ ) and turnover intention. Fit to organisation had a negative significant correlation of medium practical effect size ( $r \geq .30 \leq .49$ ), while turnover intention ( $r = -.30$ ;  $p \leq .000$ ) and sacrifice to organisation had a negative correlation with turnover intention ( $r = -.42$ ;  $p \leq .000$ ; medium practical effect).

Table 3.6  
*Pearson product-moment correlation analyses (JES & TIS) (N = 153)*

		JES	Links	Fit	Sacrifice
Turnover intention	<i>r</i>		-.50*** +++	-.30*** ++	-.42*** ++

\*\*\*  $p \leq .001$  (two-tailed)

+++  $r \geq .50$  (large practical effect size); ++  $r \geq .30 \leq .49$  (medium practical effect size)

As illustrated in table 3.7, vigour, dedication and absorption correlated significantly and negatively with turnover intention. The correlations varied from ( $r = -.25$ ; small practical effect size,  $p \leq .002$ ) to ( $r = -.37$ ; medium practical effect size,  $p \leq .000$ ). The strongest significant correlation ( $r = -.37$ ;  $p \leq .000$ ; medium practical effect) was observed between dedication and turnover intention. Vigour had a negative significant correlation of small practical effect size with turnover intention ( $r = -.29$ ;  $p \leq .000$ ), whereas absorption had a negative significant correlation ( $r = -.25$ ; small practical effect;  $p \leq .002$ ) with turnover intention.

Table 3.7

Pearson product-moment correlation analysis (UWES & TIS) (N = 153)

		UWES	Vigour	Dedication	Absorption
Turnover intention	<i>r</i>		-.29***	-.37***	-.25**
			++	++	+

\*\*\*  $p \leq .001$ ; \*\*  $p \leq .01$  (two-tailed)

+  $r \leq .26$  (small practical effect size); ++  $r \geq .30 \leq .49$  (medium practical effect size)

In table 3.8 significant relationships were observed between total job embeddedness, work engagement and turnover intention ( $p \leq .000$ ). A significant positive relationship ( $r = .51$ ; large practical effect,  $p \leq .000$ ) was observed between total job embeddedness and work engagement. A statistically significant negative relationship was observed between job embeddedness and turnover intention ( $r = -.42$ ; medium practical size,  $p \leq .000$ ). Finally, a moderate negative statistically significant relationship was observed between total work engagement ( $r = -.32$ ; medium practical effect size,  $p \leq .000$ ) and turnover intention.

Table 3.8

Pearson product moment correlation analyses (JES, UWES & TIS) (N = 153)

		Total job embeddedness	Total work engagement	Turnover intention
Total job embeddedness	<i>r</i>	-	.51***	-.42***
			+++	++
Total work engagement	<i>r</i>	.51***	-	-.32***
		+++		++
Turnover Intention	<i>r</i>	-.42***	-.32***	-
		++	++	

\*\*\*  $p \leq .001$  (two-tailed)

+++  $r \geq .50$  (large practical effect size); ++  $r \geq .30, \leq .49$  (medium practical effect size)

The results provided sufficient evidence to support research hypothesis H1<sub>a</sub>: A statistically significant relationship exists between individuals' job embeddedness, work engagement and turnover intention.

### **3.3.3 Inferential statistics: multiple regression**

Table 3.9 indicates that the regression models explained medium ( $R^2 \geq .13 \leq .25$ ) practical effect percentages of variance in the dependent variable (Cohen, 1992).

In terms of the JES variables, regression model 1 in table 3.9 shows that the JES variables explain 19% ( $R^2 = 19\%$ ; medium practical effect) of the variance in total turnover intention. Only links to organisation ( $\beta = -.48$ ;  $p = .06$ ) contributed significantly and negatively in explaining the variance in total turnover intention.

In terms of the UWES variables, regression model 2 in table 3.9 shows that the UWES variables explain 13% ( $R^2 = 13\%$ ; medium practical effect) of the variance in total turnover intention. Only dedication ( $\beta = -.55$ ;  $p = .001$ ) contributed significantly and negatively in explaining the variance in total turnover intention.

Table 3.9

Multiple regression: JES and UWES (independent variables) versus TIS (dependent variable (N= 153))

Variable	Unstandardised coefficient		Standardised coefficient Beta ( $\beta$ )	t	p	F	Adjusted $R^2$	R
	B	SE						
Model 1: JES (Constant)	5.01	.69		7.23	.000	12.39***	.19++	.45
Organisational links	-.76	.40	-.48	-1.90	.06*			
Fit to organisation	-.02	.19	-.01	-.10	.919			
Sacrifice to organisation	.07	.37	.04	.18	.856			
Model 2: UWES (Constant)	4.35	.56		7.71	.000	8.70***	.13++	.39
Vigour	.02	.30	.01	.07	.947			
Dedication	-.83	.25	-.55	-3.37	.001***			
Absorption	.30	.24	.20	1.22	.225			

\*\*\*\* $p \leq .001$ ; \*\*\* $p \leq .01$ ; \*\* $p \leq .05$ ; \* $p \leq .10$

+  $R^2 \leq .12$  (small practical effect size); ++  $R^2 \geq .13, \leq .25$  (medium practical effect size)

The results provided sufficient evidence to support research hypothesis H<sub>2a</sub>: Job embeddedness and work engagement significantly and negatively predict turnover intention.

### 3.3.4 Inferential statistics: tests for significant mean differences

#### 3.3.4.1 Significant mean differences: age

As indicated in table 3.10, the participants in the age group 46 and 55 years (maintenance phase of their careers) scored significantly lower than the other age groups in terms of fit to organisation ( $M = 56.4$ ). The oldest age group, participants older than 56+ years who are in the retirement

phase of their careers ( $M = 89.5$ ) and the age group in the establishment phase of their careers – 26-to-35 years ( $M = 85.4$ ) obtained significantly higher mean scores than the other age groups on the JES fit variable. The differences between the groups are small in magnitude ( $d = .55$ ;  $\eta^2 = .07$ ).

There were no significant differences between the various age groups in terms of their work engagement and turnover intention. The results are therefore not reported here.

Table 3.10

*Kruskal-Wallis test: significant mean differences between age groups (JES) (N = 153)*

	Age	N	Mean rank	df	Sig	Cohen's d	Partial eta squared $\eta^2$
Fit to organisation (JES)	25 years and younger	5	70.9	4	.06*	.55	.07
	26-35 years+	69	85.4				
	36-45 years	46	73.4				
	46-55 years	26	56.4				
	56 + years+	6	89.5				
Links to organisation (JES)	25 years and younger	5	91.1	4	.17	.40	.04
	26-35 years	69	85.2				
	36-45 years	46	69.7				
	46-55 years	26	64.2				
	56 + years	6	70.2				
Sacrifice to organisation (JES)	25 years and younger	5	94.7	4	.15	.40	.04
	26-35 years	69	85.1				
	36-45 years	46	68.4				
	46-55 years	26	65.6				
	56 + years	6	71.8				

\*  $p \leq .10$ ; higher mean+

#### 3.3.4.2 Significant mean differences: race

Table 3.11 shows that the race groups differed significantly in terms of the JES fit, links and sacrifice to their organisation variables. Asians and whites obtained significantly higher mean scores on the JES fit (Asian:  $M = 97.67$ ; whites:  $M = 83.49$ ;  $\eta^2 = .07$ ; small practical effect); links (Asian:  $M = 97.79$ ; whites:  $M = 85.35$ ;  $\eta^2 = .05$ ; small practical effect) and sacrifice (Asian:  $M = 103.13$ ; whites:  $M = 85.30$ ;  $\eta^2 = .07$ ; small practical effect) variables than the other race groups.

In terms of turnover intention, table 3.11 shows that the coloureds ( $M = 131.50$ ;  $\eta^2 = .14$ ; large practical effect) and Africans ( $M = 85.16$ ;  $\eta^2 = .14$ ; large practical effect) had significantly higher turnover intentions than Asians and whites.

There were no significant differences between the various race groups in terms of their work engagement and turnover intention. The results are therefore not reported here.

Table 3.11

*Kruskal-Wallis test: significant mean differences between race groups (JES) (N = 153)*

Variable	Ethnic groups	N	Mean rank	df	Sig	Cohen's d	Partial eta squared $\eta^2$
Link to organisation (JES)	African	79	68.29	3	.01**	.56	.07
	Coloured	4	32.00				
	Asian	12	97.79				
	White	56	85.35				
Fit to organisation (JES)	African	79	69.45	3	.02*	.45	.05
	Coloured	4	35.50				
	Asian	12	97.67				
	White	56	83.49				
Sacrifice to organisation (JES)	African	79	67.16	3	.01**	.55	.07
	Coloured	4	38.88				
	Asian	12	103.13				
	White	56	85.30				
Turnover intention (JES)	African	80	85.16	3	.000***	.80	.14
	Coloured	4	131.50				
	Asian	12	63.38				
	White	55	61.40				

---

\*\*\*  $p \leq .001$ ; \*\*  $p \leq .01$ ; \*  $p \leq .05$

### 3.3.4.3 Significant mean differences: gender

There were no significant differences between the gender groups in terms of their job embeddedness, work engagement and turnover intention. The results are therefore not reported here.

### 3.3.4.4 Significant mean differences: marital status

The widowed category for marital status was excluded from the analysis as the size ( $N = 2$ ) was too small for statistical analysis. As indicated in table 3.12, the married and single participants differed significantly only in terms of their vigour levels. The married participants ( $M = 4.44$ ) scored significantly higher on vigour in comparison to the single participants ( $M = 4.16$ ). The magnitude of the differences was small in terms of practical effect ( $d = .41$ ;  $\eta^2 = .04$ ).

There were no significant differences between the various marital status groups in terms of their job embeddedness and turnover intention. The results are therefore not reported here.

Table 3.12

ANOVA: significant mean differences between marital groups (UWES) ( $N = 153$ )

Variable	Marital status	N	Mean	SD	F	df	Sig. level (2-tailed)	Cohen's d	Partial eta squared $\eta^2$
Vigour	Single	50	4.16	.85	3.21	2	.04*	.41	.04
	Married	100	4.44+	.88					
Dedication	Single	51	4.40	.93	1.83	2	.16	.31	.02
	Married	100	4.53	.98					
Absorption	Single	51	4.16	.96			.34	.24	.01
	Married	99	4.36	1.00					

\*  $p \leq .05$ ; higher mean+

### 3.3.4.5 Significant mean differences: tenure

In terms of tenure, table 3.13 shows that the participants who had less than a year tenure ( $M = 95.47$ ) and those who had tenure more than 21 years ( $M = 85.00$ ) and between one and five years ( $M = 80.37$ ) scored significantly higher on the sacrifice variable than those participants who had tenure between six and 20 years. The observed differences between the tenure groups were small in magnitude ( $d = .53$ ;  $\eta^2 = .07$ ).

There were no significant differences between the various tenure groups in terms of their work engagement and turnover intention. The results are therefore not reported here.

Table 3.13

*Kruskal-Wallis test: significant mean differences between tenure groups (JES) (N = 153)*

Variable	Tenure	N	Mean rank	df	Sig	Cohen's d	Partial eta squared $\eta^2$
Sacrifice to organisation (JES)	Less than a year+	19	95.47	5	.04*	.53	.07
	1-5 years+	82	80.37				
	6-10 years	19	55.13				
	11-15 years	20	59.93				
	16-20 years	7	78.93				
	21+ years+	5	85.00				
Link to organisation (JES)	Less than a year	19	98.66	5	.12	.45	.05
	1-5 years	82	78.19				
	6-10 years	19	60.00				
	11-15 years	20	66.28				
	16-20 years	7	73.93				
	21+ years	5	71.80				
Fit to organisation (JES)	Less than a year	19	77.16	5	.67	.29	.02
	1-5 years	82	80.07				
	6-10 years	19	62.34				
	11-15 years	20	72.73				
	16-20 years	7	73.38				
	21+ years	5	90.10				

\*  $p \leq .05$ ; higher mean+

### 3.3.5 Integration: Relationship between job embeddedness, work engagement and turnover intention

*3.3.5.1 Research aim 1: To investigate the statistical relationship between job embeddedness, work engagement and turnover intention as manifested in a sample of participants employed in a South African higher education institution*

As illustrated in figures 3.8, 3.9 and 3.10, the results indicate a significant relationship between job embeddedness, work engagement and turnover intention. A strong positive relationship is

represented in these figures with a **blue** line, a medium positive relationship in **green**, a strong negative relationship with **purple**, a medium negative relationship in **orange** and a weak negative relationship in **red**.

As depicted in figure 3.8, significant positive correlations were found between all job embeddedness and work engagement dimensions. Fit to organisation was found to correlate strongly and positively with the vigour, dedication and absorption work engagement sub-dimensions. Similarly, links to organisation was found to correlate strongly and positively with the vigour, dedication and absorption work engagement sub-dimensions. Finally, sacrifice to organisation was found to correlate strongly and positively with vigour and dedication, but moderately and positively with absorption.

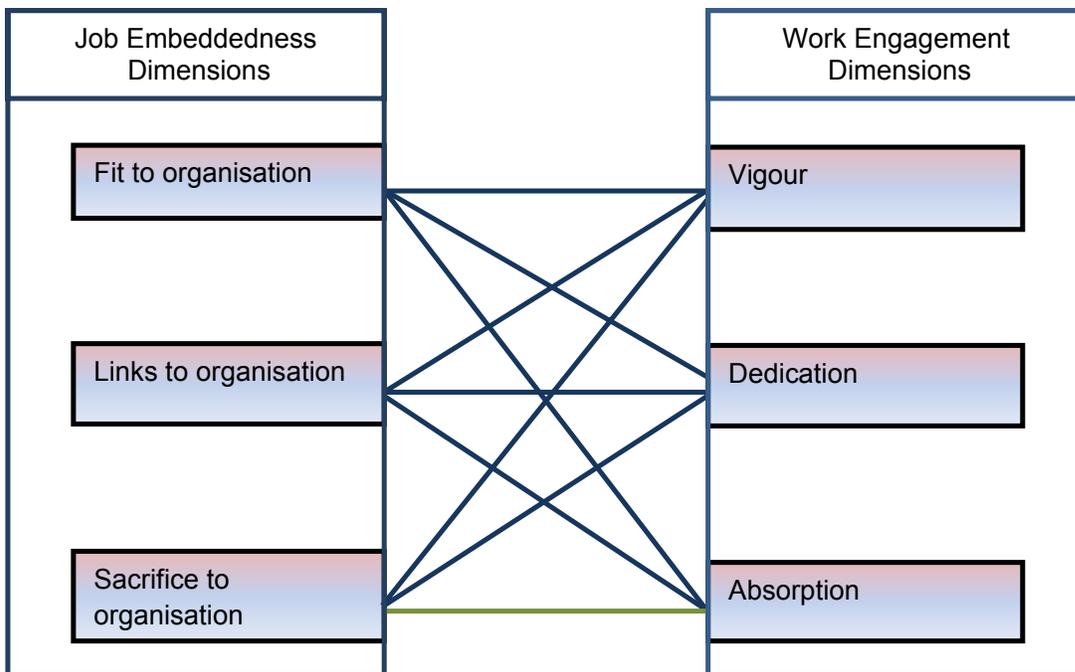


Figure 3.8: Relationship between job embeddedness and work engagement

As depicted in figure 3.9, fit, links and sacrifice to organisation correlated significantly and negatively with the turnover intention. Strong negative correlations were observed between links and sacrifice to organisation with turnover intention. However, a moderate negative correlation was observed between fit to organisation and turnover intention. Overall, strong negative significant correlations were found between job embeddedness and turnover intention.

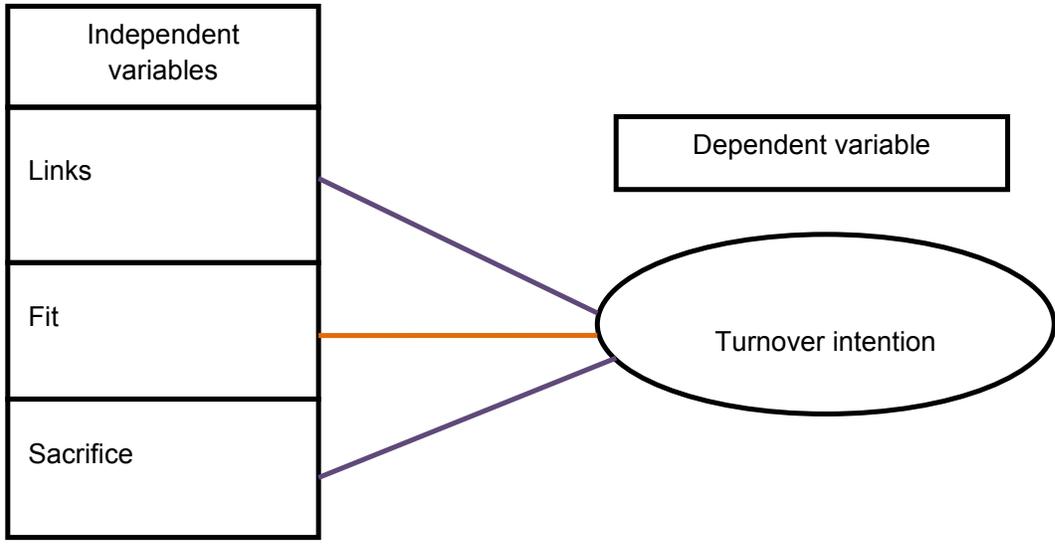


Figure 3.9: Relationship between job embeddedness and turnover intention

As illustrated in figure 3.10, vigour, dedication and absorption correlated significantly and negatively with the turnover intention dimension. A moderate negative correlation was observed between dedication and turnover intention. Vigour and absorption indicated a weak negative correlation with turnover intention. Overall a medium negative significant correlation was evident between work engagement and turnover intention.

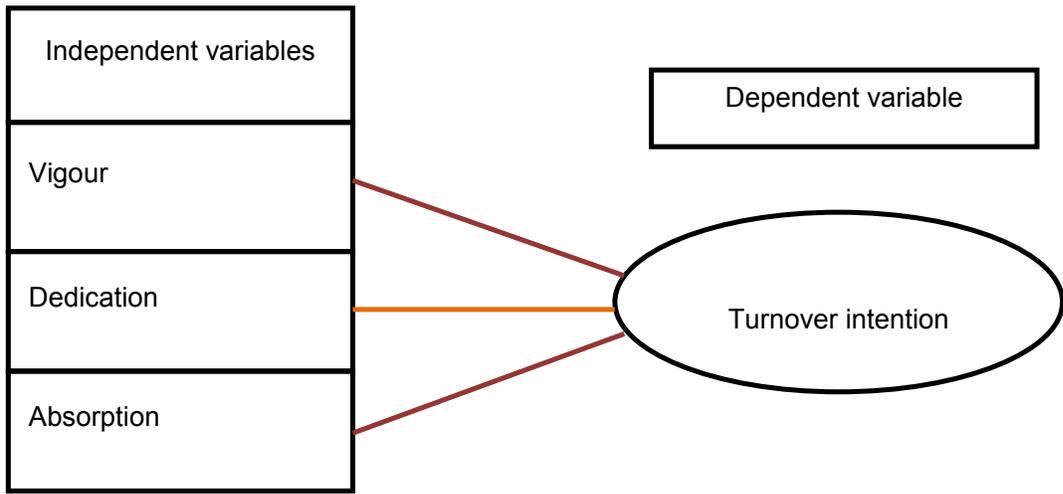


Figure 3.10: Relationship between work engagement and turnover intention

3.3.5.2 *Research aim 2: To assess whether job embeddedness and work engagement significantly predict turnover intention*

Overall, figure 3.11 illustrates that job embeddedness and work engagement significantly and negatively predicted turnover intention. More specifically, JES links and dedication moderately and negatively predicted turnover intention.

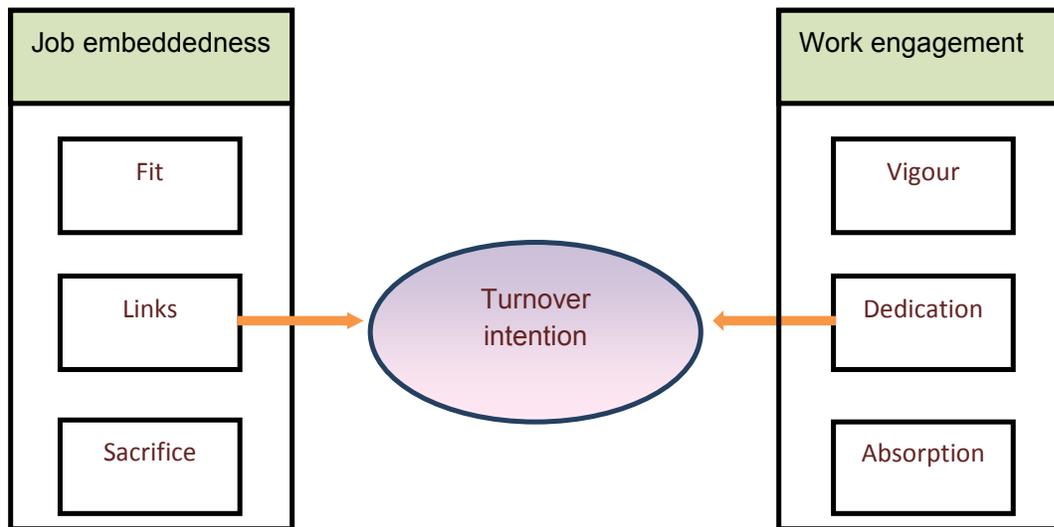


Figure 3.11: Job embeddedness and work engagement as predictors of turnover intention

3.3.5.3 *Research aim 3: To determine whether age, race, gender, marital status and tenure groups differ significantly regarding their job embeddedness, work engagement and turnover intention*

As illustrated in figure 3.12, job embeddedness levels differed significantly in relation to age, race and tenure. Furthermore, work engagement levels differed significantly in relation to marital status. Finally, the turnover intention level only differed significantly in relation to race. Table 3.14 provides an overview of the main sources of the observed differences between the biographical variables.

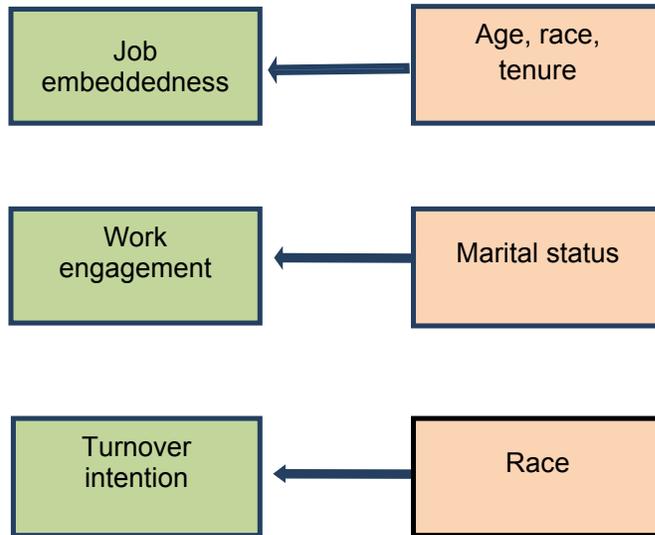


Figure 3.12: Significant differences between job embeddedness, work engagement and turnover intention in relation to age, race, gender, marital status and tenure groups

Table 3.14

*Summary overview of the source of significant differences in the biographical groups on job embeddedness, work engagement and turnover intention*

<b>Biographical group</b>	<b>Job embeddedness Significant mean differences</b>		<b>Work engagement Significant mean differences</b>		<b>Turnover intention Significant mean differences</b>
<b>Age</b>					
25 years and younger	Low*	Fit to organisation	None		None
26-35 years	High*		None		
36-45 years	Low*		None		
46-55 years	Low*		None		
56 + years	High*		None		
<b>Race</b>					
African	Low*	Link, fit and sacrifice to organisation	None		High*
Coloured	Low*		None		
Asian	High*		None		
White	High*		None		
<b>Marital status</b>					
Single	None		Low*	Vigour	None
Married	None		High*		
<b>Tenure</b>					
Less than a year	High*	Sacrifice to organisation	None		None
1-5 years	High*		None		
6-10 years	Low*		None		
11-15 years	Low*		None		
16-20 years	Low*		None		
21 + years	High*		None		

\*  $p \leq 0.05$  (two tailed)

The results provided sufficient evidence to support research hypothesis H<sub>3a</sub>: Individuals from different age, race, marital status and tenure groups will differ significantly in terms of their levels of job embeddedness, work engagement and turnover intention.

### 3.3.6 Decisions regarding the research hypotheses

Based on the above results, the following decisions in relation to the hypotheses were made. Although, the  $p \leq 0.05$  (5% level) confidence level was used as a criterion in accepting the

hypotheses or rejecting the null hypotheses, due to the relatively small sample size and nature of the empirical results, it was decided to interpret results also at the  $p \leq 0.10$  (10% level). As indicated in table 3.15, the null hypotheses of this study were rejected because of the relationships that were found between job embeddedness, work engagement and turnover intention and the differences between the groups that were found.

Table 3.15  
*Overview of decisions regarding the research hypotheses*

Research hypotheses		Supportive evidence
H1 <sub>0</sub>	There is no significant relationship between job embeddedness, work engagement and turnover intention.	No
H1 <sub>a</sub>	There is a significant relationship between job embeddedness, work engagement and turnover intention.	Yes
H2 <sub>0</sub>	Job embeddedness and work engagement do not significantly and negatively predict turnover intention.	No
H2 <sub>a</sub>	Job embeddedness and work engagement significantly and negatively predict turnover intention.	Yes
H3 <sub>0</sub>	People from different age, race, gender, marital status and tenure groups will not differ significantly regarding their job embeddedness, work engagement and voluntary turnover intention.	No
H3 <sub>a</sub>	People from different age, race, gender, marital status and tenure groups will differ significantly regarding their job embeddedness, work engagement and voluntary turnover intention.	Yes

### 3.4 DISCUSSION

The primary objective of this study was to explore the relationship between the job embeddedness, work engagement and turnover intention of staff in a higher education institution. The secondary objective was to determine whether individuals from different age, race, gender, marital status and tenure groups differed significantly regarding their job embeddedness, work engagement and turnover intention.

### **3.4.1 The biographical profile of the sample**

The sample consisted mainly of Africans and females between the ages of 26 and 45 years, which suggests that they may have been in their early or establishment career stage upon completion of their postgraduate qualification. The majority of participants were married with a master's and honours degree. This can be expected in a higher education institution as academics are expected to have these qualifications at the lecturer's level. The majority of the participants indicated tenure between a year and five years which should perhaps be interpreted in view of the younger age having joined the institution following completion of post-graduate studies and possibly having entered the workforce upon completion of their degrees or having changed jobs.

### **3.4.2 Research aim 1: The relationship between job embeddedness, work engagement and turnover intention**

Overall, the results indicated a significant relationship between the participants' job embeddedness and work engagement. The results showed that the participants who had high levels of job embeddedness and work engagement had significantly lower turnover intentions. It appears from the results that employees who feel highly embedded in their jobs experience the need to stay in the organisation. Consistent with the findings of Halbesleben and Wheeler (2008) and Mitchell *et al.* (2001b), the present results suggest strong formal or informal connections between an employee and institution or other people, the person's fit with the job and organisation and the perceived personal losses (like giving up colleagues or interesting research projects) that may result in keeping the employee in the institution. Similarly, those participants who are highly engaged in their jobs appear to have less intent to leave the institution. These results support the findings of Saks (2006) and Schaufeli and Bakker (2004), namely that engaged employees are likely to have a greater attachment to their organisation and have positive experiences which lead to a lower propensity to leave their organisation.

### **3.4.3 Research aim 2: Job embeddedness and work engagement as predictors of turnover intention**

The results suggest job embeddedness is a stronger negative predictor of the participants' turnover intention than work engagement. The findings are in agreement with those of Halbesleben and Wheeler (2008) who found job embeddedness to be a strong negative predictor of turnover intention and the contribution of work engagement relatively weak. In addition, the results suggest that the participants' links were significantly negatively related to their turnover intention. Mitchell *et al.* (2001b) found that the higher the number of links between the person and job or organisation

the more he or she feels bound to the job and organisation. The present results also indicated that the participants' dedication significantly contributed to lower turnover intention. A study conducted by Barkhuizen and Rothmann (2006) amongst academics supports these findings as they also reported relatively high levels of dedication amongst participants.

### **3.4.5 Research aim 3: Significant differences between biographical variables**

The present study explored broad trends regarding differences between various age, race, gender, marital status and tenure groups in terms of their levels of job embeddedness, work engagement and turnover intention. Overall, the results indicated a number of significant differences between the demographic groups with regard to their job embeddedness, work engagement and turnover intention. Age, race and tenure groups differed significantly with regard to their levels of job embeddedness. Race groups also differed significantly with regard to their levels of turnover intention. Finally, significant differences were evident between marital status groups with regard to their levels of work engagement.

#### **3.4.5.1 Age**

The participants 56 years and older indicated a higher fit with their job and institution than their counterparts. These participants' higher fit may indicate that they feel professionally and personally tied to the institution which suggest that they are less likely to leave the institution (Mitchell *et al.*, 2001b). Ng and Feldman (2010) are of the view that employees in the mid-to-late career stage are more concerned with job security and career stability, hence are significantly more likely to stay in their organisation than those in the early career stage. It appears from the results, job autonomy, flexible work schedules and knowledge transfer through mentoring the younger professionals can promote a better fit as well as embeddedness in the institution (Mitchell *et al.*, 2001a; Schreuder & Coetzee, 2011).

Participants between the ages of 26 to 35 years also indicated a higher fit with their job and institution than their counterparts. These participants are in establishment phase of their career. Schreuder and Coetzee (2011) suggest that individuals in their establishment career have self-perceived values and career goals; focus on developing a career strategy including professional and hierarchical development; like to develop stable affiliations; and sustain employability through further education and development. In addition, the stronger fit may be due to perceived possibilities of professional growth and development and compatibility of values with those linked to their reasons for joining the institution. It appears from the results, that developing intimacy,

involvement and stable affiliations with members of the organisation promotes a better fit and a higher likelihood that individuals will feel professionally and personally tied to the organisation (Mitchell *et al.*, 2001b; Schreuder & Coetzee, 2011).

No significant differences were found between the various tenure groups regarding their work engagement and turnover intention. These findings are supported by the findings by Barkhuizen and Rothmann (2006) who reported no significant differences between the work engagement of academics of different age groups. In terms of turnover intention, the findings of this research contradicts those of Ferres *et al.* (2003) who found that younger employees demonstrated stronger turnover intentions than older age group employees.

#### 3.4.5.2 Race

Asian and white participants were found to be more embedded in the organisation with less intention to leave the organisation than their African and coloured colleagues. Mallol *et al.* (2007) found job embeddedness to be a predictor of employee retention across culturally diverse populations. Conversely, Africans and coloureds scored higher in terms of their level of turnover intention compared to their white and Asian counterparts, which indicates less intention to stay at the institution. These findings could be attributed to the fact that the higher education institution historically was a predominantly white institution and the white participants have seemingly developed closer links and fit with the dominant culture of the institution. The findings suggest that the Africans' and coloureds' lower sense of embeddedness with the institution could have increased their higher levels of intention to leave. Alternatively, the higher levels of turnover intention could be attributed to the Affirmative Action programmes that were introduced to overcome the barriers experienced by previously disadvantaged racial/ethnic groups in South African workplaces. These Affirmative Action programmes could have opened up better employment opportunities for the Africans and coloureds elsewhere than for the Asians and whites.

No significant differences were found between the various race groups regarding their work engagement and turnover intention. These findings are supported by the findings of studies by Leonard and Levine (2006) and Wöcke and Heymann (2012) who did not find consistent evidence that race has an impact on turnover. However, the findings of the present study contradict those of Jones and Harter (2005) who found that at low levels of work engagement, members of different racial groups reported a lower tendency to remain with the organisation than members of the same racial group.

#### 3.4.5.3 Gender

No significant differences were found between the male and female participants regarding their levels of job embeddedness, work engagement and turnover intention. These findings are supported by Shafique *et al.* (2011) who did not find differences in job embeddedness and intention to leave between male and female employees. The findings are also in agreement with those of Barkhuizen and Rothmann (2006) who reported no significant differences between the work engagement of male and female academics. However, the findings contradict those of Schaufeli and Bakker (2003) who reported that men scored significantly higher than women on all dimensions of engagement: vigour, dedication and absorption.

#### 3.4.5.4 Marital status

The married participants experienced significantly higher levels of energy and mental resilience (vigour) when working compared to the single participants. The finding is in agreement with the view of Burke and El-Kot (2010) who indicated that married employees have higher levels of vigour. The support and importance of recovery that married people experience at home may have a positive impact on how individuals feel and behave during work activities (Mostert, 2006).

No significant differences were found between the married and single participants regarding their job embeddedness and turnover intention. This finding contradicts a study by Karatepe and Ngeche (2012) who found that married employees are more embedded in their jobs and are less likely to leave their current organisation.

#### 3.4.5.5 Tenure

Participants with fewer than five years and those with 21 years or more of tenure reported greater job embeddedness in terms of what they perceive they would have to sacrifice (career development plans, funds for training and development, sabbatical leave tied to longevity in institution) when leaving the institution (Mitchell *et al.*, 2001a). The findings suggest that employees young to the organisation may not want to lose opportunities for career development such as study assistance and young academics' training and development offered by the institution. Furthermore, longer tenure with the organisation may suggest that employees do not want to lose accumulated health care and pension benefits or the freedom to pursue career goals and the flexible work hours the institution offers (Mitchell *et al.*, 2001b).

No significant differences were found between the various tenure groups regarding their work engagement and turnover intention. This finding contradicts a study by Mkavga and Onyishi (2012) who revealed a significant relationship between job tenure and turnover intention. Little information is available regarding work engagement in relation to tenure.

#### **3.4.4 Conclusions: Implications for practice**

Overall, it can be concluded that there is a significant relationship between employees' job embeddedness, work engagement and their turnover intention. More specifically, high levels of job embeddedness (organisational links) and work engagement (dedication) lead to lower turnover intentions. The participants 56 years and older as well as the 26-to 35-year participants indicated higher levels of fit with their job and institution than their counterparts. Asian and white participants were found to be more embedded in the organisation with less intention to leave the organisation than their African and coloured colleagues. Conversely, Africans and coloureds showed higher levels of turnover intention compared to their Asian and white counterparts, which may indicate less intention to stay at the institution. The married group indicated higher levels of vigour or energy while working than their single counterparts. Finally, the participants with less than a year and more than 20 years in the institution showed higher levels in terms of their sacrifice to institution.

The findings of the study contribute valuable new knowledge on the relationships between the core variables, and they focus attention on the practical implications of job embeddedness and work engagement in the retention of embedded and engaged employees in the higher education institution. The conclusions drawn from the results will be discussed in more detail in chapter 4.

The conclusions from the findings indicate that practitioners can benefit from understanding the relationship between job embeddedness, work engagement and turnover intention to inform retention practices. In the chapter to follow, practical recommendations are made on the basis of the argument that embedded and engaged employees have less intent to leave their organisation, are physically involved in their tasks, and are highly motivated and emotionally connected to others when performing their work. Detailed recommendations for retention practices will be made in chapter 4.

### **3.4.5 Limitations of the study**

The main limitations will only be discussed in the following section because the comprehensive overview of all the limitations identified will be provided in chapter 4.

A cross-sectional design with a small sample size has significant limitations in terms of applying the findings to the entire population. For future research, a longitudinal design is recommended to establish causal relationships. A further limitation is the non-probability purposive sample as opposed to the random sample which implies that caution should be exercised in generalising to the total population of staff in the higher education institution.

In spite of the above-mentioned limitations, the results of this study show potential for the analysis of the relationship between job embeddedness, work engagement and turnover intention, as well as the differences between biographical groups' experiences of these constructs. The study may be used as a basis for understanding the relationships of these constructs and differences found between the biographical groups can inform the development of effective retention strategies.

### **3.4.6 Recommendations for future research**

Only the core recommendations will be focused on in this section because the recommendations will be elaborated in more detail in chapter 4.

Owing to the limited scope of this study, it is highly recommended that further studies be conducted to address the causality between the three variables covered in the present study. Furthermore, it is recommended that community embeddedness which is important for predicting specific work outcomes be examined and also that longitudinal research be conducted to examine the effect of job demands on work engagement among staff in higher education.

## **3.5 CHAPTER SUMMARY**

In this chapter, the core aspects of the literature and empirical study were discussed, the results of the study were interpreted by analysing the findings, conclusions were drawn, recommendations were made and the limitations of the study were highlighted. Chapter 4 presents a more comprehensive discussion of the conclusions drawn, the limitations of the study, and the recommendations for practical application of the findings.

Herewith the following research aims have been achieved, namely to empirically:

**Research aim 1:** investigate the statistical relationship between job embeddedness, work engagement and turnover intention as manifested in a sample of participants employed in a South African higher education institution.

**Research aim 2:** determine whether age, race, gender, marital status and tenure groups differ significantly regarding their job embeddedness, work engagement and turnover intention.

**Research aim 3:** formulate recommendations for the discipline of industrial and organisational psychology, in particular with regard to retention practice for further research.

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

Chapter 4 focuses on the conclusions drawn from this research study. This chapter highlights the limitations of the literature review and the empirical results of the study, and makes recommendations for the practical application of the findings and for future research studies.

### **4.1 CONCLUSIONS**

The following section focuses on the formulation of conclusions based on the literature review and the empirical study.

#### **4.1.1 Conclusions regarding the literature review**

There were three aims for this study. Firstly, the literature aimed to critically explore, analyse and evaluate the nature of the theoretical relationship between job embeddedness, work engagement and turnover intention. The second aim was to determine whether individuals from different age, race, gender, marital status and tenure groups differ significantly regarding their job embeddedness, work engagement and turnover intention. The third aim was to determine the implications of the theoretical relationship between job embeddedness, work engagement and turnover intention for retention practices. The general aim was accomplished by addressing and realising the specific aims of the study.

##### *4.1.1.1 The first aim: conceptualise job embeddedness, work engagement and turnover intention from the literature and determine the theoretical relationship between these variables*

The first aim, namely to conceptualise job embeddedness, work engagement and turnover intention from the literature and to determine their theoretical relationships was achieved in chapter 2. A literature review was conducted whereby the disciplinary and conceptual foundations of the three constructs were studied. From the literature it is concluded that, notwithstanding the existence of research on job embeddedness, work engagement and turnover intention, more research is needed to better understand these concepts.

For the purposes of this study, job embeddedness was approached from the perspective of Mitchell *et al.* (2001b). From the literature review, while job embeddedness comprises two dimensions, namely the organisational and community dimensions, it was concluded that the organisational embeddedness dimension better predicts employee job performance and retention

than the community dimension (Allen, 2006; Lee *et al.*, 2004). Job embeddedness is viewed as a construct that includes one's links to other people or groups, perceptions of the employee's job fit and sacrifices that may be involved in leaving the job, both financial and social (Mitchell *et al.*, 2001b). People are seen to leave their jobs for reasons unrelated to the actual jobs and Mitchell *et al.* (2001a) contends that this may be due to unexpected or expected shocks such as unsolicited job offers. Job embeddedness captures elements of one's attachment to the job, and it can therefore be concluded that, if an employee is highly linked in the organisation, fits well and would have to sacrifice a great deal if he or she were to leave the organisation, the intent to leave would be lower (Halbesleben & Wheeler, 2008).

From the literature review and in light of a comprehensive overview of the literature on work engagement, it is concluded that further progress in research is necessary so that a broad agreement on its meaning is conceptualised and operationalised. In terms of the present study, Schaufeli *et al.* (2002) view work engagement as a positive, fulfilling, work-related state of mind. Work engagement is characterised by vigour-related energy, mental resilience and the ability to invest effort in one's work, and persisting even in difficult times. According to this definition, engagement is coupled with dedication, strong involvement in one's work coupled with experiences of a sense of significance, passion, inspiration and pride in the work and absorption that relates to being fully concentrated and deeply engrossed in it. This leads to time passing quickly and the employee has difficulty disconnecting from work. Engaged employees therefore, feel strong and vigorous at work, are passionate and take pride in their work and are often engrossed in it. From the literature review it was concluded that work engagement is influenced by job demands, the job itself and personal resources.

It was concluded that turnover intention is a conscious and deliberate likelihood that an individual will change his or her job within a certain period of time (Souza-Poza & Henneberger, 2002; Tett & Meyer, 1993). While turnover intention is often associated with job search without leaving the organisation, ultimately employee turnover creates tangible or intangible costs to the organisation (Morrell *et al.*, 2004; Souza-Poza & Henneberger, 2002).

Research studies have focused on each of the constructs of job embeddedness, work engagement and turnover intention individually or in relation to other constructs. Despite their potential value, it is not clear from the literature how these three constructs relate, most especially in the South African higher education context. Based on the literature review it was concluded that there appears to be a relationship between job embeddedness, work engagement and turnover intention. This relationship is that intention can be influenced by job embeddedness and work

engagement. Employees who are highly engaged may find it difficult to detach from the job as they may have invested a lot of energy in it and may have high levels of identification with the work they do. Moreover, embeddedness represents a perception of fit, and an accumulation of formal or informal links and sacrifices in term of costs in the organisation difficult to duplicate outside of it, which makes employees cautious to leave their jobs or the organisation (Halbesleben & Wheeler, 2008).

*4.1.1.2 The second aim: to determine theoretically (based on the review of the literature) the role of age, race, gender, marital status and tenure groups on job embeddedness, work engagement and turnover intention*

From the literature review it was concluded that biographical variables (age, race, gender, marital status and tenure groups) are antecedents of job embeddedness, work engagement and turnover intention. This study found that theoretical relationships existed between job embeddedness levels in relation to various age, race and tenure groups. A theoretical relationship existed between work engagement levels in relation to the marital status group. A theoretical relationship also existed between turnover intention in relation to the race group. Although theoretical relationships exist between job embeddedness, work engagement and turnover intention levels in relation to gender groups, no differences were found in this study.

When determining the relationship that exists between the biographical variable of marital status and job embeddedness, the literature findings were inconsistent.

When determining the relationship that exists between the biographical variable of age, race, gender and tenure with work engagement the literature findings were inconsistent. This was also the case when determining the relationship that exist between turnover intention and the various age, gender, marital status and tenure groups.

*4.1.1.3 Third aim: to determine the implications of the theoretical relationship for employee retention practices*

The literature review detailed the way voluntary turnover and retention strategies are influenced by the relationship between job embeddedness, work engagement and turnover intention. It was found that employees who are engaged and embedded offer organisations a competitive advantage in the knowledge economy (Powell & Snellman, 2004). Therefore, employee and

organisational perspectives need to be considered when developing and implementing employee retention programmes.

Knowledge of the relationship between job embeddedness, work engagement and turnover intention can be useful for building more effective organisational retention policies, talent management or career development plans. The findings of this study show that there is a relationship between job embeddedness, work engagement and turnover intention. It is therefore concluded that, to retain employees, organisations can provide resources (e.g. autonomy and flexibility, mentoring and coaching or career advancement opportunities) with a view to retaining talent in the higher education institution.

#### **4.1.2 Conclusions regarding the empirical study**

The specific empirical aims of the study were as follows:

**Research aim 1:** To investigate the statistical relationship between job embeddedness, work engagement and turnover intention as manifested in a sample of participants employed in a South African higher education institution. The following research hypothesis was tested: H1<sub>a</sub> - There is a significant relationship between job embeddedness, work engagement and turnover intention.

**Research aim 2:** To assess whether job embeddedness and work engagement significantly predict turnover intention. The following research hypothesis was tested: H2<sub>a</sub> - Job embeddedness and work engagement significantly and negatively predict turnover intention.

**Research aim 3:** To determine whether age, race, gender, marital status and tenure groups differ significantly regarding their job embeddedness, work engagement and turnover intention. The following research hypothesis was tested: H3<sub>a</sub> - People from different age, race, gender, marital status and tenure groups will differ significantly in respect of their job embeddedness, work engagement and turnover intention.

**Research aim 4:** To formulate recommendations for the discipline of industrial and organisational psychology, in particular with regard to retention practices and further research.

The empirical findings provided supportive evidence for research hypotheses H1<sub>a</sub>, H2<sub>a</sub> and H3<sub>a</sub>. The relevant research findings that support the research hypotheses will be presented as empirical conclusions in the next section.

*4.1.2.1 The first aim: to investigate the statistical relationship between job embeddedness, work engagement and turnover intention as manifested in a sample of participants employed in a South African higher education institution*

Based on the findings as depicted in figure 4.1, the following conclusion was drawn:

*The participants' job embeddedness and work engagement relate negatively to their turnover intention*

Based on the findings, it was concluded that participants who have high levels of job embeddedness (a variety of links, fit with organisation and perceptions that they would sacrifice more if they left the institution) and who are highly engaged (feeling strongly energised, dedicated and absorbed in their work) in their jobs have lower intentions to leave the organisation.

*4.1.2.2 The second aim: To assess whether job embeddedness and work engagement significantly predict turnover intention*

The following conclusions were drawn:

*(i) The participants' job embeddedness significantly and negatively predict their turnover intention*

It can be concluded that strong perceived organisational links (job embeddedness) with the organisation significantly predict lower intention to leave the organisation. Participants may experience higher intention to stay as a result of many links with colleagues.

*(ii) The participants' work engagement significantly and negatively predict their turnover intention*

It can be concluded that feeling highly dedicated to the organisation significantly predicts lower turnover intention. Engaged employees are generally passionately attached to their organisation; they may find it difficult to detach from the job because they have invested a lot of energy and have high levels of identification with the work they do. Dedicated employees tend to be strongly involved in their work and experience a sense of significance, enthusiasm and challenge which may lead to lower intent to leave the organisation.

4.1.2.3 *The third aim: to determine whether age, race, gender, marital status and tenure groups differ significantly regarding their job embeddedness, work engagement and turnover intention*

Based on the findings, the following conclusions were drawn:

(i) *Age groups tend to differ significantly regarding their levels of job embeddedness*

It is concluded that participants between 26 and 35 years and those older than 56 years tend to have higher levels of fit in the organisation. Since the participants between 26 and 35 years are in the establishment phase of their career, a stronger fit may be explained by a need to develop stable affiliations as well as possibilities for professional growth and development in the organisation. However, the stronger fit for the older group in their mid-to-late career stage could be explained by a need for job security, career stability, and mentor young employees in the institution.

No differences were found between the various age groups regarding their work engagement and turnover intention. This finding is supported by Barkhuizen and Rothmann (2006) who did not find differences in the work engagement of different age groups of participants. However, the finding contradicts a study by Ferres *et al.* (2003) who found that younger employees demonstrated stronger turnover intentions than older age group employees.

(ii) *Race groups tend to differ significantly regarding their levels of job embeddedness and turnover intention*

- Based on the findings it is concluded that Asians and whites have more links to the organisation, with perceptions of person-fit, and that they would be sacrificing more if they were to leave the organisation. The findings may be explained by the Affirmative Action programmes that were implemented for the advancement with regards to racial/ethnic participation. Therefore, Asians and whites may be less inclined to leave the institution because of limited opportunities of gaining favourable employment elsewhere.
- From the results it can be concluded that Africans would be more likely to have more intentions to leave the organisation. It may be that Affirmative Action programmes create more employment opportunities for Africans or they have fewer links and poor person-organisation fit owing to the institution still being predominantly white.

- No differences were found between the various race groups regarding their work engagement. This finding contradicts a study by Jones and Harter (2005) who found that at low levels of work engagement, members of different racial groups reported a lower tendency to remain with the organisation than members of the same racial group.

(iii) *Gender groups do not tend to differ significantly regarding their levels of job embeddedness, work engagement and turnover intention*

No differences were found between the various gender groups regarding their job embeddedness, work engagement and turnover intention. This finding is supported by Barkhuizen and Rothmann (2006) who did not find differences in the work engagement of male and female academics. However, this finding contradicts a study by Reitz *et al.* (2010) that found older employees to be more embedded in their jobs and were likely to remain employed in the current organisation than their younger counterparts.

(iv) *Marital status groups tend to differ significantly regarding their levels of work engagement*

Based on the findings it is concluded that married participants experienced more vigour and overall work engagement than their single colleagues. Married participants are more likely to be more engaged than their single counterparts as a result of experiences of positive home interaction and support from family members who afford them opportunity for sufficient recovery.

No differences were found between the marital groups regarding their job embeddedness and turnover intention. This finding contradicts a study by Karatepe and Ngeche (2012) who found that married employees are more embedded in their jobs and are less likely to leave their current organisation.

(v) *Tenure groups tend to differ significantly regarding their levels of job embeddedness*

It is concluded that participants working at the organisation for less than a year and those with tenure of more than 21 years would sacrifice more if they were to leave the organisation. Employees young to the organisation may not want to lose opportunities for career development and the support given to them for training and development. Furthermore, long tenure with the organisation implies that employees would not want to lose accumulated pension benefits, long-term sabbatical leave or the flexible work schedules the institution offers.

No differences were found between the various tenure groups regarding their work engagement and turnover intention. This finding contradicts a study by Mkavga and Onyishi (2012) that revealed a significant relationship between job tenure and turnover intention. Little information is available regarding work engagement in relation to tenure.

#### **4.1.3 Conclusions regarding the central hypothesis**

Regarding the central hypothesis, it can be concluded that a significant relationship exists between job embeddedness, work engagement and turnover intention. In addition, age, race, marital status and tenure groups differ significantly in their levels of job embeddedness, work engagement and turnover intention. The empirical study yielded statistically significant evidence to support the central hypothesis.

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

The findings of the literature review and the empirical study contribute new knowledge to the field of industrial and organisational psychology, with particular focus on informing employee retention practices in the South African higher education environment. The literature review provided new insight into the conceptualisation of the constructs of relevance to the study (job embeddedness, work engagement and turnover intention), the possible relationships between these constructs and the differences between biographical groups with regard to these constructs.

Conclusions drawn from the literature review indicate that practitioners should consider the theoretical models of job embeddedness, work engagement and turnover intention when working in the field of career psychology. Furthermore, the theoretical relationship between these variables and the differences between biographical groups need to be taken into account because the findings have provided new insight into the importance of these variables for retention practices, especially in the higher education institution environment. Previous research has yielded inconsistent results on differences between biographical groups in relation to the variables of relevance to this study. However, the findings of this study provide some evidence to build on the existing findings that support the existence of these differences. In addition, a study by Mallol *et al.* (2007), found a relationship between race and job embeddedness. In the present study, Africans were found to have higher turnover intentions than their counterparts. Because Affirmative Action programmes have been instrumental in transforming higher education institutions to a more

culturally diverse environment, insight gained in the present study can help to develop retention strategies aimed at embedding Africans in the institution.

Practitioners utilising the instruments included in this study need to ensure the reliability and validity of the instruments prior to using them. The reliability of the instruments in this study was analysed and conclusions drawn from this study indicate that the instruments displayed generally acceptable levels of internal consistency reliability. Hence, additional information to that which is available on these instruments in the South African context was generated.

The results of this empirical study provide new information on the relationship between job embeddedness and work engagement, and how this may be related to turnover intention. Furthermore, the result highlights the possibility of employees' job embeddedness and work engagement in their intention to stay with or leave the organisation. Conclusions drawn from this empirical study indicate that the relationship between the constructs of job embeddedness and work engagement experienced by employees influence their turnover intention in an organisation. Organisations can therefore focus on developing an embedded and engaged workforce by formulating practices that may lead to employee retention.

## **4.2 LIMITATIONS**

Several limitations in terms of the literature review and empirical study have been identified. The limitations of this study will be discussed in the next section.

### **4.2.1 Limitations of the literature review**

Limitations of the literature review include a paucity of research in the South African context and abroad on the relationship between job embeddedness, work engagement and turnover intention. Although there is increasingly more research on work engagement and turnover intention, few studies have focused specifically on the relationship of these variables with job embeddedness.

An all-encompassing view of the factors influencing talent retention could not be provided as only three variables (job embeddedness, work engagement and turnover intention) were considered. More factors may therefore need to be considered when developing retention strategies in the higher education environment.

#### **4.2.2 Limitations of the empirical study**

Some limitations of the empirical study were identified in the previous chapters. What follows is a summary of the limitations that apply specifically to this empirical study. The limitations identified include, for example, the exclusion of various other environmental and individual factors because only three work-related dimensions were measured to inform talent retention practices.

This study used self-report, cross-sectional questionnaires to gather data at one point in time on all three measures. This design makes it difficult to draw conclusions about the causal nature of the relationships and gives no idea of change that a group might take as would a longitudinal design. Hence, future research needs to use a longitudinal design to examine the impact of job embeddedness and work engagement on employees' turnover intention.

Because this study used a non-probability purposive sample of employees working for a higher education institution, generalising the findings to other organisations might not be possible. Future research therefore needs to obtain a probability sample that is representative of all employees throughout the higher education institution to achieve generalisability.

In summary, despite these limitations, the results of this study provide a new explanation for the relationship between job embeddedness, work engagement and turnover intention as well as the differences between biographical groups' experiences of these variables. The study may be used as a basis for understanding the relationships between the variables measured and the differences between biographical groups to inform the formulation of retention practices.

#### **4.3 RECOMMENDATIONS**

Based on the findings of this study, recommendations are made regarding talent retention within organisations and for future studies.

The findings of this study show that it is important to consider job embeddedness and work engagement in order to understand employees' turnover intention. In view of the argument that embedded and engaged employees demonstrate increased performance and lower intention to leave the organisation, practical recommendations are made as shown in figure 4.1. The relationships between the three constructs of relevance to this study may provide insight into the development of retention strategies in the following ways:

- The higher education institution may provide supervisor support that provides guidelines, assistance, trust in and praise for subordinates to help employees better fit their jobs and the organisation as well as build stronger links with colleagues. Under these conditions, intangible losses such as respect and interpersonal relationship incurred by leaving the organisation will be maximised. For this reason, supervisory support can help employees' to become more embedded in their jobs (Bergiel *et al.*, 2009).
- The higher education institution could consider intervention strategies that enhance energy at work, involvement with one's work and efficacy at work (Burke & El-Kot, 2010). Engaged and dedicated employees have lower turnover intention. The higher education environment should help sustain married employees' vigour and dedication. Hence meaningful work activities, flexible work arrangements, opportunities for growth and development and incentive compensation can help improve the vigour and dedication of employees (Saks, 2006; Van den Berg *et al.*, 2008).
- Embeddedness and engagement can be promoted by enhancing the person-job fit, matching individual and organisational needs, developing training programmes targeting both organisational health and individual well-being and leadership development that build a positive emotional climate in the workplace (Schaufeli & Salanova, 2007, 2008).
- The higher education institution should explore the extent to which provision is made for personal and professional development. Growth opportunities imply that employees have the chance to develop and demonstrate their potential, which may lead them to better fit their jobs and the organisation. Employees will thus be more embedded in their jobs and less likely to leave when there are opportunities for personal and professional development (Bergiel *et al.*, 2009).
- Management could enhance engagement by coaching employees' on setting goals, developing career plans, pointing out pitfalls and giving advice where necessary (Barkhuizen & Rothmann, 2006). In addition, job resources with a positive impact, such as feedback from the supervisor, collegial support, social contact and personal growth may result in higher levels of vigour and dedication amongst employees (Van den Berg *et al.*, 2008).
- The higher education institution can provide non-financial incentives such as sabbatical leave or flexible work schedules to enhance employee embeddedness (Mitchell *et al.*, 2001a).

- Management could offer training and development so as to capitalise on member' desires to continually update skills and improve their long-term employability, thus creating a sense of job satisfaction that motivates retention rather than turnover (Holt *et al.*, 2007).
- Socialisation tactics, network groups, mentoring to address early career needs for guidance, support, affirmation and developing a sense of belonging could actively embed new Africans in the institution in an effort to reduce turnover intention (Allen, 2006; Freidman & Holtom, 2002).
- Teams and long-term projects, connecting job and organisational rewards to longevity, and matching employees' knowledge, skills, abilities and attitudes with job requirements could be used to retain the age group between six and 20 years of tenure (Lee *et al.*, 2004).
- Employees between 36 and 55 years of age possess the intellectual capital that enables the organisation to maintain a competitive advantage. Mentoring and coaching could be used for knowledge transfer from more experienced senior employees, thereby ensuring that this age group remain productive and embedded in the institution (Coetzee & Roythorne-Jacobs, 2007; Probst *et al.*, 2000).
- Newcomer learning and adjustment processes, supervisor support that provides guidelines, assistance, trust in and praise for young adults entering the institution could help them to achieve a better fit with their jobs and the institution (Allen, 2006; Bergiel *et al.*, 2009).

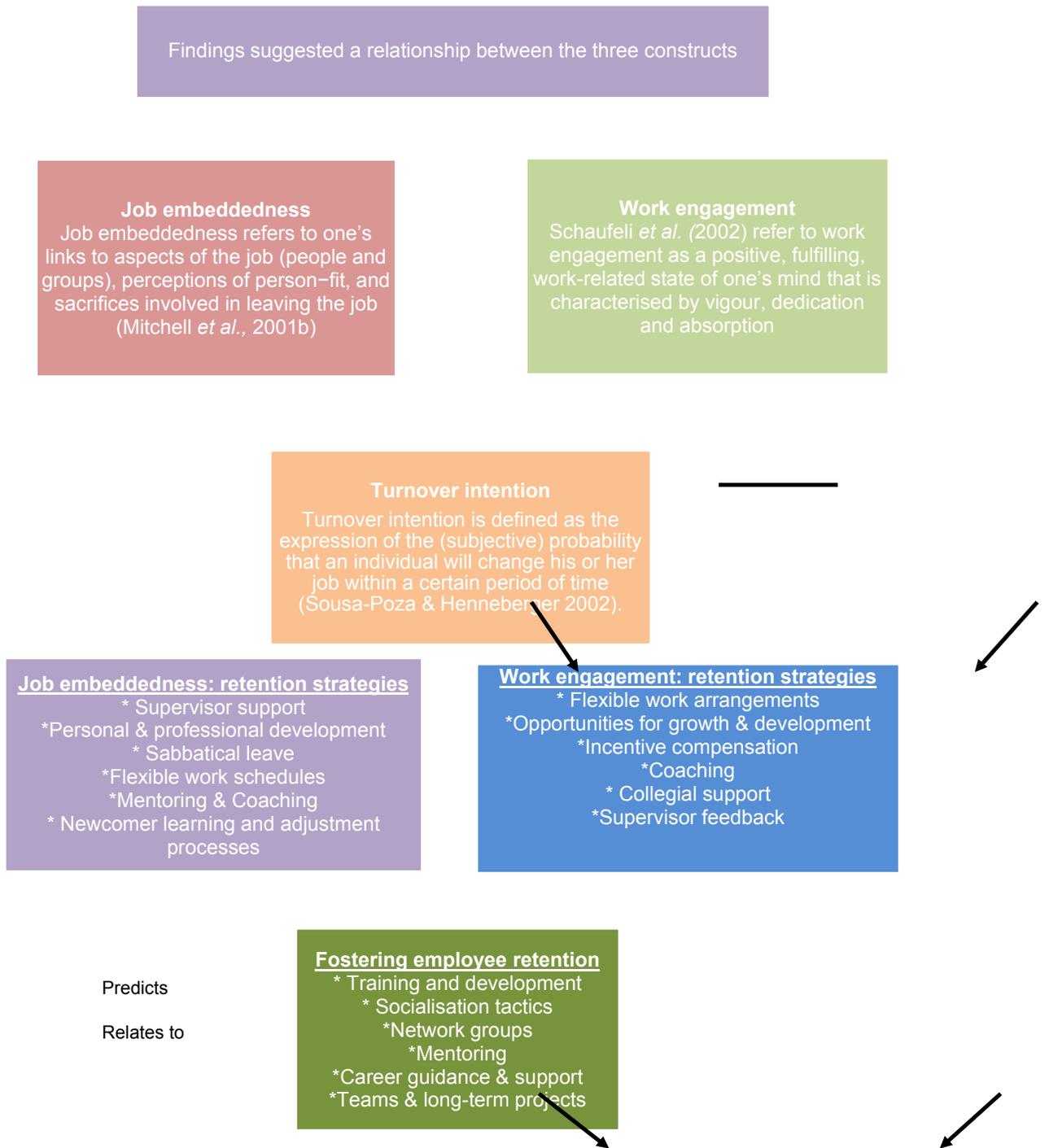


Figure 4.1: Overview and summary of core retention practices: Higher educational institutions (N = 153)

### **4.3.2 Future research**

In the light of the conclusions and limitations of this study, the recommendations as set out below are made for future research.

It is recommended that academics and support professionals in different institutions of higher education in South Africa also be studied to confirm the research results. This study was limited to a small sample of staff predominately in one section of the institution and a larger randomised sample size which is more representative, from various institutions would help to achieve better generalisability of results. Furthermore, a longitudinal study to examine the impact of job embeddedness and work engagement on employees' turnover intention may be of value.

Finally, because this study includes only three constructs, future research could include more areas, such as managerial supervision, job resources and shocks that trigger thoughts of quitting a job, which would provide more valuable insight into the findings of this study.

## **4.4 INTEGRATION OF THE STUDY**

This study investigated the relationship dynamics between job embeddedness, work engagement and turnover intention. The results suggest that a relationship exists between these three variables, and that this relationship may provide insight to inform talent retention practices.

The literature review clearly suggests that there is a relationship between these three constructs. Higher education plays a critical role in the creation of knowledge for future skills development and social improvement of South Africa. Managing knowledge involves knowledge identification, acquisition, development, and its transfer and retention. The capacity to retain institutional knowledge involves training and development, opportunities for personal growth, mentoring and coaching activities, supervisory support and job autonomy, all of which have been indicated as significant when considering employee retention strategies. In addition, the difference between biographical groups in terms of their attitudes to the organisation has to be considered.

The empirical study provided statistically significant support for the central hypothesis. The findings therefore suggest that a relationship exists between individuals' job embeddedness, work engagement and turnover intention. People's links with the organisation and their dedication to their work significantly predict their turnover intention. In addition, groups differing in age, gender,

race, marital status and tenure were shown to differ significantly in their levels of job embeddedness, work engagement and turnover intention.

In conclusion, the findings of this study reveal that insight into the relationship between job embeddedness, work engagement and turnover intention may have practical significance in that the knowledge of this relationship may inform talent retention. Management of employee turnover and its associated costs can be improved by developing retention plans that lead to considerable benefits for the organisation such as a decline in intention to quit and retention of human intellectual capital in this global competitive knowledge economy. Owing to South Africa's diverse cultural context, it is important to consider the differences between biographical groups regarding the variables of relevance to this study.

#### **4.5 CHAPTER SUMMARY**

This chapter discussed the conclusions drawn from and the possible limitations of the study, by focusing on both the literature review and empirical study. Recommendations were made with reference to practical suggestions for talent retention and recommendations for future research. Finally, an integration of the study was presented by highlighting the support of the findings for the relationship between job embeddedness, work engagement and turnover intention.

Herewith the following empirical research aims were achieved:

**Research aim 1:** To investigate the statistical relationship between job embeddedness, work engagement and turnover intention as manifested in a sample of participants employed in a South African higher education institution.

**Research aim 2:** To assess whether job embeddedness and work engagement significantly predict turnover intention.

**Research aim 3:** To determine whether age, race, gender, marital status and tenure groups differ significantly regarding their job embeddedness, work engagement and turnover intention.

**Research aim 4:** To formulate recommendations for the discipline of industrial and organisational psychology, in particular with regard to retention practices and further research.

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