

**RETENTION AND ENGAGEMENT OF GENERATION Y ENGINEERS: A  
HERMENEUTIC PHENOMENOLOGICAL INQUIRY**

by

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**UNIVERSITY OF SOUTH AFRICA**

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**DECLARATION**

I, Marié-Henriette Marais, student number 49929828, declare that: **Retention and Engagement of Generation Y Engineers: A Hermeneutic Phenomenological Inquiry** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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SIGNATURE

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DATE

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**SUMMARY**  
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SUPERVISOR : Prof H.A. Barnard  
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DEGREE : M. Comm (Industrial and Organisational Psychology)

The purpose of this study was to explore how Generation Y engineers in South Africa experience their work and based on this to determine how companies should be orientated toward their retention and engagement. I followed a qualitative research approach informed by the hermeneutic phenomenological paradigm, making use of a case study approach and in-depth unstructured interviews with six Generation Y engineers. My findings showed that even though retention cannot be ensured, hygiene retention factors are needed for initial retention and task and work-setup engagement for prolonged retention. Personal passion and commitment relating to career engagement are valued above organisational engagement and commitment. Companies should focus on the identified hygiene retention factors and on engaging these participants through providing for certain elements in their task and work setup.

**Key Words:** Generation Y, Millennials, Retention, Turnover, Engineering, Work-related Engagement, South Africa, Hermeneutics, Phenomenology, Career Script.

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## CHAPTER 1: SCIENTIFIC ORIENTATION TO THE STUDY

*“We do not see things as they are. We see them as we are.” – Talmud*

In this dissertation I focus on the retention and engagement of Generation Y engineers in South Africa from a hermeneutic phenomenological perspective. Such a perspective entails explicating the researcher’s point of view as authentically as possible from the start of the research project. I therefore decided to communicate how I “see things” by explicating my scientific orientation to this study at the start of the report. In this way I hope to help the reader understand the reasons for the various research design and methodological choices I made better and to be transparent in terms of how I may have influenced the findings and conclusions presented in the dissertation. In this chapter I firstly provide a brief background to the study. I then present the problem statement, indicate the research objectives and discuss my evolving interest in the study. Moving on, I expound on the paradigms I employed in terms of the ontological, epistemological and methodological assumptions with which I identify. I discuss my research design in terms of approach and the methods employed in terms of sampling, data collection, data analysis and interpretation as well as strategies employed to ensure quality and ethics. I then also present a chapter layout of my dissertation and conclude with a chapter summary.

### 1.1. BACKGROUND TO THE STUDY

Factors such as the ageing workforce, changes in employee attitudes, the availability of new employment options, the cost related to hiring and training new employees, the shortage of skilled workers and global competition for talent are increasingly adding to the importance of retention (Allen, Bryant & Vardaman, 2010).

Fast-paced technological and scientific advances have influenced the development of the internet, which in turn is associated with the proliferation of information and communication technologies and the ever-increasing phenomenon of globalisation (Khapova, 2006). This has brought about the notion of the knowledge economy and the knowledge worker of the 21<sup>st</sup>

century world of work. The knowledge economy is defined as “production and services based on knowledge-intensive activities that contribute to an accelerated pace of technological and scientific advances as well as equally rapid obsolescence” (Powell & Snellman, 2004, p. 201). In turn, knowledge workers can be defined as individuals who possess “high levels of education and expertise whose primary task is the creation, distribution, or application of knowledge” (Hammer, Leonard & Davenport, 2004, p. 17).

The proliferation of the knowledge economy has given rise to the notion of boundaryless organisations, as well as opportunities for boundaryless careers. The boundaryless career is characterised by flexibility, mobility and movement between different organisational contexts (Coetzee & Roythorne-Jacobs, 2012). The phenomenon answers to the challenges brought about by the knowledge economy by allowing for inter-organisational mobility of workers (Cappelli, 1999). Individuals have the opportunity to search for employment across national boundaries and work in collaboration with anyone in the world (Friedman, 2005). Thus, “anyone with the capacity to generate exceptional value added in any market enjoys the chance to shop around the globe - and to be shopped around, as well” (Castells, as cited in Khapova, 2006, p. 43). This makes the retention of these workers all the more challenging. In this context I next highlight the retention and engagement of Generation Y in general and Generation Y engineers specifically.

### **1.1.1. Retention of Generation Y**

For the first time in history organisations are experiencing the dynamic of four distinct generations present in the workplace at the same time (Codrington & Grant-Marshall, 2011). These are the Traditionalists (born prior to 1946), the Baby Boomers (born 1946 to 1964), Generation X (born 1965 to 1981) and Generation Y (born 1982 to 2000) (Lancaster & Stillman, 2010). As the groupings of these generations are influenced by historical events that occurred during their formative development stages (Noble & Schewe, 2003; Twenge, 2000), the exact parameters for dating Generation Y are debatable and could differ from one context to the next (Gruber, 2008; Stroeger, 2009). As the Baby Boomers are beginning to retire and leave the workforce, the young adults of Generation Y are entering the world of work (Reder et al., 2010).

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This generation is estimated to be twice the size of the preceding Generation X and will make up the bulk of the skilled workforce in the future (Hewlett et al., 2009). The supply of talent is, however, dwindling as Generation Y workers are leaving their workplaces at an alarming rate (Crow & Stichnote, 2010). Many companies are facing shortages in critical areas where the need to attract and retain highly skilled talent has become paramount (Erickson, Schwartz & Ensell, 2012). An international study commissioned by Deloitte found that nearly one out of every three Generation Y workers are planning to leave their current workplace and look for new career opportunities within the next year (Talent Edge 2020, 2011). It seems that very few professions have enough of the right kind of jobs that meet the needs of Generation Y workers (Codrington & Grant-Marshall, 2011).

If companies want to stay competitive they need to retain their valuable Generation Y talent by updating their retention strategies to meet the expectations and the demands of the new workforce (Talent Edge 2020, 2011). Generation Y employees can be very selective about employment opportunities and farsighted companies will have to learn to manage, attract and retain them in order to emerge stronger and more prepared for the future (Crow & Stichnote, 2010).

### **1.1.2. Retention of Generation Y engineers**

Organisations are especially concerned about the retention of key workers such as high performers and those with scarce and critical skills (Allen et al., 2010). It has been shown that high unemployment rates have little impact on the turnover of high-performing employees or those with scarce skills (Trevor, 2011). The recruitment of valuable employees still occurs in economic downturns and the retention of high-performing and scarce employees is still paramount (Smith, 2009). Highly educated workers with portable knowledge and skills can easily transition to alternative employment opportunities if provided with an incentive to resign and move (Solimano, as cited in Rahman, 2012).

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Engineering is seen as a scarce and critical skill. According to Hasna and Clark (2009), the lack in supply of engineering talent is a major concern. The dwindling supply of skilled engineers required to meet the industry's growing demands is due to a lack of graduating engineers and problems with retention of engineers in the field (Davenport, 2005; Veenstra, Dey & Herrin, 2009). There is a dire need for new engineering talent to start replacing experienced retirees, as it is expected that, within the next five years, roughly half of the engineers may retire or leave the field for other reasons (Reder et al., 2010).

In South Africa, engineering skills are also seen as scarce and the high demand for engineers has been illustrated by listing engineering as a national scarce and critical skill in 2009 (Department of Home Affairs, 2009). According to this listing, the quotas for appropriately qualified foreigners stated a need for 4 050 engineers. Furthermore, a demand for over 5 000 engineers has been listed on the South African Department for Higher Education and Training's (DHET) 2012-2013 skills demand list (DHET, n.d). South Africa is severely *under-engineered*, as the international benchmark, average population per engineer, shows that South Africa lags behind other developing countries with only one engineer for every 3 166 people compared to Brazil's 277 and Malaysia's 543 people per engineer (ECSA, 2010). In Western Europe, China and North America the ratio is around 1:300, which indicates that South Africa has one tenth of the engineers that these nations have (Nxumalo & Nordengen, 2010). Consulting Engineers South Africa (CESA, 2012) reported that in June 2012, 86.5% of firms indicated a drive to increase their engineering staff, but were struggling to find suitable candidates.

Retaining young talent in South Africa, as in other countries, is challenging because of the struggle for talent, skills shortages, employee mobility and the imminent retirement of Baby Boomers (Masibigiri & Nienaber, 2011). The National Planning Commission (NPC, 2011) mentioned that the generational reproduction of professional expertise is a looming crisis, as the ageing cohort continues to leave the system. Factors such as low pay, low status, understaffing and associated higher workloads have led to an exodus of youngsters out of the South African engineering industry (Sattar, 2007). There is thus a massive need to build capacity among graduates and young engineers, as many are attracted to other sectors such as finance, putting

further pressure on the attraction and retention of youngsters in the industry (Sattar, 2007). Watermeyer and Phillay (2012) suggest that in order to address the shortage of engineering skills there should be a drive to decrease the demand for these services, increase the number of entrants to the profession and retain existing employees in the field. In the light of the above it can be concluded that the retention of Generation Y engineers is a particularly important phenomenon that requires definite attention.

### **1.1.3. Work-related engagement**

According to Kennedy and Diam (2010), not only retention, but also engagement is crucial to business success. The focus should thus not only be on retaining engineers, but also on ensuring that they are engaged at work. Engagement has become an important topic for academics and researchers, as well as for practitioners in organisations (May, Gilson & Harter, 2004; Schaufeli & Bakker, 2004), as engaging employees plays an important part in retaining them (Van Schalkwyk, Du Toit, Bothma & Rothmann, 2010). Work-related engagement is associated with many positive organisational outcomes (Bakker, Albrecht & Leiter, 2011), the most significant outcome probably being that of increased job performance (Bakker & Bal, 2010; Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009). In the knowledge economy, driven by intense competition, businesses need employees who feel energetic, dedicated and absorbed by their work in order to maximise inputs from them (Bakker & Schaufeli, 2008). This need has given rise to the increasing importance of assuring that employees are emotionally and cognitively committed to their companies or “engaged” (Rothman & Rothman, 2010).

Contention exists among practitioners as well as academics regarding the specific conceptualisation and definition of work-related engagement (Bakker, Albrecht & Leiter, 2011; Schaufeli & Salanova, 2011). A review of literature in Chapter 2 provides an extensive discussion on the various approaches to work-related engagement and the conceptualisation thereof.

### **1.1.4. Researching the retention and engagement of Generation Y engineers**

In terms of generation research, Joshi, Dencker and Franz (2011) bemoan the fact that even though generational issues are ever present in today's society and popular pressure on generations continues to increase, organisational scholars have remained largely silent on this topic. The authors call for organisational scholars to "reclaim an arena fertile with rich traditions of scholarship across many disciplines, yet, overrun by populist and largely untested assumptions regarding generations and generational differences" (p. 178). In addition, most generational difference research has been conducted in the USA and in Europe, the problem being that this could not always be compared to the lived experiences of their South African counterparts (Henderson, 2010).

Additional research regarding employee retention is warranted. According to Allen et al. (2010) there is a gap between science and practice in understanding the management of employee retention. The authors indicate that even though turnover scholars are usually looking to come up with generalisable principles of retention, managers and practitioners could be more interested in findings directly applicable to their specific context. It is therefore valuable to conduct in-depth qualitative research regarding retention.

Studies have shown that Generation Y engineers act differently with regard to their turnover behaviour. A study conducted by Rose and Gordon (2010) among engineering and technical professionals in Australia found that, in line with generational differences, factors relating to attraction, retention and turnover intention among staff were different across age groups. The authors suggest that generational differences should thus be taken into account when deciding on retention strategies. In the same vein, Karlsson (2008) studied retention among young (Generation Y) engineers in Sweden and found that these employees act differently from other occupational groups with regard to turnover.

There is a paucity of empirical research exploring the role of generational differences in retention and engagement among Generation Y engineers in South Africa. I conducted a literature search

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in December 2012 and again in May 2013 and searched Google Scholar, Science Direct, EBSCO host, ProQuest ABI/INFORM Global (new interface) database and Unisa's library catalogue and institutional repository for literature on this topic. I included the following key words in my searches: Generation Y OR Millennial, Employee Engagement OR Work Engagement, Retention OR Turnover, Engineer and South Africa. I found only one study that mentioned this topic. It was a qualitative study conducted by Vieira (2010), in which the author indicated that her findings were not overwhelmingly decisive enough to conclude safely that generational differences have an impact on the turnover and retention of engineers. The author interviewed South African Generation Y engineers and compared their responses to the characteristics of Generation Y reported in literature in general.

My study contributes to the limited empirical body of knowledge relevant to engagement and retention of Generation Y engineers. The study is unique in that I employed a hermeneutic phenomenological paradigm to study the lived work experiences of Generation Y engineers. Furthermore, I added the component of engagement, as it is clear that research regarding work-related engagement and the factors associated with it is much needed (Rothman & Rothman, 2010). Literature also continually emphasises the need for further research regarding the antecedents of engagement and specifies that it would be advantageous to focus future research on the link between engagement and, among others, retention (Kennedy & Diam, 2010).

Sutherland and Jordaan (2004) studied the retention of knowledge workers (as which engineers are classified) in South Africa and found that old theories such as the notion that job satisfaction and organisational commitment lead to loyalty (intention to remain with an employer) may no longer hold true. They also found that the overreaching characteristics of this group could be further segmented into meaningful sub-groupings. Based on these findings, the authors suggest that empirical research is necessary to study the defining characteristics of knowledge workers, as well as the distinct identities of these sub-groupings, such as generational cohort differences. Wright (2007) calls for explorative research to be conducted in terms of identifying potential factors that could be important for engagement and retention among engineers in South Africa. She contests that these factors can then be studied further by making use of quantitative

measures to rank the identified factors in terms of importance and resulting effect. Kennedy and Diam (2010) studied retention and engagement in an engineering environment in the USA and based on their findings, recommended that researchers further investigate the antecedents of engagement and also that existing practices be evaluated to determine whether they are associated with engagement and retention. In light of the above I expect that understanding the lived work experiences of Generation Y engineers will contribute valuable insight into how to better retain and engage them.

### **1.2. PROBLEM STATEMENT**

Although research conducted in the field of generational studies and work-related engagement is abundant, there is a paucity of research regarding the retention and engagement of Generation Y engineering staff in the South African context. Only one study on this could be found and this research only studied South African Generation Y engineers in terms of retention and did not consider their work-related engagement. In terms of work-related engagement research, no studies could be found that specifically investigated engagement among Generation Y engineers in South Africa.

In terms of generational research, previous studies, such as the Oxygenz report (Puybaraud, 2010) and research by Deloitte (Talent Edge 2020, 2012), have employed a mostly quantitative approach to determine what Generation Y workers deem important in the workplace. In addition, these studies have been conducted across a vast breath of Generation Y employees and youth. In line with the call for an exploratory approach to study this construct (Wright, 2007), I intended to study engagement by making use of a qualitative approach and explore the lived work experiences of Generation Y engineers to determine how engagement and retention could be enhanced.

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In the light of the above, I formulated the research question as:

*How do Generation Y engineers in South Africa experience their work and based on this, how could companies be orientated toward the retention and engagement of these workers?*

Knowledge and understanding of factors contributing to engineers' engagement and retention may help their companies, managers and human resource practitioners take appropriate action to retain and engage this valuable scarce talent. Human resource professionals and industrial and organisational (IO) psychologists may use these findings to inform the design of various policies, programmes and interventions with the objective of retaining and engaging these Generation Y engineers. Career psychologists could also look to these findings to form a better understanding of the career orientation of these workers and thus provide more informed career advice to clients in similar contexts. Overall, this study will add to the body of knowledge relating to the retention and engagement of Generation Y engineers in the South African work context and the proposed themes and final hypothesis can then also be used as basis for future research.

### **1.3. RESEARCH OBJECTIVES**

The research objectives are put forward by indicating the general as well as the specific aims of the study.

#### **1.3.1. General aim**

In the light of the problem statement, the general aim of this study is to gain insight into the lived work experiences of Generation Y engineers working in South Africa in order to obtain a better understanding of how companies can retain and engage these workers.

#### **1.3.2. Specific aims**

The specific literature aims are:

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- To explore, discuss and integrate different theoretical perspectives regarding generational theory.
- To identify, analyse and discuss retention theory and strategies.
- To discuss work-related engagement as a construct.

The specific empirical aims are:

- To explore the lived work experiences of Generation Y engineers.
- To explore the lived work experiences of Generation Y engineers for factors that may inhibit or facilitate their retention.
- To identify elements of engagement in the lived work experiences of Generation Y engineers.

### **1.4. MY EVOLVING INTEREST IN THE STUDY**

It is a daunting task to choose a research topic, especially when one is required to do so within the first month of one's Masters' studies. As I was well aware that I would have to live with the topic I chose for the next two years, I knew I had to choose something which really interested me, which was relevant to my context and something that I would like to find answers to. After a lot of reading and searching, I think my topic rather found me, than I it.

I came across the concept of *generations* while having a discussion with one of my mentors on another possible research topic that I was considering to pursue. She mentioned the concept of generations and as soon as I heard about it, I wanted to know more. I hurriedly bought Codrington and Grant-Marshall's book, *Mind the gap* (2011), and was immediately intrigued. I found that many of the attributes and attitudes ascribed to Generation Y were true for me; however, when asking my Generation Y engineer boyfriend about it, he disagreed. I became curious whether my Generation Y colleagues and friends also experienced the factors that are deemed to be important to individuals of this generation as significant in their own work and career lives. Specifically among engineers, I found that they did not necessarily ascribe to these

stated attributes and attitudes. Most of them indicated that a factor such as job security is much more important than being able to work flexibly or in a company that ascribes much consequence to corporate responsibility and sustainability. I also found that many of the engineers I spoke to were not satisfied in their current jobs, indicated frustration and talked about leaving their companies and even engineering as a profession. I started wondering whether the information I had been given by the engineers during my informal enquiry regarding generational attributes and attitudes could explain why many of them experienced their work so negatively.

Qualitative research may be conducted to satisfy the researcher's curiosity and desire for better understanding (Babbie, 2005). The response to my informal enquiry intrigued me and provoked me to find out about Generation Y engineers' lived work experiences and how these could provide information to retain and engage them better. This study is also of personal interest to me, as I am a Generation Y worker, working in an environment with, among others, Generation Y engineers. Moreover, I am now also married to a Generation Y electrical engineer.

In declaring my interest and my generational identity and work experience thus far, I acknowledge that my study may have consciously and subconsciously been influenced by my preconceived notions. As such I chose a hermeneutic phenomenological study, employing myself as the primary research instrument and being fully aware of both the benefits and disadvantages of such a research approach. I have endeavoured to make my preconceived notions as explicit as possible and I diligently report on the research planning and interpretative decisions throughout the study.

### **1.5. MY SCIENTIFIC ORIENTATION TO THE STUDY**

My scientific orientation to the study is determined by the world-views, perspectives and paradigms I hold. A paradigm is a way of viewing the world where the researcher chooses to hold certain systems of meaning in favour of others (Maree, 2010). It is very important to choose a paradigm as a first step, since without it there is no basis for subsequent choices about

methodology, research design or literature (Mackenzie & Knipe, 2006). The paradigm perspectives discussed below will explicate the scientific boundaries defining my research (Mouton, 2001) by exploring the disciplinary relationship within which my study will take place, my psychological and research paradigms, as well as the methodological aspects of my study.

### **1.5.1. The disciplinary relationship**

This study is conducted within the discipline of industrial and organisational (IO) psychology and relates to the sub-disciplines of personnel psychology and career psychology.

#### *1.5.1.1. Industrial and organisational psychology*

Psychology is concerned with the scientific study of animal as well as human behaviour (Muchinsky, 1993). Psychology, as a field of study, consists of a number of interrelated disciplines, of which IO psychology is one (Nicholson & Wall, 1982). IO psychology can be seen as general psychology, which is applied in industry and in organisations (Strümpfer, 2007) and concerns the study of human behaviour associated with work, organisations and productivity (Cascio, 2001). Research undertaken by IO psychologists aims to study and apply theoretical knowledge scientifically with the aim of solving problems and improving work-life in the workplace (Lowenberg & Conrad, 1998; Muchinsky, 1993; Robbins, Odendaal & Roodt, 2003). As an applied science, the scientific knowledge of IO psychology and the practical application thereof are closely linked (Barnard & Fourie, 2007). The IO psychologist will conduct research and apply psychological principles in the workplace (Rothman & Cilliers, 2007) and then also create new knowledge in the process to strengthen the scientific basis for future application (Barnard & Fourie, 2007). IO psychology comprises six widely acknowledged sub-disciplines: organisational psychology, consumer psychology, ergonomics, psychometrics, career psychology and personnel psychology (Barnard & Fourie, 2007).

*Personnel psychology* employs individual differences within as well as between employees to predict optimal fit between an organisation and an employee (Bergh & Theron, 2009). It is

concerned with, among others, job analysis, psychological assessment, employee placement and selection, training and development, career development support, performance evaluation, remuneration as well as the attraction and retention of scarce and critical skills (Schreuder & Coetzee, 2010). This is in line with the research objectives of the study, especially in terms of retention and engagement.

*Career psychology* is a sub-discipline of IO psychology, which aims to assist workers to manage career conflicts (Bergh & Theron, 2009). It focuses on the dynamics between individuals and their environments and aims to describe the nature of work positions held and the ensuing experiences during an individual's life course (Arnold & Randall, 2010). It further involves the study of career development and career behaviour as an important part of human development (Greenhaus, Callanan & Godshalk, 2010). As generational theory also studies the element of development along an individual's life course (Kupperschmidt, 2000), career psychology was seen as a fitting sub-discipline for the present study.

### **1.5.2. Humanism as underlying psychological paradigm**

The humanistic paradigm formed a further boundary around my study. Humanism views the individual as capable to exercise freedom of choice, rejects reductionism, emphasises the uniqueness of individuals and posits that individuals should determine their own values based on their previous experiences (Van Niekerk, 1996). The humanistic perspective puts forward that science should aim to assist individuals to achieve self-determination, by studying them in their natural environments and that human behaviour can be explained by complete understanding of people, which comes through empathy and intuition (Whitley, 2002). A qualitative approach is also commonly used where a humanistic view is adopted (Whitley, 2002). In order to understand Generation Y engineers' lived experiences I studied participants in their natural environment by employing a stance of empathy and intuition with regard to their behaviours. Humanism is a fitting paradigm for this study, as the assumption is that Generation Y engineers have the capacity to choose how much effort they put into their work and whether they leave or stay at their places of employment.

### **1.5.3. Research paradigm: Hermeneutic phenomenology**

There are many different ways in which I could have chosen to approach the study of the retention and engagement of Generation Y engineers in South Africa. A research paradigm is an all-inclusive system of interrelated practice and thinking that defines the researcher's nature of enquiry along the three dimensions of ontology, epistemology and methodology (Terre Blanche & Durrheim, 2007). Whether deciding on a positivist, interpretive or constructionist paradigm, each will shape the manner in which I conduct research and each perspective has a specific set of assumptions or postulates regarding the manner in which the world functions (Henning, Van Rensburg & Smit, 2004).

I relied on the interpretive and constructionist paradigms and more specifically employed hermeneutic phenomenology as specific orientation within this research paradigm. The interpretive research paradigm, focusing on understanding, is applicable to this study, as I am seeking meaning from individual experiences (Mason, 2002). The interpretive approach is flexible and sensitive to the social context and involves viewing individuals and their unique interpretations, meanings and understandings as a primary source of data (Mason, 2002). The constructionist approach is based on a belief that reality consists of a set of liquid and changeable social constructions and aims to show how versions of the social world are produced or constructed in discourse (Terre Blanche & Durrheim, 2007). In line with the interpretative approach I focused on the subjective understanding and experiences of the engineers to gain insight into their personal meaning-making (Nieuwenhuis, 2010). Through the constructionist approach I then reconstructed their narrations from my own historical background and experiences (Laverty, 2003).

For this research project I placed myself within the tradition of phenomenological hermeneutics, which was founded by Martin Heidegger and further developed by Hans-George Gadamer in Germany, as well as Paul Ricoeur in France (Lindseth & Norberg, 2004).

Phenomenology allows for the study and description of the essences of particular phenomena as

these appear in the life-world of the participants (Van Manen, 1990). In the phenomenological tradition, one should dispense with one's natural "taking for granted" attitude, which sees a phenomenon as we already know and understand it and rather adopt a phenomenological attitude and become curious about the phenomenon's typical traits, characteristics and essences as if we encounter it for the first time (Lindseth & Norberg, 2004). This entails focusing on understanding the meaning that a particular phenomenon has for a research participant (Patton, 1991) by setting aside (bracketing) one's own presumptions and attempting to see the phenomenon as it really is (Osborne, 1994).

According to Lindseth and Norberg (2004), bracketing in hermeneutic phenomenology does not entail that we put our pre-understanding in brackets, as this will result in the meaning and the essence also disappearing. What we rather put into brackets is our judgments regarding the factual, in order to be open to our own experiences and to the understandable meaning contained in this experience. The authors follow that we refrain from judging and concluding and are more interested in relating what we have experienced ("So this is what you experienced, this is what you thought") rather than in stating the facts ("What you say is right, what you say is wrong").

Hermeneutics is the study of human cultural activity as texts, including written or verbal communication, visual art and music (Kvale, 1996). Hermeneutics, as an interpretive process, has the aim of discovering intended and expressed meanings and to bring about understanding of phenomena through language (Annells, 1996; Kvale, 1996). Hermeneutics allows for the interpretation of the participants' experiences.

Interpretation is viewed as critical to the process of understanding, as meaning is found as we are being constructed by the world and also in turn constructing the world from our own historical background and experiences (Lavery, 2003). In this view "pure" phenomenological bracketing is not possible, as understanding is based on our historicity of being and understanding and will therefore always involve some prejudice (Gadamer, 1976). As understanding is connected to a specific set of foreclosures, which includes one's historicity and cannot be eliminated, one should therefore become aware of and also account for these interpretive influences rather than

attempting to eliminate them (Heidegger, 1927/1962). Hermeneutics presupposes that the researcher makes use of a theoretical perspective to interpret the data and that this perspective should also be made explicit to the reader (Cunliffe, 2003). Work-related engagement was used as interpretive lens and the theoretical underpinning of this theory is discussed in Section 2.3 below. My theoretical knowledge in terms of generational theory and retention also functioned as theoretical lenses through which I constructed meaning from the data.

In line with Lindseth and Norberg (2004) I do not ascribe to “pure” phenomenology, which sees essences uncontaminated by interpretation; neither do I ascribe to “pure” hermeneutics where interpretations of text do not move beyond the text meaning to reveal essential traits of the life world. I ascribe to the hermeneutic phenomenological orientation, which will firstly allow for a description of Generation Y engineers’ lived work experiences through phenomenology, and then secondly the interpretation of the phenomena by means of hermeneutics (Caputo, 1984). In terms of this paradigm I will now move to make explicit my ontological assumptions, which give rise to my epistemological assumptions, which cascade into my methodological assumptions, which finally give rise to the specific methodologies I made use of, such as data collection and analysis (Jansen, 2010).

### *1.5.3.1. My ontological perspective*

Ontology specifies the nature of reality that is to be studied and what can be known about it (Terre Blanche & Durrheim, 2007). It establishes the framework, the “world” or the target of my study (Nel, 2007). Positivist frameworks hold the ontological assumption that the world (or reality) is structured by law-like generalities, which can be predicted, identified and manipulated to provide universal statements of science (Munhall, 1989). In contrast, the interpretive and constructionist frameworks hold that there is not only one reality, but rather multiple realities that are constructed and can also be changed by the knower (Laverly, 2003). In this study, the notion of an objective reality is rejected in favour of a perspectival reality where the focus of the ontological interest is rather on the emotions, ideas, motivations, mentality and perceptions (Mason, 2002) of Generation Y engineers in the South African work context. The study focuses

on the individual experiences and meanings (Whitley, 2002) Generation Y engineers ascribe to, where each of these participants' ontology is limited to what they have experienced (Nel, 2007). As my hermeneutic phenomenological stance also focuses on understanding the meaning that a phenomenon has for a research participant instead of searching for law-like generalities, these ontological assumptions are congruent with the research paradigm I employed.

### *1.5.3.2. My epistemological perspective*

If ontology defines the research framework, or target of study, epistemology establishes the set of research questions (Nel, 2007). Epistemology describes the nature of the relationship between the knower and what can be known (Lincoln & Guba, 1985). My epistemological perspective determined my opinions about which theories are valid, what kinds of research questions are important, the best way to carry out research and the proper interpretation of data (Whitley, 2002). Epistemological questions should direct researchers to consider philosophical issues that will aid the ontological perspective and verify what will be considered proof or knowledge of social things, what is regarded as the "knowledge or evidence of things in the social world" (Mason, 2002, p. 16). In the positivist tradition researchers are seen as able to obtain a viewpoint devoid of personal values and biases (Polkinghorne, 1983) attempting to assume a stance of a disinterested scientist (Denzin & Lincoln, 2000). In the interpretive and constructionists traditions, research is seen as a human activity in which the researcher as knower is central (Polkinghorne, 1983) and the investigator and the investigated are interactively linked in the creation of findings (Denzin & Lincoln, 2000). Here the researcher is not seen as a disinterested scientist, but rather a passionate participant (Denzin & Lincoln, 2000). Employing an interactional epistemological stance, I will rely on the subjective relationship between me and the participants to obtain information regarding their individual experiences. As hermeneutic phenomenology also allows for the interpretation and construction of the participants' experiences, my research paradigm is fitting to my epistemological assumptions.

### 1.5.3.3. *My methodological perspective*

My methodology specifies how I practically went about studying what I believe can be known (Nel, 2007; Terre Blanche & Durrheim, 2007). In the positivist framework, specified methods are used to ensure the absence of the researcher's influence and bias, as these are seen as a threat to the validity of the research results (Lavery, 2003). However, in the interpretive and constructionist traditions to which I ascribe, I rather made use of good judgement and responsible principles than strict rules to guide the research process by being reflective, insightful, sensitive to language and persistently open to new experiences (Van Manen, 1997). The main aims are understanding and the reconstruction of experience and knowledge, where my influence is not absent, but where the methodological approach may evolve in a process of interpretation and interaction between research participants and me (Lavery, 2003).

The methodology employed needs to follow from as well as reflect the philosophy (positivist, interpretive or constructionist) as it carries on throughout the research project (Osborne, 1994). Following from the my ontological and epistemological perspective, an idiographic approach was employed, as the study focuses on the individual and the understanding of the individual's behaviour by tapping the experiences of Generation Y engineers and not on formulating general laws (Maree & Van der Westhuizen, 2010).

The methodology employed in the hermeneutic phenomenological tradition guided my research design as well as the methodology I followed. I conducted my research in line with what Van Manen (1990) describes as the dynamic interaction between the following six hermeneutic phenomenological research activities: (1) Turning to the phenomenon that earnestly interests me and commits me to the world; (2) Studying experiences as the Generation Y engineers and I live it rather than as we conceptualise it; (3) Reflecting on key themes that characterise the phenomenon; (4) Describing the phenomenon through writing and rewriting; (5) Maintaining a strong and oriented relation to the phenomenon and (6) Balancing the research context by considering the parts as well as the whole. The specific methodologies I employed in this study flow from my methodological perspective and will be discussed in the following section.

## **1.6. RESEARCH DESIGN**

A research design is a strategy or a plan that flows from the underlying philosophical assumptions to indicate the selection of participants, data-gathering techniques to be used as well as the data analysis to be conducted (Nieuwenhuis, 2010). According to Durrheim (2007), it can be seen as a strategic framework that links the research question to the execution and implementation of the research. The author acknowledges that the purpose of the research, the paradigms informing the research, the research context as well as the research techniques should be woven together to create a coherent research design to maximise the validity of the findings. Having already elaborated on my research question and research paradigm, my research design will now be discussed with specific reference to the research approach I followed and the specific techniques I used to collect and analyse the data.

### **1.6.1. Research approach**

A qualitative exploratory approach was followed, as this approach is in line with the philosophical views I previously discussed and most appropriate for generating the kind of data required in answering my proposed research question. In qualitative research, designs are more open, fluid and changeable (Durrheim, 2007). The qualitative approach adopted for this study thus rejected the idea of a blueprint for the entirety of the study, as decisions about strategy and design were ongoing and grounded in the process and framework of the research itself (Mason, 2002). This approach allowed me to explore the lived work experiences of Generation Y engineers holistically in their natural context, in depth, openness and detail (Durrheim, 2007).

An exploratory approach was employed to satisfy my curiosity and desire for a better understanding of the experiences of Generation Y engineers (Babbie, 2005) by employing an open, flexible and inductive approach to look for new insights into this phenomenon (Durrheim, 2007). Exploratory studies are typically used when a researcher examines a new interest or when the study itself is relatively new (Babbie, 2005). Although there is much literature regarding

generational theory, little research has been conducted among Generation Y engineers in South Africa and therefore this research aims to explore this area, which is relatively new and of much interest to me.

### **1.6.2. Research method**

The research method employed has to do with the setting of the research, the entree and establishment of researcher roles, sampling, data collection, the recording and analysis of data, strategies to ensure quality, ethics and reporting.

#### *1.6.2.1. Research setting*

This research study does not have a specific setting, but all the engineers participating in the study were either working in Gauteng or Mpumalanga.

#### *1.6.2.2. Entree and establishing researcher roles*

At first I planned to conduct my study at a specific engineering company. To obtain access to this setting I had to make use of a sponsor as well as a gatekeeper. A sponsor is a person who is accepted in the group one wants to study who could help one gain initial acceptance, whereas a gatekeeper is someone who has a say on who is allowed in the setting and who is not (Kelly, 2007). My manager at the consulting firm for which I work contacted one of the managers of the company where I wanted to conduct my research. After I had explained my study and answered the questions they had, one of the managers of the company gave me written permission to conduct the study in this setting. I however later decided to conduct the research on Generation Y engineers in general (not at a specific company) and communicated this decision to the company. They accepted this change and gave me approval to request participation from their engineers if I required more participants. After interviewing the participants whom I approached informally, I decided that I needed to interview additional participants and contacted some of the Generation Y engineers in that company.

Most of the participants were however approached informally, outside of their working hours and not at their places of employment. It was therefore not necessary to approach the companies for authorisation, as the organisation was not peculiar to the research setting.

I gained entry to the various research settings by firstly asking my husband to refer me to engineers who could possibly form part of my study and I also contacted engineers I already knew. I asked them to be participants and then also to refer me to their Generation Y engineering friends and colleagues whom I could also ask to participate in the study.

### *1.6.2.3. The self as instrument*

When conducting interpretative research, the researcher becomes the primary instrument for collecting and analysing data (Terre Blanche, Kelly & Durrheim, 2007). The researcher's subjectivity is then also accepted as something that cannot be eliminated (Nieuwenhuis, 2010) and seen as making it possible for us to understand personal realities empathically (Terre Blanche et al., 2007). However, this subjectivity should be made explicit; especially when employing hermeneutic phenomenology as research paradigm one needs to become aware of and account for one's own interpretive influences (Laverty, 2003). It is required that I interpret my own presence in the research appropriately, indicate how I used my subjective capacities and then also be open and honest by reporting where I was lacking in terms of my capability to make good sense of the phenomena under study (Terre Blanche et al., 2007).

### *1.6.2.4. Sampling*

According to Strauss and Corbin (1998), sampling doesn't need to be random if the researcher is not looking for representivity, but rather looking at how concepts vary dimensionally in terms of their properties. In order to obtain the richest possible sources of information to answer the research question, purposive sampling and where necessary snowball sampling were used (Nieuwenhuis, 2010). Nieuwenhuis (2010, p. 79) defines purposive sampling as "selecting participants according to pre-selected criteria relevant to a particular research question". For my

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study it was very important that I sampled individuals who could provide rich information about the phenomena under study. I therefore made use of purposive sampling and sampled qualified engineers who are employed in an engineering capacity, working in South Africa, have been working in an engineering capacity for more than one year, are part of the Generation Y cohort, graduated with an engineering degree from a tertiary institution in South Africa, are South African citizens, and were willing and able to talk about their lived work experiences.

The cut-off birth dates were chosen as those born between 1981 and 1993. These dates were chosen as they make provision for overlap with European and American Generation Y classifications (Robyn, 2012). This age cohort is also recognised in South Africa as the *transition generation*, which forms part of Generation Y (Deal et al., 2012). Furthermore, those born after 1994 would not be old enough to have graduated with an engineering degree.

Qualitative research typically involves smaller sample sizes than quantitative studies (Nieuwenhuis, 2010) and although it was proposed that the sample size would be rather small (three respondents), the size was ultimately determined on the basis of theoretical saturation (Kelly, 2007). This point is reached “when the data no longer brings additional insights to the research question” and therefore “data review and analysis are done in conjunction with data collection” (Nieuwenhuis, 2010, p. 79). My sampling was thus also directed by theoretical sampling, as I continued to select cases up to a point where theoretical saturation was reached for my particular study as no new themes emerged from further interviews. Further cases were selected on the basis of snowball sampling as they were referred to me by the participants who were already participating in my study. In the end the sample included six Generation Y engineers, with biographical descriptives as indicated in Table 1.1 below.

### *1.6.2.5. Data collection*

Data were collected by means of qualitative unstructured in-depth interviews (Terre Blanche et al., 2007). This method allowed me to obtain “rich descriptive data” that helped me to “understand the participant’s construction of knowledge of social reality” (Mason, 2002, p. 87).

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In a qualitative interview the interviewer has a general plan of enquiry, rather than a specific set

Table 1.1

*Biographical descriptives of participants*

Code	Race	Gender	Age	Category	Company type	Environment	Years in profession
WMM25	White	Male	25	Mechanical	Mining	Production	2.50
WFP28	White	Female	28	Process	Petrochemical	Project	6.50
WMP28	White	Male	28	Process	Petrochemical	Project	6.50
IFE25	Indian	Female	25	Electrical	Petrochemical	Project	2.00
BMM30	Black	Male	30	Mechanical	Consulting	Project	6.50
WMI26	White	Male	26	Industrial	Consulting	Project	4.00

of questions that are to be asked in a predetermined order using particular words (Babbie, 2005). There are several reasons why the proposed research questions could best be answered by making use of qualitative unstructured in-depth interviews. Firstly, according to Mason (2002), this form of interviewing may be used to obtain information about individuals' perception of an experience. As previously mentioned, my ontological position suggests that I see the views, opinions and experiences of Generation Y engineers as meaningful properties of social reality, which the research question is then designed to explore. Secondly, the epistemological position dictates that in order to gain an understanding of the perception of Generation Y engineers, a meaningful way to do so would be by "talking interactively with people, to ask them questions, to listen to them, to gain access to their accounts and articulations" (Mason, 2002, p. 64). By interviewing Generation Y engineers, the data could most appropriately cause me to obtain an understanding of work-related engagement and retention among Generation Y engineers in the workplace. The in-depth unstructured interview method was lastly employed, as I did not want to lead or in some way control the interview with a set of rigidly predetermined questions, which could possibly result in losing some of the richness of the data, which is a strategy congruent to the notion of phenomenological bracketing.

In line with the hermeneutic phenomenological research paradigm employed, I engaged in unstructured in-depth interviewing as a specific in-depth interview strategy. This interview strategy allowed for the exploration, understanding and interpretation of the participants' lived work experiences in the company for which they work (Appleton, 1995; Kvale, 1996; Van Manen, 1990). In this paradigm the interview takes the form of an informal conversation about a specific aspect of human experience (Kvale, 1996; Patton 1980). In this instance participants were asked to describe how they as young engineers experienced working for their company, *for example* "As an engineer, how do you experience working for this company – please tell me about some of the experiences you have had."

Before starting with the interviews I anticipated that my interview conversations would follow a neat rational path, but found that the trajectory of the actual interviews did not always pan out as I expected (see also Johnson, 2001). In the cases where I found that a participant did not seem to understand the question, or know how to go about answering it, I rephrased the question until the participant indicated that he or she understood what I was asking. During the interviews I tried to maintain a flexible approach (Broom, 2005) and spontaneously asked questions as they came up as part of the natural flow of conversation (Patton, 1980). The duration of the interviews was between 14 and 52 minutes each.

It was important to remain flexible and attentive to the assortment of meanings that emerged as the interviews progressed (Warren, 2001). By spontaneously generating questions I was able to individualise the questions posed to the participants and in doing so I was establishing in-depth conversation with the participants (May, 2010). In line with what is suggested by Lindseth and Norberg (2004), I encouraged the various participants to talk freely about their lived experience of being a young engineer working in the company. To encourage further narration I asked questions such as: "*Will you tell me more about that please? How did you respond? What happened next? How did you feel about that?*"

During some of the interviews, the participant only gave a short answer to the hermeneutic

question and did not elaborate further when probed. To get further information I then expanded on the initial interview question by asking about the meaning and purpose working for the company had for them and what about working for the company energised or excited them. In addition, as a “close-out” question, I asked all the participants how they saw themselves moving along their career paths from then on forward. I initially planned to ask each of the participants questions pertaining specifically to retention during a follow-up interview if they had not addressed the questions during the initial interview. However, during the first interview I decided that I could just ask the question during the initial interview to save some time and administration effort.

Before starting with the interviews, I conducted a pilot interview with my husband who is a Generation Y engineer. I asked him to give me feedback on the questions I asked, how I handled the interview and if he had any suggestions. He indicated that the initial hermeneutic question was very broad and suspected that some participants would not know how to answer it. I then followed his suggestion to rephrase the question until the participants indicated that they understood what was asked. I also anticipated that the interviews would take about an hour; the pilot interview only took 20 minutes. I realised that I needed to be more alert and make notes during the ensuing interviews to help me ask the right probing and clarification questions to allow the participants to express their experiences in adequate depth. I learnt to allow for a narrative to evolve and thus phrased open narrative questions and only then probing and reflective questions.

### *1.6.2.6. Recording the data*

Interviews were recorded digitally and field notes were compiled additionally (Maree, 2010). Interviews were transcribed and non-linguistic expressions such as silences, laughing and sighs were also included in the transcription to give a more complete picture of what the interviewee was saying (Kelly, 2007). The field notes were then used in conjunction with the transcribed interviews in the analysis phase.

After informed consent had been obtained from the participant, data were accurately recorded by making use of digital recordings, which were then also transcribed to allow for more practical data analysis. Field notes were recorded by means of handwritten notes.

It was important that I recorded the interview data in such a manner that it could easily be accessed to be viewed in case the methodology or techniques of analysis should be questioned (Mouton, 2001). The digital recordings, field notes and transcriptions will be stored safely for a period of three years and access to this material will be limited. This will be done by storing the information on my personal, password-protected computer and in a digital location for which only I know the password. All other digital and print copies will be destroyed once this research project has been completed.

### *1.6.2.7. Data analyses and interpretation*

To analyse and interpret the data, I will follow the process proposed by Lindseth and Norberg (2004), which is based on Ricoeur's (1976) phenomenological hermeneutical interpretation theory. The steps involve naïve reading, structural analysis and comprehensive understanding. Employing these steps, I firstly interpreted each interview separately and once all the interviews had been interpreted I again conducted the final step of the process (comprehensive understanding) for all the interview texts as a whole.

#### *i. Interpreting each interview's text separately.*

Naïve reading: Here the interview transcription (text) was read several times to allow me to grasp its meaning as a whole. I had to adopt an open attitude and allow the text to speak to me by employing a phenomenological (instead of a natural) attitude to the text. The data were read by engaging with the naïve description provided by the participants and attempting to look at this without using a theoretical lens (Ashworth, Giorgi & De Koning, 1986). I then put forward a naïve understanding of the text by making use of phenomenological language, which was then either validated or invalidated during the next, structural analysis, phase.

Structural analysis: Reading through the text again, I then determined the natural meaning units as expressed by the participants (Kvale, 1996). These meaning units varied in length of text, but always allowed for fruitful analytic reflection that could answer the research question (Lindseth & Norberg, 2004; Wertz, 2011). I then reflected on the meaning units against the background of my naïve understanding (Lindseth & Norberg, 2004). Subsequently I attempted to formulate these meaning units in condensed form with the intention of revealing what I believed the participants themselves understood to be the meanings of what they said (Kvale, 1996). The condensed meaning units concisely expressed the essential meaning of the text unit in everyday words (Lindseth & Norberg, 2004).

I conducted a thematic structural analysis by employing content analysis, which makes use of codes and coding (Lindseth & Norberg, 2004). I made use of the Microsoft Excel program to code by copying and pasting the meaning units in meaningful configurations and indicating categories, themes and subthemes next to these text parts. Content analysis is an “inductive and iterative process” that looks for similarities and differences in the texts (Nieuwenhuis, 2010, p. 101). I systematically examined the content to determine the ways in which I could describe the themes, a process also recommended by Welman and Kruger (2001). According to Lindseth and Norberg (2004, p. 149), a theme is a “thread of meaning that penetrates text parts” and aims to convey an essential meaning of the participant’s lived experience. The authors acknowledge that themes are not formulated as abstract concepts, but are rather condensed descriptions, which are formulated to disclose meaning. Following the suggested process of labelling text parts as themes, I then again reflected on these themes in terms of their similarities and differences and further sorted, condensed and abstracted them to form sub-themes. The subthemes were then again assembled to main themes as I started to recognise subthemes’ related meanings and logical conceptual clustering. To help me make sense of the text I then also rephrased, combined and clustered main themes into meaningful categories. I attempted to read the condensation of the participants’ words without prejudice and thematise the different statements from their viewpoints as best I could (Kvale, 1996). As verbs are better than nouns to reveal lived experience (Lindseth & Norberg, 2004), I made use of verbs to code my themes, i.e. *feeling*

*excited* instead of *excitement*.

Still following the suggested process, the categories, main themes and subthemes were then reflected on against the backdrop of the naïve understanding. In the cases where the naïve understanding was invalidated, I read the text again and formulated a new naïve understanding, which was then again checked by a new structural analysis. I repeated this process until I was satisfied that the structural analysis and naïve understanding validated each other.

Comprehensive understanding: In this step each interview's categories, main themes, subthemes and themes were summarised and reflected upon in relation to the research question of the study and the context of Generation Y engineers working in South Africa (Lindseth & Norberg, 2004). Here I moved away from a commonsense understanding employed in the previous step toward a wider frame of understanding (Kvale, 1996). This was done by making use of free imaginative association in an attempt to determine what the combination of meaning units and themes said about the psychological phenomenon under investigation (Wertz, 2011). I thus interrogated the meaning units by asking questions specific to the research question and the purpose of the study (Kvale, 1996). I posed questions related to the text based on the main research question of the study: How do Generation Y engineers in South Africa experience their work and based on this, how should companies be orientated toward the retention and engagement of these workers? The questions I posed concerning the text included, for example: "What does this statement tell me about the experiences of Generation Y engineers?"; "What does this passage tell me about engagement?"; "How would this explain retention?" Any new insights into the text were noted and indicated in the text. Using my pre-understanding and keeping the validated themes and naïve understanding in mind, I then formulated and jotted down a final initial interpretation of the text (Lindseth & Norberg, 2004).

To interpret the data on a second, deeper level I aimed to gain theoretical insight into the interview text by making use of a theoretical framework or lens (Cunliffe, 2003; Kvale, 1996). It seemed appropriate to use work-related engagement as a theoretical lens to interpret the interview texts. I will discuss this theoretical lens in Section 2.3. The statements put forward

after this step in the interpretation process were seen as the results of the study.

Analysing the results I then also referred to literature regarding engineering, Generation Y, work-related engagement and retention to provide further information and insight into the results of the study. The idea here was not to force the literature's perspective on the text, but rather to allow the literature to illuminate the interview text and then also to allow the interview text to shed light on the literature (Lindseth & Norberg, 2004).

ii. *Interpreting all the interview texts as a whole.*

After all the interviews had been analysed individually I started with the process of interpreting all the interviews as a whole. I attempted to formulate an integrated structural analysis by analysing the various interview texts separately, as well as the texts as a whole, thus articulating the various meaning units and themes as a structural whole (Wertz, 2011). This was done by making use of a hermeneutic circle where I moved back and forth from parts of the experience to the whole of the experience with the aim of increasing my understanding of the texts (Annells, 1996). The meaning of the separate parts was thus determined by the overall meaning of the text and the meaning of the overall text again determined by the meaning of the separate parts (Kvale, 1996). The final statement was formulated in everyday language as close to the lived experience of the Generation Y engineers as possible (Lindseth & Norberg, 2004).

As with the individual interview texts, I then also interpreted the data on a second, deeper level, making use of engagement, retention and generational theory as interpretive lenses (Cunliffe, 2003).

This step in the process of analysis was extremely difficult for me. Especially being a "new" researcher, I was constantly afraid that I was getting the interpretation wrong. I had to write and rewrite my interpretations many times before I felt that my findings were true to the text and the meaning behind it.

### 1.6.2.8. *Strategies employed to ensure quality*

A qualitative study aims to understand people's meaning-making; therefore, the emphasis falls on the internal validity of the research, which refers to the production of accurate findings that agree with the participants' life world (Schurink, 2004). I made use of naturalistic terms to describe the rigour of the study and will be discussing the dependability, credibility and transferability of the findings.

Dependability has to do with convincing the reader that the findings did occur as reported in the results (Van der Riet & Durrheim, 2007). This can be done by presenting the reader with an audit trail which provides rich and detailed descriptions showing how my actions and opinions are rooted in and developed out of my contextual interaction (Kelly, 2007; Van der Riet & Durrheim, 2007). Thus to ensure that my research project is auditable (and therefore dependable) I described my decisions regarding the design and methodology of my research project in detail in this chapter to allow the reader to follow the decisions that I made (Appleton, 1995).

To further enhance the dependability of the study I made use of field notes and kept a reflective research journal (Maree, 2010). Field notes were taken during the interviews to make it possible to understand the interview text in relation to its context field and included notes regarding arrangements, interruptions, etcetera (Lindseth & Norberg, 2004). A reflective journal assisted me in the process of reflection and interpretation (Laverty, 2003). In hermeneutic phenomenology this can include my personal reflections on the topic, information provided by the participants as well as descriptions of experiences outside of the research project such as art, poetry or music (Polkinghorne, 1989).

Credibility refers to the extent to which research findings are convincing and believable (Kelly, 2007). To enhance the credibility of the study I tested the communicative validity of my knowledge claims by engaging in dialogue with the participants, my research supervisors and the readers of this research report (Kelly, 2007). As described above, I firstly interpreted and coded each of the participants' interviews and wrote and rewrote my naïve understanding of the text

until I was satisfied that the naïve understanding and the codes were in line with one another (Lindseth & Norberg, 2004). I then sent these naïve interpretations to each of the participants and asked them to comment (Kelly, 2007). All the participants responded and either indicated that my understanding was correct or explained where I could express their views better. I took these suggestions into account when interpreting the texts as a whole. Upon completion of my interpretation and integration of the data I engaged in an iterative conversation with my supervisor. We discussed the meaning I had derived from my naïve reading, structural analysis and comprehensive understanding, resulting in the reconstruction of interpretations and findings in a collaborative manner. This implies that the supervisor's lenses also contributed to the construction of meaning in this study. Their lenses are generally influenced by them being psychologists, experienced in qualitative phenomenological research methodology. As mentioned above, I am also testing the communicative validity with the readers of this report by providing a detailed description of the design and methodological decisions made during the course of the project.

As the majority of the participants' home language was Afrikaans, I conducted most of the interviews in Afrikaans. To ensure that I translated their words correctly to English, I first translated the text parts that I used as evidence in Chapter 3 to English and then the next day, without looking at the Afrikaans translation again, I translated the text parts from English back to Afrikaans. Where there were discrepancies between the original Afrikaans and the translated Afrikaans I translated it again and again until I felt that the translation correctly reflected the interpreted meaning.

Transferability has to do with whether understandings from one research context can be transferred to another context to provide a framework that can be used to reflect and make comparisons with findings in the new context (Riet & Durrheim, 2007). As mentioned above, this is done by providing an accurate description of the research process, clearly explaining and advocating my choice of methods and providing a thorough description of the research situation and context by providing the background and motivation to the study, profiling the demographics of the participants and providing a detailed discussion of the theory relevant to the study in the

following chapter.

### *1.6.2.9. Ethics*

This research project has been conducted in line with the Ethical Rules of Conduct as laid down by the Professional Board for Psychology, Health Professions Council of South Africa (Health Professions Act No.56 of 1974, 2006). In line with these rules, when reporting on the study I refrained from plagiarism and provided publication credit where it was due. In addition, data were not collected before permission to commence with the study had been obtained from the UNISA IOP departmental research ethics committee (REC).

After receiving permission from the REC, I first obtained written consent from each participant before commencing with the interviews. Consent given by the participants was informed, as I provided the participants with appropriate information about the study, I made sure that they knew what was expected of them and that they were competent to provide the required information (Wassenaar, 2007). This was done by either firstly introducing the study verbally or emailing a participant sheet explaining the study, depending on what was practically feasible. Before the start of the interview I also reiterated what the study was about and what I expected from them and I answered any questions they had. I also informed them that participation in the study was voluntary and that they were free to withdraw at any stage (Cohen, Manion & Morrison, 2007). After showing the participants how the digital recorder worked and indicating that the recorded data would be transcribed, informed consent relating to the use of a digital recorder was also obtained in writing (as part of the consent form) before commencing with the interview.

Initially the study would have been conducted at a specific company that employed, among others, Generation Y engineers. I obtained the necessary authorisation to conduct my study in this setting. However, I later decided to conduct the research on Generation Y engineers in general. This was then communicated to the company. They accepted this change and also indicated that I was still free to interview some of their engineers, should I wish to do so. In the

end I also interviewed engineers from their company. As the interviews with the other participants were not company-specific, I did not obtain authorisation from the different companies employing these participants.

As interviewing cannot guarantee anonymity, I assured the participants that the information they provided would be kept confidential (Babbie, 2005). I indicated to them that none of their personal identifiable details would be included in any of my research reports and that if there was information that could potentially be used to identify them, this information would either be removed or changed. To further ensure confidentiality, I indicated that the information would be safely and securely stored and that access to it would be limited.

Lastly, in line with the Ethical Rules of Conduct (Health Professions Act No.56 of 1974, 2006), I treated each of the participants with respect.

### *1.6.2.10. Reporting*

In line with the hermeneutical phenomenological stance employed in this study, I would like to share the new perspectives and insights I acquired during the course of my research in order to assist others in also gaining new insights, by writing this research report in a manner that could affect others (Lindseth & Norberg, 2004).

According to Miles and Huberman (1994), there are a few report-related issues the researcher must decide on; in the light of their advice, my reporting style will now be discussed. The readers of this research report will be academics and members of dissertation committees. The report is therefore intended to be scientific and convince the reader of its worth, truth and value. To persuade the reader I employed a confessional voice and used active verbs, honest personal stances and straightforward talk to guide the style of the report. In order to accomplish this, I employed a first-person qualitative reporting style to report on the findings of the research.

## **1.7. CHAPTER LAYOUT**

The remaining chapters are presented as follow:

### **Chapter 2: Literature Review**

Generational theory, retention theory and the concept of work-related engagement are discussed. Engagement as a retention strategy is also presented.

### **Chapter 3: Research Article**

Findings in terms of the Generation Y engineers' lived work experiences are explored and presented in the form of a complete research article.

### **Chapter 4: Conclusion, Limitations and Recommendations**

Conclusions and recommendations are provided based on the results of the research. Limitations are also discussed.

## **1.8. CHAPTER SUMMARY**

In Chapter 1, the scientific orientation to the study was discussed. This included the background to the study, the problem statement, the research objectives, my evolving interest in the study, the paradigms I employed, my research design and the methods employed in terms of sampling, data collection, data analysis and interpretation, and strategies employed to ensure quality and ethics. The chapter ended with the chapter layout.

## **CHAPTER 2: LITERATURE REVIEW: GENERATION Y, RETENTION AND ENGAGEMENT**

Chapter 2 comprises the literature review and proposes to answer the specific literature aims of the study. Firstly, the different theoretical perspectives regarding generational theory are explored, discussed and integrated. Secondly, retention theory and strategies are identified, analysed and discussed. Work-related engagement is then discussed as a construct and also presented as a retention strategy. A chapter summary concludes this chapter.

### **2.1. GENERATIONAL THEORY**

The notion of “generations” has an age-old standing in history, dating back as far as the ancient Greeks who referred to four generational periods in history (Golden, Silver, Bronze and Iron) (Burnett, 2011 as cited in Joshi et al., 2011; Nash, 1978), or even further back where references to generations are found in ancient Egyptian texts referring to rituals and ancient rites of passage that marked the cyclical nature of life, death and afterlife (Redford, 2003). According to Joshi et al. (2011), these pre-modern conceptualisations associated generations with distinct phases in mythology, which connected human activity to nature or to the universe in general. In turn, modern conceptualisations of generations rather focus on the individual in relation to society (not to the universe) and view time as linear, moving forward in a historic trajectory rather than being cyclical (Adam, 1990; Joshi et al., 2011; Urry, 1996).

Karl Mannheim (1928/1952) conducted seminal work on generations and in his essay, “The Problem of Generations”, he expanded this construct from having only biological significance to sociological significance, moving away from the notion of “kin” (generations based on familial relations) to the concept of “kith” or cohort (generation based on association) (Joshi et al., 2011). A cohort can be defined as individuals who were born at about the same time in history (Edmunds & Turner, 2005; Ryder, 1965). According to Mannheim (1928/1952), generations can be viewed as social constructions where individuals of a certain age or set of ages are defined by historical and social events. This concept has two important components, one being common

location in a historic time period and the other a distinct consciousness as a result of important events of that time (Joshi et al., 2011). Furthermore, based on a generation's unique location in history and its members' distinct consciousness, these members are predisposed to a specific historically relevant action, thereby making them agents of social change (Mannheim, 1928/1952). Each new generation is thus seen as challengers of the status quo and the older generations as preservers of tradition (Wohl, 1980).

Schuman and Scott (1989) were the first to build on Mannheim's work by researching and linking the concept of "collective memories". Here the assumption is that distinctive generational memories occur when a cohort of individuals transition into adulthood, assuming that this changeover is marked by a novel historical event. The authors conducted a study that included a sample of 1400 Americans in 1985. Participants were asked to recall historical events that were important to them. The results showed that different age groups (cohorts) recalled different events and that these formative experiences, or "collective memories" played a prominent role in the adoption of values and attitudes, especially when a cohort transitions into adulthood. Belonging to a group as a result of shared experiences indicates that a generation is thus not only a social creation, but also a function of life course and historical experiences (Mayer & Tuma, 1990). Research done with regard to collective memories also found that in a representative national sample of individuals, cohorts tended to recall different events with formative experiences playing an important role in the individuals' collective memories (Schuman & Scott, 1989).

Strauss and Howe (as cited in Papenhausen, 2011) moved to popularise the concept of generations by offering a comprehensive theory to explain the concept of generations by looking at a cyclical theory of history and generations. The first assumption of this theory is that each generational cohort's social behaviour is governed by a relatively unchanging lifecycle. Secondly, these basic life phases are believed to last approximately 22 years each. Individuals in the first life-phase, namely "elders" (aged 66 to 87), have the role of stewardship, which entails supervising, mentoring and channelling values. The second is "midlife adults" (44-65) where incumbents have the role of leadership and are involved in parenting, teaching, directing

institutions and using values. In the next phase, “rising adults”, individuals are aged between 22 and 43 years and have the role of activity, which includes working, starting families, serving institutions and testing values. Lastly we have the “youth”; here members are aged between 0 and 21 and have the role of dependence, which involves growing, learning, accepting care and protection, keeping out of harm’s way and acquiring values.

Next the authors explain the concept of a “social moment”, which pertains to any important historical event such as a war or a revolution, which affects each individual’s personality differently, depending on the life phase (elder, midlife adult, rising adult or youth) in which individuals find themselves. The authors explain that because of the different role each life-phase grouping is called to take up, the stress of responding to the social moment leaves different memories with each group, where these differences are then further reinforced by social interaction. This then results in a situation where the four separate adjacent cohort groups combine into different generations, each with its own distinct peer personality. The authors then also posit that this central role could extend into the next life phase of a generation, but not into the life phase after that, as the next generation in rising adulthood triggers a new social moment and in so doing wrests dominance away from the earlier generation.

The final assumption of Strauss and Howe’s theory is that the four generational archetypes repeat sequentially and that during each new social moment each generation will have the opportunity to redefine or reconstruct the fundamental role of the life phase it is entering in to in a manner that attempts to cancel the perceived excesses of that role since the previous social moment.

### **2.1.1. The generation cohort in generational theory**

The definitions offered for the term “generation” are similar, but have been expanded over time (Constanza, Badger, Fraser, Gade & Severt, 2012). Ryder (1965, p. 845) described a generation as an “aggregate of individuals who experienced the same event within the same time interval”. Kertzer (1983) added an effect aspect by arguing that a generation can be viewed as possessing an averaged set of lived experiences, behaviours, attitudes, memories and ideals which is

inclined to to affect work-life. According to Strauss and Howe (as cited in Papenhausen, 2011, p. 1080) the term generation can be defined as “a cohort-group whose length approximates the span or a phase of life and whose boundaries are fixed by peer personality.” Kupperschmidt (2000, p. 66) adds a developmental aspect to the definition and describes a generation as “an identifiable group that shares birth years, age, location, and significant life events at critical developmental stages.” Constanza et al., (2012) assert that there are some consistencies across all these conceptualisations, and defines a generation as a group of people of about the same age, whose experiences are influenced by the same set of noteworthy historical events that were experienced during important developmental periods in their lives, typically late childhood, adolescence and early adulthood.

### **2.1.2. The elements of generational theory**

Taking the above history and definitions into account, it can be said that generational theory ascribes to a number of elements. The first element has to do with a generational group or “cohort”. This does not refer to familial generational (grandparent, parent and child) ties, but rather to a non-elective group of which members do not choose to be part or to which they may not even be aware of belonging (Kowske et al., 2010). The second element pertains to chronology where members of the cohort, an age group, occupy a unique location in historical time (Joshi et al., 2011; Kowske et al., 2010; Mannheim, 1952; Ryder, 1965). Successive entry into a life-stage can thus be seen as the basis for a distinct generation, which is differentiated from other generations that occupy different stages in the life course as, for example, youth, young adults, retirees, etcetera (Joshi et al., 2011). As such, members of each generation “arrive at the door” at different times (Joshi et al., 2011). As a third element, it is put forward that members of the cohort then develop a set of shared experiences of significant historical events within the same time period (Henderson, 2010; Kowske et al., 2010; Underwood, 2007). Here members are born, start school, start working, become parents and retire at about the same time and age and are also about the same age when wars are waged, technological advances are made and different social changes occur (Kowske et al., 2010). As a fourth element such experiences are especially salient during members’ formative years (late childhood and early adulthood,

between 20 and 23 years of age) when these individuals are at a particularly impressionable development stage (Duncan & Agronick, 1995; Noble & Schewe, 2003; Schuman & Scott, 1989), resulting in them having similar perceptions and interpretations of important historical events and influences (Duncan & Agronick, 1995). As a fifth element, these experiences then guide the formation of identifiable generational characteristics (Schuman & Scott, 1989; Twenge & Campbell, 2008), which affects members' values, expectations, attitudes and personality (Henderson, 2010; Kowske et al., 2010; Schuman & Scott, 1989; Underwood 2007). The final element is found in these distinctive characteristics having an impact on traditional social forces and driving societal change (Mannheim, 1928/1952; Ryder, 1965). Earlier and later generations are thus linked through the exclusive imprints of knowledge skills and values that they obtain and are in the position to pass on, based in their place in a temporal order (Joshi et al., 2011).

### **2.1.3. Generational theory in the work context: Application and controversy**

For the first time in history, organisations are faced with the dynamic of having four distinct generations present in the workplace at the same time (Codrington & Grant-Marshall, 2011). These include the Traditionalists (born prior to 1946), the Baby Boomers (born 1946 to 1964), Generation X (born 1965 to 1981) and Generation Y (born 1982 to 2000) (Lancaster & Stillman, 2010). There is, however, a number of key conceptual and methodological problems that result in disagreement about the concept of generations and how it should be studied and measured (Rosow, 1978; Ryder, 1965).

Research on generational differences is slammed for lack of consensus on a single term to label the different generations, with each label attached to a new generation carrying with it some particular characteristic or metaphoric meaning, while still being used interchangeably (Jones & Czerniewicz, 2010). Traditionalists are also labelled Pre-Boomers or the Silent Generation; Generation X is also labelled Slackers and Generation Y has been referred to as NetGen, Millennials, Gen D and Echo Boomers (Van der Walt & Du Plessis, 2010). Questions are also raised with regard to the specific age boundaries around each generational cohort. Individuals on the cusps between adjacent cohorts' age boundaries show characteristics of both generations,

making each cohort less clear-cut (Papenhausen, 2011).

Furthermore, using cross-sectional data makes it difficult to determine whether values displayed by a generation reflect a formative identity or rather a process of ageing (Tuma & Hannan, 1984). Even if longitudinal data are available, there is a problem in separating the effects of an individual's age, the cohort in which the person is located and the historical period, resulting in the "age-period-cohort problem" (Blossfeld, Hamerle & Mayer, 1989). Kowske et al. (2010) explain that an age effect relates to variation due to psychological growth, the individual's progression through the different development stages and the accrual of experience. In turn, a period effect is variation due to historical events that occurred during a unique point in time, such as war or technological advances. Lastly, a generational effect is variation due to the shared experiences of the members of similar age-groups at the same period. Also, factors such as organisational experience, tenure and technological advancements are often confounded with age and generation (Rhodes, 1983, Trzesniewski & Donnellan, 2010).

Lastly, given the grounds on which generational theory is built, namely that individuals are influenced by historical events that occurred during their formative development stages (Noble & Schewe, 2003; Twenge, 2000), it is important to exercise caution in generalising cohorts, years and labels to individuals who did not experience the same events (Parry & Urwin, 2010).

Although there is a growing body of evidence that questions the foundations of generational differences, it can, nonetheless, be found extensively in policy statements, in commercial rhetoric as well as in references in academic work (Czerniewicz, Williams & Brown, 2009; Hargittai, 2010; Ramanau, Cross & Healing, 2010). The concept of generations is alive and well, not only remaining the subject of popular culture and media, but seeing academic interpretations of this construct becoming more sophisticated and complex as a result of such critique and controversies (Joshi et al., 2011). According to Jones and Czerniewicz (2010) this shows that there is still a need to engage with this concept and its discourse, as it continues to have an impact on policy and practice. This impact is made regardless of the lack of clarity in the use of terms and the boundaries that define a generation. The authors call for further research to clarify

the nature of the changes that are taking place among young people and to dispel the false dichotomies that exist in this regard.

### **2.1.4. Dating Generation Y in South Africa**

Against the background of the controversies regarding generational theory highlighted above, the exact parameters for dating Generation Y is debatable (Stroeger, 2009). In Europe and America, Generation Y has been classified as those born between 1980 and 2000 (Deal et al., 2012; Strauss & Howe, as cited in Papenhausen, 2011; Zemke, 2001). This generation has increasingly been exposed to diversity in terms of ethnicity, language, non-traditional family, sexual alignments as well as the influence of media such as talk shows, reality TV and the internet (Paul, 2001). Taking these birth year boundaries into account, the Generation Y grouping in South Africa could be split up into the *Transition Generation*, born between 1981 and 1993, and the *Free Generation*, born between 1994 and 2000 (Deal et al., 2012; Mattes, 2011). Members of the Transition Generation will mostly know about the apartheid-related violence that happened during their childhoods, but entered adolescence in a new legal system without the impositions dictating how they should travel, work, live and marry. These individuals also grew to adulthood in a social system where they were exposed to democratic political processes, as well as global news and media.

Generation Y's younger members would then be referred to as the Free Generation. Born between 1994 and 2000, this generation was "born free", as they have no recollection of living within the apartheid regime (Deal et al., 2012; Martins & Martins, 2012). The South Africa they are growing up in has democratic political processes and is all the more included in globalisation through television and technological advances, such as the internet (Deal et al., 2012; Mattes, 2011). Although there were many differences between black and white Generation Y groupings, the lines are becoming increasingly blurred in response to racial integration and access to global media (Martins & Martins, 2012).

Key events that could have influenced members of Generation Y in South Africa include the township revolts, FW de Klerk being named as president, Mandela's release after 27 years and the ANC's victory during the first non-racial election (Robyn, 2012; [www.sahistory.org.za](http://www.sahistory.org.za)). Owing to globalisation and advances in technology, events in others countries such as the USA (11 September, Afghanistan and Iraqi wars and Hurricane Katrina) could also have influenced the Generation Y cohort in South Africa.

Taking globalisation into account, making provision for the overlap between European and American Generation Y classifications (Robyn, 2012) and also taking important South African historical events into account, this study will classify Generation Y members as those born between 1980 and 2000. The focus will be on the earlier part of this generation, those born between 1980 and 1993 (Transition Generation), as members of the latter grouping are not old enough to have graduated with an engineering degree.

### **2.1.5. The characteristics of Generation Y**

As mentioned earlier, different generational cohorts experienced historical events at about the same time in their formative development; where these unique experiences are then said to lead to the formation of identifiable generational characteristics that affect members' personality, values, expectations, attitudes and lifestyle preferences; this is not necessarily a function of age (Bogdanowicz & Bailey, 2002; Kowske et al., 2010; Schuman & Scott, 1989). These characteristics are then brought into the workplace with them (Zemke et al., 2000) and can also be ranked (Lyons, Duxberry & Higgins, 2000), resulting in a situation where even though two or more generations may share similar values, one generation's rank ordering of the values may differ significantly from another (Williams, 1979). The following have been identified as attributable to Generation Y in general and in the workplace:

### 2.1.5.1. *Flexibility and work-life balance*

For Generation Y work-life balance is of paramount importance (Gilbert, 2011). This generation is interested in balancing their personal, work and family lives, thus rather “working to live” or “working to have a life” (Downs, 2009). These individuals also value flexibility and studies have shown this to be an important motivational factor for members of this generation (Lieber, 2010). The OXYGENZ project (see Puybaraud, 2010) gathered data from an international sample of different generations that could provide information to companies in terms of using their real estate and facilities as strategic assets to attract and retain scarce talent. This project found that, in line with this flexibility need, 79 percent of Generation Y workers indicated a preference for mobile working to static ways of working (Puybaraud, 2010).

### 2.1.5.2. *Opportunities to grow*

This generation values career development and expects to be provided with high-quality training and development opportunities that will ensure that they stay marketable (Cole, 1999, Pitcher & Purcell, 1998). A study by PriceWaterhouseCoopers (PWC, 2009) among Generation Y South Africans found training and development to be the most highly valued benefit for these members in their first few years of work. The opportunity to pursue personal growth is also an important motivational factor for Generation Y workers (Lieber, 2010). In addition, these workers are aware of the importance of developing their skills and pursuing opportunities to show what they are capable of (Burmeister, 2009). Employers therefore have to provide opportunities to attain measurable achievements and advancements with explicit benchmarks to maintain these workers’ professional skills (Howe & Nadler, 2009).

### 2.1.5.3. *Feedback and communication*

To track how they are developing, Generation Y workers often demand immediate feedback, as this will show them where and how they need to improve (Fallon, 2009; Hershatter & Epstein, 2010). Members of Generation Y also prefer a direct communication style together with frequent

encouragement and recognition of their efforts (Irvine, 2010). Growing up, Generation Y was/is used to supervision, guidance and direct and constant feedback from parents, teachers and authority figures (Downs, 2009, Crumpacker & Crumpacker, 2007) and this may be the reason why they are demanding the same from managers and supervisors (Conrad 2009).

### 2.1.5.4. *Corporate social responsibility*

Generation Y employees are increasingly taking an organisation's values and mission into consideration and want to work for organisations that go beyond simply making money (Ng, Schweitzer & Lyons, 2010). Generation Y places high importance on social responsibility (Burmeister, 2009; Martins & Martins, 2012; PWC, 2009) and an international study showed that 96 percent of Generation Y workers indicated an aspiration to work in a greener office (Puybaraud, 2010). Reisenwitz and Iyer (2009) also found that getting involved in the community is important to Generation Y and reported that these individuals are more likely to get involved through volunteering than donating money to non-profit organisations. In contrast, a time-lag study conducted by Twenge and Campbell (2012) among Americans in their early adult life-stage showed that they are less interested in community affairs, less interested in environmental issues and also less likely to take action to save energy and help the environment.

### 2.1.5.5. *Teamwork and social values*

Although the time-lag study conducted by Twenge and Campbell (2010) indicated that Generation Y scored lower than previous generations in terms of social rewards such as making friends and having contact with many people, other studies found results to the contrary. According to Deloitte (2009), Generation Y workers value teamwork more than previous generations do and are also more accustomed to collaboration. These workers are team-orientated (Irvine, 2010) and view working and interacting with others as making work more pleasurable and rewarding (Myers & Sadaghiani, 2010). However, in a study among Generation Y workers, results showed that there was less participation in teamwork by Generation Y than by Baby Boomers (Martins & Martins, 2012).

### 2.2. RETENTION

Schuler and Jackson (2006) define retention as everything an employer does to encourage qualified and productive employees to continue working for the organisation and that has the main objective of reducing unwanted voluntary turnover among valuable people in the organisation.

Griffeth and Hom (2001) indicate that turnover can be described across three dimensions: Firstly turnover is either voluntary or involuntary. Turnover is voluntary when the employee freely chooses to leave the job of his or her own accord. Involuntary turnover is initiated by the organisation or company, usually because of the employee's poor performance or organisational restructuring. In the sphere of voluntary turnover a further distinction is made between functional and dysfunctional turnover (Griffeth & Hom, 2001). Functional turnover refers to turnover that is not harmful, such as the exit of poor performers. Dysfunctional turnover, on the other hand, is harmful, as it may cause the loss of high performers or those with scarce and critical skills. Finally, a distinction can be made in terms of avoidable and unavoidable turnover (Abelson, 1987). Avoidable turnover is that which the organisation may be able to influence, such as turnover prompted by poor management or low compensation. Unavoidable turnover occurs when the organisation has little control over the reasons for the employee's leaving, such as health or the relocation of a spouse's job.

Voluntary employee turnover has been much researched over the last 50 years (Holtom, Mitchell, Lee & Eberly, 2008). Research in this regard has either focused on the process (how people quit) or the content (why people quit) of turnover (Maertz & Kmitta, 2012). The withdrawal process characteristically involves thinking about quitting, searching for jobs, assessing and comparing alternative opportunities, turnover intention and finally turnover behaviour (Allen et al., 2010). Content researchers, on the other hand, could focus on determining significant predictor variables in multivariate empirical models (Griffeth, Hom & Gaertner, 2005), to study "reasons" as perceived causes for turnover behaviour (Westaby, 2005)

or study shocks as catalysts to turnover considerations (Lee & Mitchell, 1994). Lee and Mitchell (1994, p. 60) define a shock as “a very distinguishable event that jars employees toward deliberate judgments about their jobs” and may, for instance, include a job offer to a prominent co-worker (Felps et al., 2009), an unexpected negative performance evaluation, a lower raise than expected, being passed over for promotion or learning what a co-worker is being paid (Burton, Holtom, Sablinski, Mitchell & Lee, 2010).

### **2.2.1. Retention in the knowledge economy**

The knowledge economy and the resulting boundaryless organisation and boundaryless career (Arthur, Khapova & Wildercom, 2005) has a significant impact on employees’ turnover, retention and career behaviour. According to Khapova (2006), open markets, technology and a focus on intellectual rather than physical inputs or natural resources became important in the 1990s, causing the idea of the “boundaryless organisation” to emerge. In order to keep up with new technologies and global competition, workers in these organisations have to do multiple jobs, constantly learn new skills and frequently shift to different locations to work on new assignments (Ashkenas, Ulrich, Jick & Kerr 1995), resulting in stable employee relationships giving way to more flexible ones (Parker, Khapova & Arthur, 2009). The boundaryless career is characterised by flexibility, mobility and movement between different organisational contexts (Coetzee & Roythorne-Jacobs, 2012).

The boundaryless organisation and the boundaryless career answers to the challenges brought about by the knowledge economy by allowing for inter-organisational mobility of workers (Cappelli, 1999). In turn, globalisation and technological advancements in the knowledge economy have also given organisations the opportunity to source talent from anywhere in the world (Khapova, 2006). The most knowledgeable and competent workers from across the globe can thus be sourced by an organisation to work on different projects, also with the added benefit that organisations can have individuals from different time-zones working on the same product or service 24 hours a day, resulting in much faster turn-around time (Khapova, 2006). In the knowledge economy organisational hierarchies are flattening to adapt better to the changing

world and full-time permanent employees are increasingly replaced with temporary or part-time workers to cut escalating costs associated with employee pension and medical benefits (Feldman & Ng, 2007). In turn, individuals have the opportunity to search for employment across national boundaries and work in collaboration with anyone in the world (Friedman, 2005). Knowledge workers with scarce and critical skills may thus search for employment anywhere and be headhunted from anywhere (Khapova, 2006), resulting in much more complex and challenging turnover and retention situations for organisations.

### **2.2.2. Retention theory**

Since voluntary turnover research formally began, many retention theories have been put forward or some existing theories related to other constructs have even been used in the realm of retention and turnover research. I will now offer a quick overview of some of these established theories and then zoom in on the construct of work-related engagement as a retention theory.

#### *2.2.2.1. Organisational equilibrium*

According to March and Simon (1985) the theory of organisational equilibrium puts forward that an individual will stay in the employ of the organisation as long as the incentives offered by the organisation are equal to, or more than, the contribution required by the organisation. Thus, individuals are likely to remain with the organisation until the point is reached when they see the advantages of leaving as considerably greater than those their current situation offers (Mitchell, Holtom & Lee, 2001). These judgments are then also influenced by the employee's desire to leave, as well as the ease of leaving, where the ease of leaving can then be influenced by the availability of alternative job opportunities (Lee, Mitchell, Wise & Fireman, 1996; March & Simon, 1985). Allen et al. (2010) explain that in times when alternatives are abundant, workers perceive many options and would then evaluate their current employment situation against a higher standard compared to when options are few. The authors believe that this then explains why plentiful opportunities make retention more difficult, as workers not only have high ease of movement, but may also be more difficult to satisfy.

### 2.2.2.2. *Perceived organisational support*

The model of social exchange processes was developed by Eisenberger, Huntington, Hutchison and Sowa (1986) and posits that perceived organisational support (POS) adds to the establishment and maintenance of the employee-employer relationship. In this model employees create beliefs regarding the degree to which the organisation in which they are employed values their contribution and cares about their well-being. This will then add to the employee's commitment to the organisation and the behaviour that contributes to organisational goals and positive outcomes. This commitment is then seen to influence an employee's intention to stay. POS may include aspects such as pay, job rank, job enrichment (Eisenberger et al., 1986), work conditions, fairness, supervisor support (Rhoades & Eisenberger, 2002) and career advancement (Jawahar & Hemmasi, 2006).

### 2.2.2.3. *The unfolding model of turnover*

The unfolding model of turnover names four primary paths to turnover, indicating that these paths are often instigated by a shock, an event that leads an individual to start thinking about resigning from his or her job (Lee & Mitchell, 1994). Mitchell et al. (2001) explain the four paths as follows: The first path involves leaving an unsatisfying job. The second path has to do with an employee leaving for a more attractive alternative. A third path entails employees who have a "script" or a plan in mind that involves resigning in response to certain events: "I will quit as soon as I complete my studies". The fourth and final path does not have to do with any of the above reasons for resigning and is most likely to involve impulsive resignations, which are usually in response to negative shocks, such as being passed over for promotion.

## 2.3. **WORK-RELATED ENGAGEMENT**

Practitioners as well as academics have paid a lot of attention to work-related engagement, possibly because research found this construct to be associated with many positive outcomes for

## RETENTION AND ENGAGEMENT OF GENERATION Y ENGINEERS

organisations (Park & Gursoy, 2012). Outcomes include increased job performance, motivation, job satisfaction, an increase in working safely, client satisfaction, return on assets, increased profits and lower intention to leave (Bakker, Demerouti & Schaufeli, 2003; Bakker, Schaufeli, Leiter & Taris, 2008; Harter, Schmidt & Hayes, 2002; Schaufeli & Bakker, 2004).

This concept is especially relevant to organisations, as it is a significant predictor of employees' intention to leave (Saks, 2006). Even though this is not purely a retention theory, engagement has proven to be positively correlated with high performance and organisational commitment and is thus also employed to study turnover and retention (Bakker, Demerouti, Hakanen & Xanthopoulou, 2007). Intention to leave refers to employees' attitudes or opinions about leaving their respective organisations and does not refer to actual employee turnover (Mobley, Griffeth, Hand, & Meglino, 1979). However, as behavioural intention is a dependable determinant of actual behaviour; turnover intention may be used as a proxy for actual labour turnover (Bothma, 2011; Muliwawan, Green & Robb, 2009; Tett & Meyer, 1993).

Many studies, in South Africa as well as internationally, have shown that high work-related engagement is an indicator of low intention to leave (Du Plooy & Roodt, 2010; Firth, Mellor, Moore & Loquet, 2004; Sulu, Ceylan & Kaynak, 2010). Recent research, conducted in a wide range of occupational fields, however, mostly investigates factors influencing engagement (e.g. James, Mckechnie & Swanberg, 2011; Shuck, Reio & Rocco, 2011) and intention to leave separately (e.g. Hausknecht, Rodda & Howard, 2009; Karlsson, 2008; Liou, 2009), even though there is evidence of a strong relationship between these two variables.

The importance of understanding the factors that influence engineers' engagement and their reasons for staying or leaving becomes evident when the contest for scarce engineering skills is considered. When identifying the reasons given for intention to leave (and engagement), turnover behaviours could be anticipated and prevented in advance (Hwang & Kuo, 2006).

Harter et al., (2002, p. 269) define engagement as an "individual's involvement and satisfaction with as well as enthusiasm for work." Gonzalez-Roma, Schaufeli, Bakker and Lloret (2006)

## RETENTION AND ENGAGEMENT OF GENERATION Y ENGINEERS

conceptualise engagement in terms of high levels of energy and strong identification with one's work. An alternative view, as offered by Kahn (1990, p. 694) conceptualises engagement as the "harnessing of organization member's selves to their work roles: in engagement, people employ and express themselves physically, cognitively, emotionally and mentally during role performances". Following the above, Bakker et al., (2011) summarise that engagement can be conceptualised as a positive and high arousal affective state that is characterised by involvement and energy. Schaufeli et al. (2002, p. 74) add another dimension when defining engagement as "a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption".

A study conducted by Du Plooy and Roodt (2010) identified six types of work-related engagement: job engagement, organisational engagement (Saks, 2006), personal engagement, burnout/engagement, work engagement and employee engagement (Simpson, 2009). Even when referring to work engagement (as a type), there is more than one meaning that can be implied by this conceptualisation. Work engagement is often defined either in terms of organisational commitment or extra-role behaviour. Organisational commitment is defined in terms of affective commitment (i.e. emotional attachment to the organisation) or continuance commitment (i.e. the wish to remain with the organisation), whereas extra-role behaviour is conceptualised as discretionary effort on the part of the employee that benefits the effective functioning of the organisation (Bakker et al., 2011).

According to Schaufeli and Salanova (2011), the term *work engagement* seems to be preferred in academia, whereas *employee engagement* appears to be more popular in business. The authors conclude that these terms refer to different things. The first term could refer to the relationship of the employee with his or her work and the second could also include a broader relationship with the employee's professional or occupational role and with his or her organisation. This could then explain why the term employee engagement is more popular with business and consultancy (Schaufeli & Salanova, 2011).

It is important to differentiate between the various types of work-related engagement, as these differ in their antecedents and consequences (Saks, 2006; Simpson, 2009). In addition, there is also the risk of confusing various constructs and putting “old wine in new bottles” (Schaufeli & Bakker, 2010, p. 2). In this study “engagement” is regarded as encapsulating the relationship of the employee with his or her work, occupation and organisation.

The three dimensions of *work* engagement as conceptualised by Schaufeli et al., (2002) were employed. I did, however, not limit these dimensions to considering only engagement in terms of the employee’s relationship with his or her *work*, but also took into account his or her occupational role and organisation (Schaufeli & Salanova, 2011). Engagement was defined as a continual and pervasive, affective-cognitive state that is not focused on a specific object, event, person or behaviour (Schaufeli & Bakker, 2004). It is “a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption” (Schaufeli et al., 2002, p. 74). According to Schaufeli and Bakker (2004), these three dimensions are regarded as follows:

- Vigour is characterised by high levels of energy and mental resilience while working, willingness to invest effort in one’s work and persistence even in the face of difficulties.
- Dedication is characterised by a sense of significance, enthusiasm, inspiration, pride and challenge.
- Absorption is characterised by being fully concentrated and happily engrossed in one’s work, where time passes quickly and one experiences difficulty to detach oneself from one’s work.

### **2.4. RESEARCH FINDINGS: ENGINEERS, RETENTION, ENGAGEMENT AND GENERATION Y**

As mentioned in chapter 1, I could not find any studies on work-related engagement for Generation Y engineers in South Africa. The only study I found on retention of this group was conducted by Vieira (2010). Vieira (2010) studied the early career expectation and retention factors (not engagement) of Generation Y engineers in South Africa. The author found that they value gaining practical engineering experience on actual engineering sites, involvement in engineering design, learning, training and development, mentoring, work-life balance and the

## RETENTION AND ENGAGEMENT OF GENERATION Y ENGINEERS

ability to manage their own career development. Travelling, making a contribution and making a difference were also seen as important.

A study by Gruber (2008) among engineers working in a South African consulting company (not necessarily Generation Y workers) found that respondents were more likely to stay at the company when they were motivated at work, they were satisfied, aligned with the corporate culture and value system, adequately remunerated, able to enjoy sound relationships with superiors, learning in a learning organisation, challenged at work, autonomous and able to satisfy higher order needs outside their work life.

In the same vein, Karlsson (2008) studied the retention among young (Generation Y) engineers in Sweden (not South Africa). He found that these engineers were less likely to leave when they received fewer job offers, had to apply their mind in order to accomplish a task (opportunities for mental work), had the opportunity to discern their own work performance, viewed their work as that which they desired for their future (not feeling locked-in), experienced their work as offering them the opportunity to develop and found their work challenging.

A recent mixed method study by Rahman (2012) conducted among engineers in Malaysia (not South Africa) found a significantly positive relationship between POS and the engineers' intention to stay. Elaborating on this by means of interviews revealed that engineers value opportunities to participate in decision-making processes, especially in human resource management (HRM) processes such as training and development and performance appraisals, which have a direct implication for their careers. In turn, lack of opportunity for participation in decision-making related to HRM practices reduced the feeling of being supported by the organisation and consequently influenced these employees' retention behaviour.

Wright (2007) conducted a study among engineers (not specifically Generation Y) working at Sasol in South Africa with the intention of investigating the effect of diversity targeting on the motivation (work-related engagement) and retention of these individuals. The author found the following retention variables to be important to and leading to higher levels of engagement:

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Better work/life balance, better career prospect and development opportunities, a favourable total financial package, exposure to leading technologies and global experience. When splitting up the respondents according to engagement, it was interesting to note that “better working conditions” was ranked first for the most disengaged group of engineers and only seventh for the most engaged group. The author explains that, given the fact that in general working conditions are similar for all engineers, the results show that if an employee is engaged, he or she might be more prepared to tolerate less than desirable working conditions. In turn, for employees who are not engaged, a less desirable work environment could demotivate them even further. Following this, the author puts forward a two-stage employee engagement maturity model, which posits that employers should firstly focus on the retention variables of “career prospects” and “working environment” (those important for disengaged employees) and then once the employee is engaged, focus on work/life balance, equitable financial packages and opportunities for growth in terms of exposure to leading technologies and perhaps opportunities for rotation to gain global experience.

Summarising the research presented above, it can be said that learning and development and support in this regard are very important. Engineers want to be learning in a learning organisation (Gruber, 2008), be given opportunities to develop (Karlsson, 2008; Wright, 2007), be trained, be mentored, manage their own career development (Vieira, 2010), have good career prospects (Wright, 2007) and have a say in their training (Rahaman, 2012). In addition, they also want to be challenged at work (Gruber, 2008; Karlsson, 2008) and have opportunities for mental work (Karlsson, 2008). They value practical work experience, involvement in engineering design (Vieira, 2010), exposure to leading technologies and global experience (Wright, 2007). They also want to view the work that they are doing in the present as what they want to do in the future (Karlsson, 2008). Autonomy is important (Gruber, 2008), especially in terms of discerning their own work performance and being part of the decision-making process in terms of performance appraisals that will have a direct impact on their careers (Karlsson, 2008; Rahaman, 2012). Attaining work-life balance (Vieira, 2010; Wright, 2007) and being able to satisfy higher order needs outside of work are important (Gruber, 2008). These engineers value making a contribution, making a difference (Vieira, 2010) and having corporate culture and values aligned

to their own (Gruber, 2008). Lastly, they also see receiving a favourable total financial package as important (Wright, 2007).

### **2.5. CHAPTER SUMMARY**

This chapter comprised the literature review and satisfied the specific literature aims of the study. The different theoretical perspectives regarding generational theory were explored, discussed and integrated. Retention theory and retention strategies were identified, analysed and discussed. Finally, work-related engagement was discussed as a construct and also presented as a retention strategy.

**CHAPTER 3: RESEARCH ARTICLE**

In this chapter my research is presented as a full journal article.

**RETENTION AND ENGAGEMENT OF GENERATION Y ENGINEERS: A  
HERMENEUTIC PHENOMENOLOGICAL INQUIRY**

**ABSTRACT**

The engagement of Generation Y engineers is expected to affect their retention significantly, thus allowing companies to retain their scarce and critical skills. The purpose of this study was to explore the lived work experiences of Generation Y engineers in South Africa in order to obtain better understanding of how companies can retain and engage these workers. Although abundant research has been conducted in the field of generational studies and work-related engagement, there is a paucity of research into the retention and engagement of Generation Y engineering staff in South Africa. A qualitative study was conducted from a hermeneutic phenomenological perspective. Data were gathered through in-depth unstructured interviews with six Generation Y engineers working in South Africa. Data were analysed by applying a hermeneutic phenomenological analysis and were interpreted from a work-related engagement stance. Findings showed that being retained and being engaged are interlinked. Even though retention cannot be ensured, hygiene retention factors are needed for initial retention and task and work-setup engagement for prolonged retention. Personal passion and commitment relating to career engagement are valued above organisational engagement and commitment. Companies should change their programmes, policies and interventions to focus on the identified hygiene retention factors and on engaging these employees by providing for certain elements in terms of their task and work setup. Furthermore, Generation Y engineers' career scripts could be explored to allow for better career paths to be planned for them within or across companies. This study contributed to the field of industrial and organisational psychology, engineering companies, human resource professionals, career psychologists and myself as researcher in that it provided insight into the lived work experience of Generation Y engineers in South Africa in terms of their engagement and retention.

### 3.1. INTRODUCTION

Retaining young talent in South Africa, as in other countries, is challenging because of skills shortages, employee mobility and the imminent retirement of Baby Boomers (Masibigiri & Nienaber, 2011). According to the National Planning Commission (NPC, 2011) in South Africa the generational reproduction of professional expertise is a threatening crisis as the ageing generational cohorts continue to leave the workforce. For organisations the retention of key workers such as high performers and those with scarce and critical skills is also becoming increasingly challenging and important (Allen, Bryant & Vardaman, 2010). In South Africa, engineering has been listed as a national scarce and critical skill (Department of Home Affairs, 2009) and a demand for over 5000 engineers has been listed on the South African Department for Higher Education and Training's (DHET) 2012-13 skills demand list (DHET, n.d).

It is, however, not enough only to retain these engineers; there is also a need to engage them at work to ensure business success (Kennedy & Diam, 2010).

### 3.2. BACKGROUND TO THE STUDY

As Baby Boomers start retiring, Generation Y workers are starting to enter the world of work (Reder et al., 2010). This supply of talent is, however, also declining as Generation Y workers are leaving their workplaces at an alarming rate, leaving many companies with skills shortages in critical areas (Crow & Stichnote, 2010; Erickson, Schwartz & Ensell, 2012).

Highly educated workers with portable knowledge and scarce and critical skills can easily move to alternative employment and research has also shown that high unemployment rates have little impact on the turnover of these workers (Solimano, as cited in Rahman, 2012; Trevor, 2011). In South Africa, engineering is a scarce and critical skill, as the country is severely *under-engineered* when assessed against the international benchmark. The international benchmark, looking at average population per engineer, shows that this country lags behind other developing countries by having only one engineer for every 3 166 people. These statistics are compared to

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Brazil's 277 and Malaysia's 543 people per engineer (ECSA, 2010). Consulting Engineers South Africa (CESA, 2012) reported that in June 2012, 86.5% of firms indicated a drive to increase their engineering staff, but were struggling to find suitable candidates. The retention of Generation Y engineers may therefore be of particular importance in the field of industrial and organisational (IO) psychology in view of high turnover expectancies in the Generation Y cohort, combined with the fact that engineering is a scarce skill.

Kennedy and Diam (2010) state that it is not only retention, but also engagement that is crucial to business success. As the engagement of workers play an important part in their retention, engagement has become an important topic for IO psychology academics, researchers and practitioners (Schaufeli & Bakker, 2004; Van Schalkwyk, Du Toit, Bothma & Rothmann, 2010). Although work-related engagement is coupled with many positive organisational outcomes, increased job performance is especially significant (Bakker, Albrecht & Leiter, 2011; Bakker & Bal, 2010) in the knowledge economy, which is driven by intense competition (Bakker & Schaufeli, 2008). In this economy there is a need for the maximised inputs associated with engaged workers who are energetic, dedicated and absorbed by their work (Bakker & Schaufeli, 2008; Rothman & Rothman, 2010).

Most generational difference research has been conducted in the USA and in Europe, but the findings cannot always be compared to the lived experiences of South Africans (Henderson, 2010). South African researchers have done a lot of work on engagement in organisations, as well as on retention (Schreuder & Coetzee, 2010). Some generational research has also been done. Empirical research exploring the phenomena of both retention and engagement among Generation Y engineers in South Africa provides a new perspective that may contribute to the existing body of generational research, specifically in the context of engineering as a scarce skill.

A qualitative study by Vieira (2010), focussing on retention in a similar context (generational research and engineering), reported that her findings were not decisive enough to conclude safely that generational differences influence the turnover and retention of engineers. Conversely, other

## RETENTION AND ENGAGEMENT OF GENERATION Y ENGINEERS

studies have shown that Generation Y engineers act differently with regard to their turnover behaviour (Karlsson, 2008; Rose & Gordon, 2010).

Wright (2007) calls for explorative research to be conducted in terms of identifying factors that could be potentially important for engagement and retention among engineers in South Africa. Kennedy and Diam (2010) studied retention and engagement in an engineering environment in the USA and based on their findings, recommended that researchers investigate the antecedents of engagement in the engineering work context further. In terms of generational research, previous studies, such as the Oxygenz report (Puybaraud, 2010) and research by Deloitte (Talent Edge 2020, 2012), have employed a mostly quantitative approach to determine what Generation Y workers deem important in the workplace. In addition, these studies have been conducted among a vast range of Generation Y employees and youth.

In the light of the aforementioned, the main research purpose was to explore how Generation Y engineers in South Africa experience their work and based on this, to determine how companies should be orientated toward the retention and engagement of these workers.

### **3.3. RESEARCH OBJECTIVE AND CONTRIBUTION**

In line with the call for an exploratory approach to study engagement and retention among engineers in South Africa (Wright, 2007), I intended to study engagement and retention by conducting a qualitative inquiry into the lived work experiences of Generation Y engineers. Crafting an understanding of Generation Y engineers' construction of engagement and retention may contribute to understanding how their engagement and retention can be enhanced.

This study contributes to the field of IO psychology, engineering companies, human resource professionals, career psychologists and myself as researcher in that it provides insight into the lived work experience of Generation Y engineers in South Africa in terms of their engagement and retention, specifically in terms of informing career counselling practice, workplace retention and engagement policies, programmes and interventions.

The specific aim of the literature review that follows was to explore, discuss and integrate different theoretical perspectives regarding generational theory, to identify, analyse and discuss retention theory and strategies and to discuss work-related engagement as a construct. The research design, research findings and a discussion of the findings follow the literature review.

### **3.4. LITERATURE REVIEW**

Generational theory, retention theory as well as work-related engagement will now be discussed.

#### **3.4.1. Generational theory**

Interest in generational differences has its roots in ancient Greece (Burnett, 2011, as cited in Joshi et al., 2011; Nash, 1978), with Karl Mannheim's (1928/1952) pivotal contribution highlighting the sociological significance of differences in generations (Joshi et al., 2011). Schuman and Scott (1989) highlighted the dynamic of "collective memories" that are distinctive of the tendency of people in a particular generational cohort to recall different events with formative experiences. Strauss and Howe (as cited in Papenhausen, 2011) moved to popularise the concept of generations by offering a comprehensive theory to explain the concept of generations by looking at a cyclical theory of history and generations.

##### *3.4.1.1. Conceptual issues*

According to Constanza, Badger, Fraser, Severt and Gade (2012), there are some consistencies across the conceptualisations of generations. The authors define a generation as a group of people, about the same age, whose experiences are influenced by the same set of significant historical events that were experienced during key developmental periods in their lives, typically late childhood, adolescence and early adulthood.

In literature there are a number of conceptual and methodological problems that result in disagreement concerning the conceptualisation, study and measurement of generations (Rosow,

1978; Ryder, 1965). Despite this, the concept of generations not only remains the subject of popular culture and media, but academic interpretations of this construct are becoming more sophisticated as a result of such controversies (Joshi et al., 2011), showing that there is still a need to engage with this concept and its discourse (Jones & Czerniewicz, 2010). Jones and Czerniewicz (2010) call for more research to dispel false dichotomies that exist in this regard and also to clarify the nature of the changes that are taking place among the members of Generation Y.

### *3.4.1.2. Application of generational theory in the work context*

Members of a certain generation are said to have similar personalities, values, expectations, attitudes and lifestyle preferences, which are not necessarily a function of age (Bogdanowicz & Bailey, 2002; Kowske et al., 2010; Schuman & Scott, 1989) and which are brought into the workplace with them (Zemke et al., 2000). The following have been identified as attributable to Generation Y.

Work-life balance is of paramount importance (Gilbert, 2011). These individuals also value flexibility and studies have shown this to be an important motivational factor for members of this generation (Lieber, 2010).

PriceWaterhouseCooper (PWC, 2009) found training and development to be the most highly valued benefit among Generation Y South Africans. The chance to pursue personal growth is also seen as an important motivational factor for this generation (Lieber, 2010).

Members of Generation Y often demand immediate feedback, as this will show them where and how they need to improve (Hershatter & Epstein, 2010). They also favour a direct communication style, frequent encouragement and recognition for their work (Irvine, 2010).

Although a time-lag study conducted by Twenge, Abebe & Campbell (2010) indicated that Generation Y scored lower than previous generations in terms of social rewards such as making

friends and having contact with many people, other studies found results to the contrary. Deloitte (2009) found that Generation Y workers value teamwork more than previous generations do and are also more used to collaboration. They are team-orientated and view working and interacting with others as making work more pleasurable and rewarding (Irvine, 2010; Myers & Sadaghiani, 2010).

Even though literature reports on various attributes that are linked to Generation Y workers, whether these are also attributable specifically to Generation Y engineers working in South Africa is unclear. This study fills this gap by specifically looking at this group and their preferences and attributes.

### **3.4.2. Retention theory**

Retention has been defined as everything an employer does to encourage qualified and productive workers to continue working for the company and has the main objective of reducing unwanted voluntary turnover among valuable individuals in the company (Schuler & Jackson, 2006).

The turnover, retention and career behaviour of workers are significantly influenced by the knowledge economy and the resulting boundaryless organisation and boundaryless career (Arthur, Khapova & Wildercom, 2005). To reduce the ever increasing costs of pension and medical benefits and to better adapt to the changing world of work, companies are replacing permanent employees with part-time workers and flattening company hierarchies (Feldman & Ng, 2007). The talent pool has become global where technological advances has made it possible for knowledge workers, particularly those with scarce and critical skills, to search for employment from anywhere in the world and also be headhunted from anywhere (Khapova, 2006). These changes have increased the complexity and challenge companies face with regard to their turnover and retention.

Since voluntary retention research formally began, many retention theories have been put forward. Some more recent theories related to other constructs have also been employed to study retention and turnover. I will now offer a quick overview of some of these established retention theories and then concentrate on the construct of work-related engagement as a modern retention theory.

### *3.4.2.1. Organisational equilibrium*

The organisational equilibrium theory suggests that a worker will stay with a company as long as the incentives provided by the company are either equal to, or more than, the contribution required by the company (March & Simon, 1985). Therefore, a worker is expected to stay with the company until he or she perceives the advantages associated with leaving are significantly greater than his or her present situation provides (Mitchell, Holtom & Lee, 2001).

### *3.4.2.2. Perceived organisational support*

Eisenberger, Huntington, Hutchison and Sowa (1986) developed the model of social exchange processes. They put forward that perceived organisational support (POS) adds to the establishment and maintenance of employee-employer relationships. Employees are said to create beliefs regarding the degree to which the company in which they are employed values their contribution and cares about their well-being. This will then add to the employee's commitment to the organisation and increase behaviours that contribute to organisational goals and positive outcomes. This commitment is then seen to influence an employee's intention to stay.

### *3.4.2.3. The unfolding model of turnover*

This model presents four paths to turnover where each of these paths is commonly initiated by a shock - an event that leads the employee to think about resigning (Lee & Mitchell, 2004). According to Mitchell et al., (2001) the first path related to leaving because of dissatisfaction

with your current job whereas the second path relates to leaving for a more attractive job offer. The authors describe the third path as leaving in accordance with a “script” or a plan that you have for your career. Here the worker resigns in response to certain events: “I will resign as soon as we start a family.” The fourth path, according to the authors, indicates impulsive resignations which commonly occur as a reaction to a negative shock such as not receiving an expected promotion or salary increase.

In South Africa Sutherland and Jordaan (2004) studied the retention of knowledge workers (as which engineers are classified) and found that theories such as the belief that job satisfaction and organisational commitment lead to workers’ loyalty (intention to remain with an employer) to a company may no longer hold true. In line with this, the present study aimed to investigate the lived work experiences of Generation Y engineers in South Africa in terms of turnover to determine how this cohort views retention.

### **3.4.3. Work-related engagement**

Engagement is associated with many positive outcomes for companies (Bakker, Demerouti & Schaufeli, 2003; Bakker, Schaufeli, Leiter & Taris, 2008; Harter, Schmidt & Hayes, 2002; Schaufeli & Bakker, 2004), including:

- Increased job performance
- Motivation
- Job satisfaction
- Increases in working safely
- Client satisfaction
- Return on assets
- Increased profits.

These outcomes could possibly be the reason why practitioners as well as academics have paid such a lot of attention to work-related engagement (Park & Gursoy, 2012).

### 3.4.3.1. *Engagement as retention theory*

This concept is especially relevant to companies, as it is a major predictor of employees' intention to leave (Saks, 2006). Even though this is not purely a retention theory, engagement has been positively correlated with organisational commitment and is thus also employed to study turnover and retention (Bakker, Demerouti, Hakanen & Xanthopoulou, 2007).

Numerous studies conducted in South Africa and in other countries have found high levels of work-related engagement to be associated with low intention to leave (Du Plooy & Roodt, 2010; Sulu, Ceylan & Kaynak, 2010). Even given evidence of a significant relationship between these two constructs, recent studies conducted in different occupational fields mainly investigate factors influencing engagement (e.g. Shuck, Reio & Rocco, 2011) and intention to leave separately (e.g. Liou, 2009).

This study aimed to explore the phenomena of both retention and engagement among Generation Y engineers in South Africa to provide a new perspective that may contribute to existing research, specifically in the context of engineering as a scarce skill.

### 3.4.3.2. *Conceptualising engagement*

Various types of work-related engagement can be identified in literature, including job engagement, organisational engagement, personal engagement, burnout/engagement, work engagement and employee engagement (Du Plooy & Roodt, 2010; Saks, 2006; Simpson, 2009). As these differ in their respective antecedents and consequences, it is important to differentiate between them (Saks, 2006; Simpson, 2009). There is also the risk of confusing various constructs and putting "old wine in new bottles" (Schaufeli & Bakker, 2010, p. 2). In this study "engagement" is regarded as encapsulating the relationship of the employee with his or her work, occupation and organisation.

The three dimensions of *work* engagement as conceptualised by Schaufeli et al., (2002) were employed. I did, however, not limit these dimensions to viewing engagement only in terms of the worker's relationship with his or her *work*, but also considered his or her occupational role and organisation (Schaufeli & Salanova, 2011). Engagement was defined as a continual and pervasive, affective-cognitive state that is not focused on a specific object, event, person or behaviour (Schaufeli & Bakker, 2004). It is "a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption" (Schaufeli et al., 2002, p. 74). According to Schaufeli and Bakker (2004), these three dimensions are considered as follows:

- Vigour is characterised by high levels of energy and mental resilience while working, willingness to invest effort in one's work and persistence even in the face of difficulties.
- Dedication is characterised by a sense of significance, enthusiasm, inspiration, pride and challenge.
- Absorption is characterised by being fully concentrated and happily engrossed in one's work, where time passes quickly and one experiences difficulty to detach oneself from one's work.

### 3.4.3.3. *Previous research among engineers*

The following provides a summary of the findings of research conducted among engineers in general. These findings show that learning and development and support in terms of learning and development are very important. The engineers in these studies want to be given opportunities to develop (Karlsson, 2008; Wright, 2007), be learning in a learning organisation (Gruber, 2008), be trained, be mentored, manage their own career development (Vieira, 2010), have good career prospects (Wright, 2007) and have a say in their training (Rahaman, 2012). They also want to be challenged in their work (Gruber, 2008; Karlsson, 2008) and have opportunities for mental work (Karlsson, 2008). They assess practical work experience as valuable, value involvement in engineering design (Vieira, 2010) and have a high regard for exposure to leading technologies and global experience (Wright, 2007). They want to view the work that they are doing at present as what they want to do in the future (Karlsson, 2008). Autonomy is important (Gruber, 2008), particularly in terms of discerning their own work performance and being part of the decision-

making process in terms of performance appraisals, which will have a direct impact on their careers (Karlsson, 2008; Rahaman, 2012). Attaining work-life balance (Vieira, 2010; Wright, 2007) and being able to satisfy higher order needs outside work are key (Gruber, 2008). These engineers also see receiving a favourable total financial package as important (Wright, 2007). Lastly, they value making a contribution, making a difference (Vieira, 2010) and having corporate culture and values aligned to their own (Gruber, 2008).

### **3.5. RESEARCH DESIGN**

Below I discuss my research approach, strategy and methodology.

#### **3.5.1. Research approach**

I followed a qualitative exploratory approach from a hermeneutic phenomenological perspective, as developed in the writings of Heidegger, Gadamer and Ricoeur (Lindseth & Norberg, 2004). An exploratory approach was employed to satisfy my curiosity and desire for better understanding the lived work experiences of Generation Y engineers in South Africa. Exploratory studies are typically used when a researcher examines a new interest or when the study itself is relatively new (Babbie, 2005). Although there is much literature on generational theory, there is a dearth of research conducted among Generation Y engineers in South Africa.

Phenomenology allows for the study and description of the essences of particular phenomena as these appear in the life-world of participants (Van Manen, 1990). Here I will focus on understanding the meaning that a particular phenomenon has for a research participant (Patton, 1991) by setting aside (bracketing) my own presumptions and trying to see the phenomenon as it really is (Osborne, 1994). Hermeneutics is an interpretive process that brings about the understanding of phenomena through language and has the aim of discovering intended as well as expressed meanings (Annells, 1996; Kvale, 1996). Following Lindseth and Norberg (2004), I do not ascribe to “pure” phenomenology where essences are seen as uncontaminated by interpretation, neither do I ascribe to “pure” hermeneutics where interpretations of text do not

move further than the text meaning to reveal essential traits of the life world. I ascribe to the hermeneutic phenomenological paradigm, which will allow for a description of Generation Y engineers' lived work experiences through phenomenology, and then also the interpretation of the phenomena by means of hermeneutics (Caputo, 1984).

### **3.5.2. Research strategy**

I focused on exploring the lived work experiences of Generation Y engineers in South Africa by making use of in-depth interviews with six engineers.

### **3.5.3. Research method**

In terms of the research method I will discuss the setting of the research, the entree and establishment of researcher roles, sampling, data collection, the recording and analysis of data and reporting.

#### *3.5.3.1. Research setting*

This research study does not have a specific setting, but all the engineers participating in the study were either working in Gauteng or Mpumalanga across the fields of mechanical, process, electrical and industrial engineering. Most were employed in the petrochemical and consulting industries and functioned in either a specialised or managerial role.

#### *3.5.3.2. Entree and establishing researcher role*

I approached the majority of the participants informally, outside their working hours and not at their places of employment. With the unit of analysis being the phenomena of engagement and retention as experienced by the individual, it was not necessary to approach the companies for authorisation, as the organisations were not peculiar to the research setting. I gained entry to the various research settings by contacting engineers I already knew, asking them to be participants

and then also asking them to refer me to their Generation Y engineering friends and colleagues whom I could also ask to participate in the study. My husband also referred me to possible participants.

However when I established that I needed to interview more participants, I approached an engineering company and obtained their permission to request their Generation Y engineers to participate in my study. This company was familiar with my study as I initially planned to conduct my study in this setting.

### 3.5.3.3. *Sampling*

I made use of purposive, snowball and theoretical sampling (Nieuwenhuis, 2010) and sampled qualified engineers employed in South Africa in an engineering capacity for more than one year, who are part of the Generation Y cohort (born between 1980 and 1993), who graduated with BEng degrees from tertiary institutions in South Africa, who are South African citizens and who were willing and able to talk about their lived work experiences.

I determined the cut-off birth dates to be between 1981 and 1993. I chose these dates as the *transition generation*, which forms part of Generation Y in South Africa, falls into this age cohort (Deal et al., 2012). These dates also make provision for the overlap between European and American Generation Y classifications (Robyn, 2012). In addition, those born after 1994 would not be old enough to have graduated with an engineering degree. The sample included six Generation Y engineers, with biographical descriptives as displayed on the next page (see Table 3.1).

Table 3.1

*Biographical descriptives of participants*

Code	Race	Gender	Age	Category	Company type	Environment	Years in profession
WMM25	White	Male	25	Mechanical	Mining	Production	2.50
WFP28	White	Female	28	Process	Petrochemical	Project	6.50
WMP28	White	Male	28	Process	Petrochemical	Project	6.50
IFE25	Indian	Female	25	Electrical	Petrochemical	Project	2.00
BMM30	Black	Male	30	Mechanical	Consulting	Project	6.50
WMI26	White	Male	26	Industrial	Consulting	Project	4.00

*3.5.3.4. Data collection*

In line with the hermeneutic phenomenological research paradigm I employed, I engaged in unstructured in-depth interviewing, which allowed for the exploration, understanding and interpretation of the engineers' lived work experiences (see Appleton, 1995; Kvale, 1996; Van Manen, 1990). In this research paradigm the interview takes the form of an informal conversation about a specific aspect of human experience (Kvale, 1996; Patton 1980). In this instance I asked participants to describe how they as young engineers experienced working for their company and specifically probed retention attitudes and experiences of engagement. Before starting with the interviews, I conducted a pilot interview with my husband, who is a Generation Y engineer.

*3.5.3.5. Recording of data*

I recorded the interviews digitally, kept a reflective journal and also compiled field notes during the interviews (Laverty, 2003; Maree, 2010). Interviews were transcribed and to provide a more complete picture of what the participant was saying, non-linguistic expressions such as silences, laughing and sighs were also included in the transcriptions (Kelly, 2007). The field notes and reflective journal entries were then used in conjunction with the transcribed interviews in the

analysis phase.

### 3.5.3.6. *Data analysis*

To analyse and interpret the data, I followed the process proposed by Lindseth and Norberg (2004), which is based on Ricoeur's (1976) phenomenological hermeneutical interpretation theory. This involved the steps of naïve reading, structural analysis and comprehensive understanding. Employing these steps, I firstly interpreted each interview separately and once all the interviews had been interpreted I again conducted the final step of the process (comprehensive understanding) for all the interview texts as a whole.

In the structural analysis phase I read through the interview text again and determined the natural meaning units as expressed by the engineers (Kvale, 1996). I then endeavoured to formulate these meaning units in condensed form (Kvale, 1996). I organised the meaning units into meaningful configurations by indicating categories, themes and subthemes.

Still following the process suggested by Lindseth and Norberg, the categories, themes and subthemes were then reflected on against the backdrop of my naïve understanding. If the naïve understanding was invalidated, I revised and changed the categories, themes, subthemes, meaning units and naïve understanding until these validated one another.

In the next phase, I summarised and reflected on each interview's categories, themes, subthemes and meaning units in relation to the research question (Lindseth & Norberg, 2004) with the aim of moving away from a commonsense understanding toward a wider frame of understanding (Kvale, 1996). I did this by making use of free imaginative association trying to establish what the combination of meaning units and themes said about the psychological phenomenon under investigation (Wertz, 2011). Using my pre-understanding and keeping the validated categories, themes, subthemes, meaning units and naïve understanding in mind, I then formulated and wrote down a final initial interpretation of the text (Lindseth & Norberg, 2004). To interpret the data on

a second, deeper level I viewed the text through the theoretical lenses of engagement, generational and retention theory (Cunliffe, 2003).

After I had analysed the interviews individually, I started interpreting all the interviews and their various categories, main themes, subthemes and meaning units as a structural whole (Wertz, 2011). I did this by making use of a hermeneutic circle where I moved back and forth from parts of the experience to the whole of the experience with the aim of increasing my understanding of the texts (Annells, 1996). I then formulated the final statement in everyday language as close to the lived experience of the Generation Y engineers as possible (Lindseth & Norberg, 2004). As with the individual interview texts, I then also interpreted the integrated interview data on a second, deeper level, making use of engagement, retention and generational theory as interpretive lenses (Cunliffe, 2003).

### 3.5.3.7. *Reporting*

To persuade the readers of my report, I employed a confessional voice and used straightforward talk, active verbs and honest personal stances to guide the style of the report (Miles & Huberman, 1994). In order to accomplish this, I employed a first-person qualitative reporting style to report on the findings of the research.

### 3.5.3.8. *Ethical considerations*

I employed particular strategies to ensure an ethical study of good scientific quality. This research project has been conducted in line with the Ethical Rules of Conduct as laid down by the Professional Board for Psychology, Health Professions Council of South Africa (Health Professions Act No.56 of 1974, 2006). In line with these rules, data were not collected before permission to commence with the study had been obtained from the UNISA, IO Psychology departmental research ethics committee.

I obtained written informed consent from each participant before commencing with the interviews (Wassenaar, 2007). After showing the participants how the digital recorder worked and indicating that the recorded data would be transcribed, informed consent relating to the use of a digital recorder was also obtained.

As interviewing cannot guarantee anonymity, I ensured the participants that the information they provided would be kept confidential (Babbie, 2005). I indicated to them that none of their personal identifiable details would be included in any of my research reports and if there was information that could potentially be used to identify them, this would be either removed or changed.

The digital recordings, field notes and transcriptions will be stored safely for a period of three years and access to it will be limited by storing the information on my personal, password-protected computer and in a digital location for which only I know the password.

### 3.5.3.9. *Rigour*

I made use of naturalistic terms to describe the rigour of the study and will be discussing the dependability, credibility and transferability of the findings.

Dependability has to do with convincing the reader that the findings did occur as reported in the results (Van der Riet & Durrheim, 2007). This can be done by providing the reader with an audit trail that provides rich and detailed descriptions showing how my actions and opinions are rooted in and developed from my contextual interaction (Van der Riet & Durrheim, 2007). Thus, to ensure that my research project is auditable and therefore dependable, I described my decisions regarding the design and methodology of the study in detail to allow the reader to follow the decisions that I made (Appleton, 1995). To enhance the dependability of the study further, I made use of field notes and kept a reflective research journal (Maree, 2010).

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Credibility refers to the extent to which research findings are convincing and believable (Kelly, 2007). To enhance the credibility of the study I tested the communicative validity of my knowledge claims by engaging in dialogue with the participants, my research supervisors and the readers of this report (Kelly, 2007). I sent (via email) my interpretation (in the form of my naïve understanding) of each interview I had to the participants I had interviewed and asked them whether I had understood them correctly. I then incorporated their responses into my interpretations of the data. Their responses were either sent via email or I discussed it with them in person. I also submitted my findings and discussion to my supervisors. They looked at it, provided general feedback, asked critical questions and made suggestions. I contacted them to clarify some of their questions and suggestions and also explained my viewpoints.

Since most of the participants were Afrikaans-speaking, I conducted the majority of the interviews in Afrikaans. To ensure that I translated the text parts I used as evidence of the identified themes correctly I translated back and forth between Afrikaans and English. I first translated the text parts into English and then the following day, without looking at the Afrikaans again, translated the English back to Afrikaans. I then compared the original Afrikaans to the translated Afrikaans. In cases where there were discrepancies between the two, I translated the relevant section again until I was satisfied that the translated English accurately reflected the interpreted meaning.

Transferability has to do with whether conclusions from one research context can be transferred to another context to provide a framework that can be used to reflect and make comparisons with findings in the new context (Riet & Durrheim, 2007). As mentioned, I did this by providing a precise description of the research process, clearly explaining and advocating my choice of methods and providing a thorough account of the research situation and context by submitting the background and my motivation for the study, providing a profile of the demographics of the participants and also discussing the theory relevant to the study in detail.

### 3.6. FINDINGS

In terms of my naïve understanding I found instances of task engagement, work-setup engagement (more than work engagement and organisational engagement) and career engagement (more than occupational engagement) in the texts.

It seemed that the participants did not indicate general *work* engagement as much as they did engagement in terms of very specific *tasks*. Also, the engineers indicated engagement in terms of their *tasks* and their *work setup* more than they articulated instances of engagement in terms of their relationship with their *organisation* as a whole. Although WFP28 indicated engagement in terms of her company (or organisation), it seemed that this was rooted in task engagement – the meaning that she derived from the specific tasks that she was working on at the company. WMM25 indicated that working at a certain company or organisation does not have a bearing on how much he enjoys his work. WMI26 confirmed this by mentioning that one does not feel loyal towards a company, but rather toward people and experiences. Using a theatre analogy, it was as if the theatre company (organisation) they were working for was not as important as the part (task) the actors were playing and the theatre rules and allowances (work setup) governing them.

Most of the participants were either planning a shift in the focus of their current occupation, or a total change in occupation either in the long term or the immediate future. BMM30 was adamant that when it came to his ultimate goal of starting his own farming business, there was nothing that the company could do to stop him from leaving. It was not that he was unhappy; it was just that he felt he had to follow his dream of being self-reliant. In the light of this, instances of *career* engagement were much more prevalent than those of *occupational* engagement.

It seemed that instances of task and work-setup engagement enticed the participants to stay at their companies, but as soon as career engagement became more important and their company could not provide the desired career engagement opportunities, they communicated turnover intentions either in the near or more distant future, depending on their career scripts. Following

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this, it can be said that even though task and work-setup engagement were essential to retention, for these Generation Y engineers, retention could not be ensured.

In addition, the feeling that you are you are “getting what you expect” from the company functioned as a type of baseline retention factor. Having these baseline retention factors did not result in engagement, but rather functioned as hygiene retention factors keeping the engineer from leaving the company prematurely. These hygiene retention factors may also be indicative of Generation Y engineers’ significant work identity needs, derived from their collective work identity, attitudes, values and the expectations they hold (Sayers, 2007; Zemke et al., 2000).

Hygiene retention factors worked in the same way as getting a salary raise would; one is excited and energised about it for a short while, but then one gets used to the new higher salary and it does not motivate one anymore. On the contrary, elements of engagement ensured prolonged motivation, as it was not something that they just got “used” to after a while. Where engineers felt that they were not getting what they expect in terms of these hygiene retention factors, turnover was very probable and engagement highly unlikely.

Table 3.2 below provides the categories, themes and subthemes I identified during the structural analysis phase, as well as quoted text as evidence of each subtheme.

Table 2.2

### *Themes*

Category	Theme	Subtheme	Quoted text as evidence
Elements of leaving	Leaving	Leaving is not about the company	<i>...ek dink nie enigiemand sal sommer teenoor ‘n “company” lojaal voel...nie, ek voel lojaal teenoor mense of...ervarings... (I don’t think anybody would easily feel loyal toward a company. I feel loyal toward people or experiences) (WMI26)</i>

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		Leaving to follow my heart	<i>Hierdie projek is vir my so lekker ... so groot geleentheid, dat ... as die projek klaar is ... moet ek ... iets heeltemal anderste doen ... ek wil ... my loopbaan as ingenieur op 'n hoogtepunt afsluit ... ek sal ophou werk by (die maatskappy waar ek nou werk) ...</i> (For me this project is so enjoyable, it is such a big opportunity that if the project is finished, I must do something totally different. I want to end my career as an engineer on a high note. I will stop working at the company where I work now.) (WFP28)
Hygiene retention factors	Getting what you expect	Expecting equitable monetary reward	<i>...dis...my "attitude" teenoor geld: Betaal 'n ou genoeg dat die geld van die tafel af is...</i> (This is my attitude toward money: Pay a guy enough so that money is off the table. (WMI26)
		Expecting promotion	<i>...white people are not getting promoted; Indian people are not getting promoted. I am one of those people. It upsets me.</i> (IFE25)
		Expecting experience, growth and development	<i>As ek nie ontwikkel nie, as ek voel ek staan stil, dan sal ek oorweeg om te skuif ...</i> (If I am not developing, if I feel I am standing still, then I will consider moving.) (WMI26)
		Expecting challenging work	<i>... tien persent van jou werk sal jy aan ingenieursgoed spandeer, as jy gelukkig is... meeste van dit is maar administratief...</i> (Ten percent of your work you will spend on engineering stuff, if you are lucky. Most of it is just administrative.) (WMP28)

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- Expecting support ... *in terme van ingenieursvernuf, weinig ondersteuning, tegniese ondersteuning ook weinig ... Lynbestuur, weinig ondersteuning, besigheid, weinig ondersteuning ... dit voel ... asof jy alleen staan ...* (In terms of engineering expertise, very little support, technical support, also very little, line management, very little support, business, very little support. It feels as if you are standing alone. (WMP28)
- Expecting transparency from management ... *op die oomblik vertrou ek hulle nie, glad nie ... ek kan nie ons bestuur vertrou nie.* (At the moment I do not trust them, not at all. I can't trust our management.) (WMP28)
- Expecting to be treated with basic human dignity *Selfs al wil hulle 'n projek afskiet ... dat hulle dit dan met waardigheid doen en nie net minagend nie en ... 'n persoon se menswaardigheid nog steeds ken. Ek dink dit is voldoende. Dit vat nie baie nie ...* (Even if they want to shoot a project down, that they then do it with dignity and not just contemptuously...still acknowledge a person's human dignity. I think that is sufficient. It does not take a lot). (WMP28)
- Expecting functioning work relationships ... what makes your environment mainly, is the people ... at the end of the day I just wanted to go into my work and do the work and then it shouldn't be about ... that personal issues ... the clashes of characters ... (BMM30)
- Expecting work-life balance ... half past four/five o'clock ... we just go on with our lives ... if the work is done at the end of the day you ... continue ... with my life ... it is very important. (BMM30)

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Elements of engagement	Developing and progressing at a faster tempo	Gaining sought-after experience and exposure (also global)	<i>Ek kan ... dink dat ek vir vyf jaar projekbestuur sal doen. Ek wil vyf jaar se ervaring hê ... by die ingenieurs is hulle eintlik skaars. (I can imagine that I will do project management for five years. I want five years' experience; with the engineers they are actually scarce) (WMI26)</i>
		Learning from the experts	<i>Ek skuur skouers met ... ouens wat regtig al 'n rukkie in die "game" is ... (I rub shoulders with guys who have really been in the game for a while). (WMI26)</i>
	Being rewarded intrinsically	Seeing success as the biggest reward	<i>I think what excites me is ... just successfully completing a task or a job ... that ... is a good energiser for me.(BMM30)</i>
		Getting instant gratification	<i>Dit is nie... "delayed gratification"...nie, dit is dadelik. (It is not delayed gratification, it is immediate.) (WMM25)</i>
	Being engaged by the type of work that you do	Working on ground-breaking technology	<i>... dit is heeltemal 'n nuwe tegnologie ... dit is 'n eerste, eerste in die wêreld! (It is totally a new technology; it is a first, a first in the world!). (WFP28)</i>
		Having something to show	<i>... and it is always exciting at the end of a project to look back and this is the changes that I made ... (IFE25)</i>

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Making a meaningful contribution and an impact	Making a	<i>My doel ... is om seker te maak die ding word geïmplementeer. Dit het rêrig 'n landwye impak ... dit maak my baie opgewonde. (My goal is to ensure that the thing gets implemented. It really has a nationwide impact, it makes me very excited.) (WFP28)</i>
Having an engaging work setup	Having autonomy and freedom to organise your life	<i>Ek het ... volledig fleksityd. Ek kan tienuur inkom as ek wil ... nou die aand het ek gewerk tot ... eenuur die oggend ... en dis "fine" ... daai is die eerste ding wat ek geniet ... (I have complete flexitime. I can come in at 10 o'clock if I want to. The other evening I worked until one o'clock in the morning and that's fine. That is the first thing I enjoy.) (WMI26)</i>

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### 3.6.1. Hygiene retention factors

Even though getting paid was seen as an important outcome of work, it was not seen as the best motivator. Money was rather seen as a hygiene factor. Participants expect monetary reward which is equitable to their merit or level of performance.

Two participants (WMP28 and IFE25), working in a company with a very hierarchical structure, expressed a lot of frustration in that they were not being promoted because of employment equity requirements.

Even though developing and progressing at a faster tempo through gaining sought-after experience was seen as an element of engagement, getting what one expects in terms of basic experience, growth and development was seen as an element of retention.

Although the participants did not agree on whether or not it is important to be doing typical engineering work, all of them agreed that it was necessary to be doing work that is challenging

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enough and where one can utilise one's skills. Participant WMP28 was extremely unhappy because he was mostly doing administrative work.

He was also especially upset about the lack of support he was receiving at work. He felt that he was not getting the support he expected in terms of the work he was doing, especially not from management's side. He was experiencing opposition rather than support, resulting in him feeling as if he was standing alone.

WMP28 and IFE25 shared that management could not be trusted. WMP28 did not know if he would still have a job the following year, as the promises made by management could not be relied on. They were also promised a reward for their hard work, but received nothing.

WMP28 mentioned that his company did not know how to work with people. He felt that he was not treated with basic human dignity, but rather with contempt. He indicated that his effort was not taken into account and that his hard work was constantly just wiped off the table without a mention or any recognition. He felt that people were not enjoying the highest priority, but rather workplace politics.

The participants saw the people they worked with as a very important part of their work setup. It was evident that the participants wanted to get along with the people they worked with and not have work relationships keep them from completing their work successfully. Belonging and fitting in were also seen as important.

Work-life balance was viewed more as a hygiene factor than an element of engagement, as the participants indicated they made career decisions based on their families' needs, which were often prioritised above their work needs. Work-life balance was also important in that participants indicated that it was important to have time for other elements of life and not just work.

These hygiene retention factors are communicated as expectations reflective of the Generation Y engineer's work identity needs.

### **3.6.2. Elements of engagement**

#### *3.6.2.1. Developing and progressing*

Developing and progressing at a faster tempo and gaining sought-after experience and exposure were seen as significant. Two participants (WMI26 and IFE25) showed enthusiasm about gaining sought-after experience and exposure by travelling overseas and being exposed to other cultures and work environments. Participants discussed the challenge of being in demand by obtaining sought-after and rare accreditations and experience. Learning from the experts was also seen as a significant element of engagement.

#### *3.6.2.2. Being rewarded intrinsically*

Being rewarded intrinsically was seen as significant by all the participants. Success and the accompanying sense of accomplishment were seen as the best reward and proved to energise the participants. Being noticed because of their success was also seen as very rewarding and inspiring. A sense of enthusiasm was evident when participant WMM25 talked about getting instant gratification as opposed to waiting for years to see the fruit of his labour.

#### *3.6.2.3. Being engaged by the type of work that you do*

Engagement lies in personal identification with the task – the level, complexity, uniqueness, completeness, impact and meaningfulness of the task. Two participants (IFE25 and WFP28) were inspired by working on groundbreaking technology and putting out new solutions as part of their work. There was a strong focus on having something to show for the work that one puts in; having task identity, where one can say: "Look, this is what I have done". A sense of enthusiasm, inspiration, pride and challenge was evident when some of the participants spoke

about feeling that they were making a meaningful contribution and having a real impact. Participant WMI26 expressed willingness to invest extra effort in his work by putting himself second, as he felt that they were creating something meaningful, which was greater than him.

### *3.6.2.4. Having an engaging work setup*

Engagement results from an autonomous and flexible work setup. Work setup mattered to these participants. Participant WMI26 said that it was the most important thing for him, even more than the type of work that he did. Some of the participants also showed willingness to invest extra effort in their work when they were able to organise their work setup according to their needs and wants. Participant WMI26 mentioned that even if he decided that he wanted to be a youth minister for two days a week, his company would be willing and able to work out something to accommodate him. Autonomy and freedom to organise one's time by having full flexitime was also seen as significant. Some of the participants showed willingness to invest extra time in their work when it was required, but then they also wanted to be able to make up for this time when the piece of work or project was completed.

## **3.7. DISCUSSION**

The purpose of this study was to explore how Generation Y engineers in South Africa experience their work from a hermeneutic phenomenological stance and based on these experiences, to determine how companies should be orientated toward the retention and engagement of these workers. I answer this objective by providing the following summary and discussion of the findings in terms of each of the empirical aims of the study:

### **3.7.1. Exploring the lived work experiences of Generation Y engineers**

For these participants, working as a Generation Y engineer in South Africa means being engaged when one is developing and progressing at a faster tempo, gaining sought-after experience and exposure and learning from the experts. Furthermore, engagement means being rewarded

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instantly, intrinsically and especially through the sense of accomplishment one gets from successfully completing a project. Engagement is also about working on ground-breaking technology, having something to show and making a meaningful contribution and an impact. Engagement means having a work setup where one has autonomy and freedom to organise one's life. Although it is about task and work-setup engagement being essential to retention, it is also about knowing that engagement cannot ensure one's retention when it comes to leaving the company to follow one's heart or one's engagement in terms of one's career. Furthermore, it means leaving the company prematurely when one feels that one is not getting what one expects in terms of certain hygiene retention factors such as money, promotion, experience, growth and development, challenge, support, transparency, human dignity, functioning work relationships and work-life balance.

To illustrate my findings further and as a basis for further discussions, I propose the model illustrated in Figure 3.1.

The model shows that the participants first needed to feel that they were getting what they expected from the company in terms of certain hygiene retention factors, before they would experience psychological safety and be able to make themselves available to stay with the company and display normal levels of performance. As mentioned above, these hygiene retention factors may mirror the participants' work identity needs that are rooted in their collective work identity.

If companies do not provide their employees with the hygiene retention factors that are expected, I propose that the Generation Y engineers will have lower levels of performance and leave prematurely. However, if the company ensures that the hygiene retention factors are accounted for, as well as the elements of task and work-setup engagement, this could lead to higher levels of performance and prolonged employment, as these workers will then only leave in line and in time with their career engagement and career scripts. The notion that higher engagement would lead to higher levels of performance is supported in research conducted among engineers in South Africa (Malan, 2004).

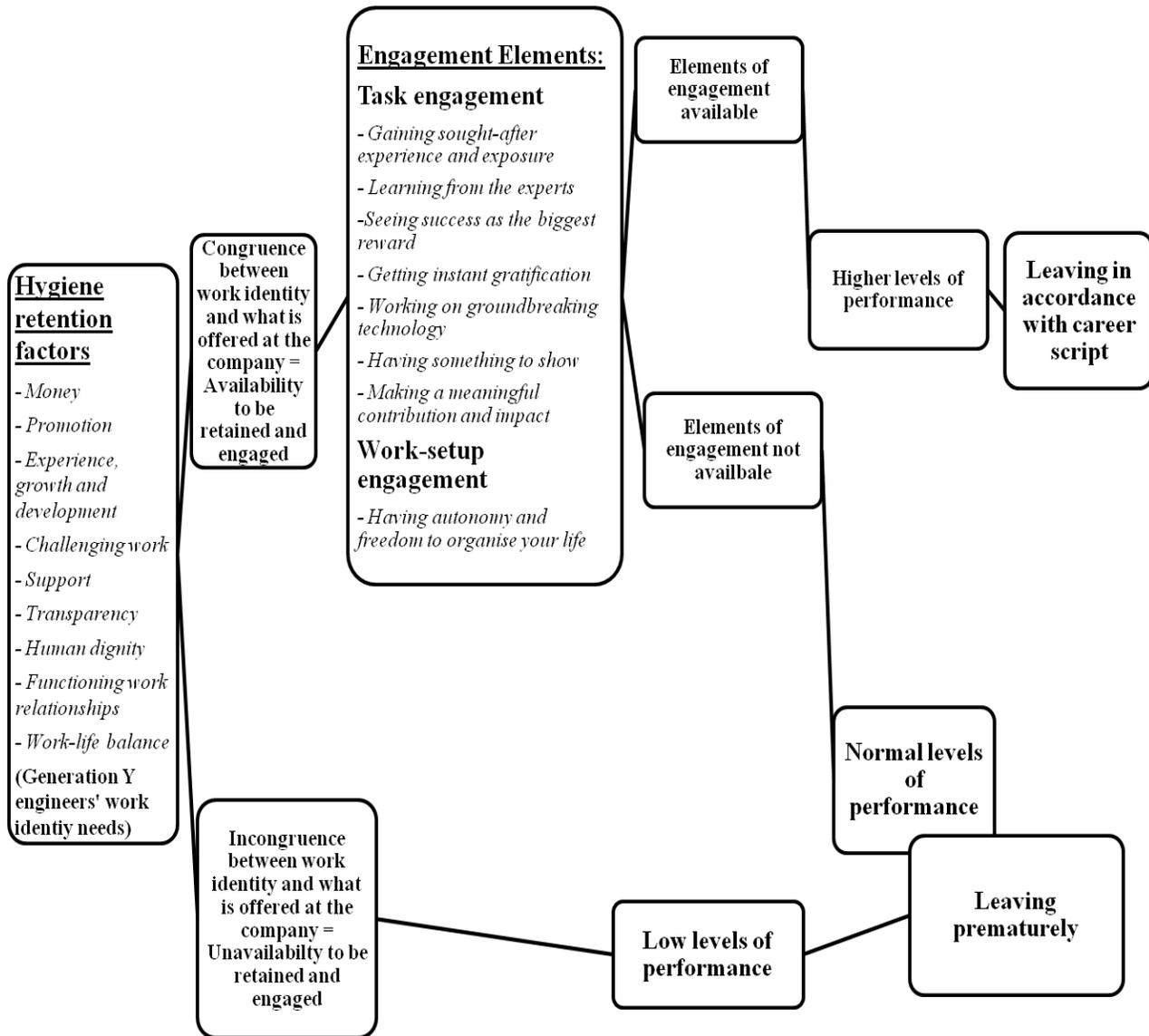


Figure 3.1 A proposed model for hygiene retention factors and engagement elements for Generation Y Engineers in South Africa

**3.7.2. Factors that may inhibit or facilitate retention**

The results showed that no matter how engaged the participants were at their respective companies and how much they enjoyed working there, they would still leave the company and even the engineering profession to follow their hearts in terms of their careers if their companies

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could not offer them what they desired in terms of career engagement. This is in line with research conducted by Sutherland and Jordaan (2004) who studied the retention of knowledge workers in South Africa and found that old theories such as the notion that job satisfaction and organisational commitment lead to intention to remain with an employer may no longer hold true.

Lee and Mitchell's (1994) unfolding model of turnover could provide a useful theory, especially in respect of the third path to turnover, namely that employees may have a "script" or a plan in mind that involves considering resignation in response to certain events.

Stanz (2009) examined engineers in South Africa and found that the factors leading to their retention and those leading to their turnover are not exactly the same. In line with this I propose that even though the listed hygiene retention factors could reduce premature turnover among participants, these would not stop them if they decided to leave in line with the script they had laid out for their careers.

I should stress that there was a very fine line dividing hygiene retention factors and elements of engagement. For instance, I saw "expecting experience, growth and development" as a hygiene retention factor. However, I clustered "developing and progression at a faster tempo" under engagement elements. It was as if the participants made use of more objective, concrete and conscious, cognitively negotiated elements of the employer-employee contract to evaluate whether they should stay or leave, whereas they relied more on their subjective views and feelings relating to the psychological contract between them and the employer when reporting instances of engagement. Being satisfied that the company was honouring its part of the employer-employee contract, the Generation Y engineers were available to stay with the employer and to seek out engagement opportunities, which if offered, engaged them and kept them at the company for longer. It was as if the participants first had to experience psychological safety (see Kahn, 1990) in that they felt they were getting what they expected before they were available to stay at the company and be engaged.

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However, if the consciously negotiated employer-employee relationship was not honoured by the employer, the results showed that the participants might leave their companies prematurely. This willingness to leave the company could be due to the fact that Generation Y reports higher levels of confidence and an inflated sense of self; they are more confident in their abilities than previous generations were at the same age (Twenge & Foster, 2010). This, coupled with the fact that engineering skills are scarce and critical, may be the reason why these engineers feel that they have many opportunities and are in a position to be “picky” about where they work.

My view that “not getting what you expect” could be correlated with leaving a company prematurely, is in line with findings by Gruber (2008). The author found that engineers in South Africa were more likely to stay with their companies when they were aligned with the corporate culture and the value system of the company. Work identity may also play a role in this regard. Different generations are said to form collective identities in which distinct values, attitudes and expectations are contained within each cohort’s identity (Bogdanowicz & Bailey, 2002; Kowske et al., 2010; Sayers, 2007; Schuman & Scott, 1989). This identity, including the various values, attitudes and expectations, is then brought into the workplace (Sayers, 2007; Zemke et al., 2000) to form a work identity. I propose that these Generation Y engineers’ work identities interact with factors in the workplace and that there is either congruence or incongruence between the two. In addition, I suggest that their work identities also give rise to certain work identity needs, which are either satisfied or frustrated in the workplace.

Getting what they expect in terms of the elements of money, promotions, experience, growth and development, challenging work, support, transparency from management, basic human dignity, functioning work relationships and work-life balance are important factors in relation to congruency with their work identities. I am proposing that these factors will not necessarily keep them from leaving, but rather that these factors can be seen as hygiene factors or baseline necessities for retention.

I identified “expecting equitable monetary reward” as a hygiene retention factor rather than an element of engagement. Wright (2007) conducted research among engineers working for Sasol

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in South Africa. She found that the most engaged group in her study rather than the least engaged group saw receiving a favourable total guarantee package as an important consideration when looking for a new job. Based on this, she identified receiving a favourable total guarantee package as an element of engagement. I believe that even though the engaged group saw this factor as important, it does not necessarily mean that getting paid well is responsible for this groups' higher levels of engagement. Getting a favourable guarantee package could rather be seen as having the employee stay for longer to be available for possible engagement opportunities in the future.

Getting what one expects in terms of promotions and also experience, growth and development was identified as a hygiene factor. This is in line with Generation Y research. Findings show that Generation Y workers want to be able to track that they are in fact achieving something and progressing (Howe & Nadler, 2009). Furthermore, they will not be satisfied to keep on doing their jobs without further development and training (Martins & Martins, 2012). Research among engineers confirms this; it has been found that these workers want to discern their own progression in terms of performance and development (Karlsson, 2008; Vieira, 2010).

In line with getting what one expects in respect of challenging work, Gruber (2008) and Karlsson (2008) found opportunities for challenging work to be an element of retention for engineers. This is also in line with Gilbert's (2011) view that Generation Y workers want work that is challenging.

In the era of the fast-paced knowledge economy, the identity of Generation Y engineers may be characterised by a need to learn and change continuously – so as not to get bored or have a sense of “falling behind”. Thus, such an identity would connect with a work environment where opportunities for promotions, experience, growth and development and challenging work are available, as these then entice the engineer's identity needs.

As regards being supported, this study was found to be in line with Rahman (2012), who conducted research among engineers in Malaysia and found a significantly positive relationship

between POS and engineers' intention to stay with their companies. A study by Masibigiri and Nienaber (2011) among South African Generation Y workers found that they regarded the non-supportive nature of leadership as discouraging. Their requirements for transparency from management and the basic human dignity they expect directly tie in with Gruber's (2008) notion that the company's culture and value system should be in line with that of the engineer. According to Irvine (2010), Generation Y workers prefer a direct communication style and need to respect their leaders in order to follow them.

This need for support, transparency and dignity may result from Generation Y growing up in an environment where they were used to supervision, guidance and constant feedback from parents and teachers (Crumpacker & Crumpacker, 2007; Downs, 2009). This characteristic need could then subconsciously interact with their work context, resulting in either congruence or incongruence with their work identity and expectations and then also result in either retention or turnover.

The importance of functioning working relationships for engineers as a hygiene retention factor was supported by research conducted by Gruber (2008) in South Africa and also general research on Generation Y workers by Myers and Sadaghiani (2010).

Finding that work-life balance is an important hygiene retention factor is in line with research on Generation Y workers (Gilbert, 2011), as well as research conducted among Generation Y engineers in South Africa (Vieira, 2010). Wright (2007) also identified this as a retention variable for the most engaged group in her study.

### **3.7.3. Elements of engagement in the lived work experiences of Generation Y engineers**

Developing and progressing at a faster tempo, being rewarded intrinsically and satisfaction with the type of work that one does and one's work setup were seen as elements of engagement rather than elements of retention.

Wanting to develop and progress at a faster tempo is in line with the values of Generation Y workers, as indicated by a review conducted by Petroulas, Brown and Sundin (2010). Gaining sought-after experience and exposure through, amongst others, travel was identified by Vieira (2010) as an element of retention among Generation Y engineers. However, in line with this study's findings, Wright (2007) found opportunities for global travel to lead to higher levels of engagement among engineers. My finding that the Generation Y engineers proved to be engaged through learning from experts is in line with findings that suggest that members of Generation Y find interacting with others pleasurable and rewarding (Myers & Sadaghiani, 2010). I identified "functioning work relationships" as a hygiene retention factor and "learning from the experts" as an element of engagement. Following my argument in the previous section, I believe that having functioning work relationships is cognitively negotiated by the engineers to be important, as not having such relationships may inhibit their ability to complete their work successfully. When they are satisfied that they have functioning work relationships, they are available to stay with the employer, where they are given the opportunity to learn from experts (which entails a relationship); this is then seen as engaging and could make them feel that they want to stay for longer to make use of other engagement opportunities.

The second grouping of engagement elements has to do with being rewarded intrinsically. This is in line with research conducted by Van der Walt and du Plessis (2010) among Generation Y workers in South Africa. The authors found that success and instant reward were important values for these workers. Succeeding and being instantly rewarded for it may engage these workers by confirming to them that they have in fact achieved what they set out to do, thus making them feel energised to seek out other opportunities to do the same in the company that rewarded them.

I identified doing certain types of work as the third element of engagement. When participants talked about working on groundbreaking technology, having something to show and contributing and achieving meaning through their work, feelings of engagement were evident. Working on ground-breaking technology as an element of engagement was consistent with Wright's (2007) findings among engineers in South Africa.

In Generation Y research in South Africa, making a meaningful contribution and impact is in line with findings by Van der Walt and du Plessis (2010). Making a meaningful contribution and impact through the work that one does was identified by Vieira (2010) as an element of retention among Generation Y engineers, whereas my study identified it as mainly an element of engagement. I agree with Vieira (2010) that this element is associated with retention; however, I believe it is not a hygiene retention factor (such as those discussed in the previous section), but rather firstly an element of engagement, which inadvertently translates to prolonged retention.

Task identity is important to Generation Y engineers. A study conducted among engineers in Nigeria determined that task identity was significantly correlated with higher levels of performance both subjectively and objectively (Onukwube & Iyagba, 2011). Tying in with success and instant reward as engagement elements, this element of task identity may also engage these workers by functioning as confirmation that they have in fact achieved their goal, making them feel energised and motivated to stay at the company and look out for other similar opportunities.

Having autonomy and freedom to organise one's work setup according to one's needs and being able to organise one's time by having full flexitime were seen as elements of engagement. Gruber (2008) also found that the engineers in his study valued autonomy in their work. Lieber (2010) found that Generation Y workers saw flexibility as an important motivational factor. Results from the Oxygenz project also showed that in line with this need for flexibility, 79% of Generation Y workers indicated that they preferred mobile working to static ways of working (Puybaraud, 2010). This may be due to the fact that members of Generation Y grew up in an age

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when technology was always available, making unlimited and instant access to information, global opportunities, video conferencing, mobile working arrangements and flexible working hours accessible.

When looking at this study, the identified elements and factors are in line with the values indicated for Generation Y workers in literature (Downs, 2009; Gilbert, 2011; Howe & Nadler, 2009; Irvine, 2010; Lieber, 2010; Martins & Martins, 2012; Masibigiri & Nienaber, 2011; Myers & Sadaghiani, 2010; PWC, 2009; Van der Walt & du Plessis, 2010; Vieira, 2010). In general the findings are also in line with research conducted among engineers. The only exception is when discussing whether certain elements should fall under hygiene retention factors or under engagement. In this study there were discrepancies in this regard in terms of seeing money as a hygiene element instead of an element of engagement and viewing making a meaningful contribution and an impact as an element of engagement rather than a retention factor.

Furthermore, elements of engagement were not only found in terms of work-related engagement. By making use of Schaufeli and Bakker's (2004) definition and dimensions of work-related engagement and expanding this to include work, occupational and organisational facets of engagement, I found instances of task engagement (more than work engagement), work-setup engagement (more than organisational engagement) and career engagement (more than occupational engagement). Engagement in terms of the engineers' relationship with their task and work setup seemed to prolong retention, as the participants' stayed in the expectation of more opportunities for such engagement. However, when such engagement opportunities were not foreseen or their career script dictated a change, it seemed that engagement in terms of their planning for their careers propelled them to leave the company they are working, either to pursue the same occupation or a totally different occupation.

In conclusion, I propose the following hypothesis:

Retention and the work-related engagement of Generation Y engineers working in the South African context are not mutually exclusive, but interlinked. Engagement with the organisation is incumbent upon feeling psychologically safe, which results from a cognitive self-appraisal of the equity of hygiene retention factors in relation to the engineer's input. Engagement is primarily about being engaged by certain elements of one's work tasks and the work setup one is being exposed to over and above organisational engagement. Personal passion and commitment relating to career engagement are valued above organisational commitment and engagement. Therefore, although task and work-setup engagement is essential to the Generation Y engineers' retention, their retention cannot be ensured on the long term.

Results to satisfy the final aim, namely: To provide recommendation to companies regarding the retention and engagement of their Generation Y engineers, will be discussed below.

### **3.7.4. Recommendations**

In the light of the scarcity of engineers and the high demand for them in South Africa, coupled with the looming crisis of ageing Baby Boomers continuing to leave the system, there is a need to retain and engage Generation Y engineers in the country. Based on the findings of this study, the recommendations below are put forward.

I recommend that the engineering companies where these engineers are employed, their human resource professionals and career psychologists shift their focus from trying only to retain these workers to engaging them. To engage these workers, the elements identified in this study concerning task and work-setup engagement can be taken into account when designing policies, programmes and interventions. It is proposed that this will allow their companies to get the highest performance out of their workers while they are still employed at the specific company. Companies need to encourage their Generation Y engineers to be vocal about their career scripts and then these companies also need to be flexible to accommodate career engagement as far as

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possible in order to retain these engineers. Their companies may consider a “swop-shop” approach, where employees are rotated among different companies in line with the experience, exposure and career they desire. Options such as extended unpaid leave allowing these employees freedom to pursue a specific interest related to their career scripts or to “tick something off a bucket list” and then return to the company could also be considered. Companies could also consider offering these workers “shaped” work weeks where they are at the company for three days a week and have the other two days off, for instance to be a youth worker, start up a small farming business or even get a community project off the ground. Where practical, these ventures may even be undertaken in association with the company.

Their companies and human resource professionals should, however, not negate hygiene retention factors, as “not getting what they expect” may result in these workers leaving prematurely. The identified hygiene elements can be used to guide policies, programmes and interventions. Given that these elements are congruent with their work identities, it could be valuable to have frequent focus group discussions with these workers to understand their work identities better and also to gauge whether they feel they are in fact getting what they expect. Furthermore, transparency becomes important when these workers are shown how what they get compares to what other internal and external workers get in terms of money, promotions, experience, growth and development, challenging work, support and work-life balance.

For me as researcher and other IO psychologists I propose that Generation Y engineers’ career scripts be explored to allow better career paths to be planned for them within or across companies. Furthermore, the identified elements of engagement and hygiene retention factors could be further researched quantitatively within the wider Generation Y engineering population in South Africa. The focus of this research should be on determining whether the broader Generation Y engineering population responds similarly in terms of having a career script and showing evidence of career engagement, being engaged in relation to task and work setup, whether they find the same elements significant and whether these elements should be grouped under engagement or under hygiene retention factors.

### **3.7.5. Limitations of the study**

I did not include all engineering categories and race groups in South Africa in my study. The sample could have been expanded to include coloured participants, participants in the civil engineering category and engineers in other parts of South Africa to provide a more complete picture of Generation Y engineers in South Africa. I only interviewed Generation Y engineers and not other cohorts, making it impossible to discuss differences and similarities between various cohorts. Future studies could include other generational cohorts, which would then allow for comparisons. The small sample size affected the generalisability of the study. However, these findings may be transferable to other similar contexts.

### **3.7.6. Conclusion**

The main objective of this study was to gain insight into the lived work experiences of Generation Y engineers working in South Africa in order obtain a better understanding of how companies can retain and engage these workers. The specific research aims were to explore the lived work experiences of Generation Y engineers, to explore these lived work experiences for factors that may inhibit or facilitate their retention, to identify elements of engagement and to provide recommendations to engineering companies regarding the retention and engagement of their Generation Y engineers. To reach these objectives an explorative, hermeneutic phenomenological research design, making use of in-depth interviews, was employed.

The results showed that for Generation Y engineers working in the South African context, being retained and being engaged are interlinked. Participants first need to feel psychologically safe by determining that they are getting what they expect in terms of a number of hygiene retention factors before they can make themselves available by staying with the organisation and potentially being engaged. Certain elements of their task and their work setup engage them and cause them to stay at the company even longer in the expectation of experiencing more instances of engagement. However, in the absence of engagement or when career engagement is

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experienced, this could propel them to leave the company or the engineering profession as a whole.

I proposed that these engineers' companies change their programmes, policies and interventions to focus on the identified hygiene retention factors and on engaging these participants by providing for certain elements in their task and work setup. Furthermore, Generation Y engineers' career scripts could be explored to allow for better career paths to be planned for them within or across companies.

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

In this chapter conclusions and recommendations are provided, based on the results of the research. Limitations are also discussed.

### **4.1. SUMMARY**

The main objective of this study was to gain insight into the lived work experiences of Generation Y engineers working in South Africa to obtain better understanding of how companies can retain and engage these workers.

#### **4.1.1. Conclusions drawn from the literature review**

Below I discuss the conclusions drawn from both the literature review and the qualitative research study.

##### *4.1.1.1. Theoretical perspectives regarding generational theory*

The first aim related to the literature was to explore, discuss and integrate different theoretical perspectives regarding generational theory.

A generation can be defined as a group of individuals of about the same age, whose experiences are influenced by the same set of significant historical events that were experienced during important developmental periods in their lives, typically late childhood, adolescence and early adulthood (Constanza et al., 2012). Studying the history of generations, I determined that the notion of “generations” dates back to the ancient Greeks who spoke of four generational periods in history (Burnett, as cited in Joshi et al., 2011; Nash, 1978). The next mention of generations can be found in the works of Karl Mannheim (1928/1952). He performed leading work on generations and in his essay “The Problem of Generations”, he developed this construct from having only biological significance to having sociological significance as well. Schuman and

Scott (1989) were the first to build on Mannheim's work by linking the concept of "collective memories". Later on Strauss and Howe (as cited in Papenhausen, 2011) popularised the notion of generations by offering a comprehensive theory to explicate the concept of generations by looking at a cyclical theory of history and generations.

In literature there are at present a number of conceptual and methodological issues leading to disagreement about the concept of generations and whether there is evidence of generational differences (Czerniewicz, Williams & Brown, 2009; Hargittai, 2010; Ramanau, Cross & Healing, 2010). The concept of generations can, nevertheless, often be found in policy statements, in commercial rhetoric as well as in academic work, showing that it is still alive and well (Czerniewicz, Williams & Brown, 2009; Hargittai, 2010; Joshi et al., 2011; Ramanau, Cross & Healing, 2010).

Members of a particular generation are said to have similar personalities, values, expectations, attitudes and lifestyle preferences, which are not necessarily functions of age and are brought into the workplace with them. These attributes can be found in literature (Bogdanowicz & Bailey, 2002; Kowske et al., 2010; Schuman & Scott, 1989; Zemke et al., 2000).

#### *4.1.1.2. Retention theory and strategies*

The second aim of the literature study was to identify, analyse and discuss retention theory and strategies.

According to Schuler and Jackson (2006), retention can be defined as everything an employer does to encourage qualified and productive workers to continue working for the company. The main purpose of retention is to reduce unwanted voluntary turnover among valuable and key employees in the company (Schuler & Jackson, 2006). The knowledge economy and the resulting boundaryless organisation and boundaryless career have a noteworthy impact on employees' turnover, retention and career behaviour (Arthur, Khapova & Wildercom, 2005). In this economy, knowledge workers with scarce and critical skills may search for employment

anywhere on the globe and also be headhunted from anywhere, resulting in much more complex and demanding turnover and retention situations for companies (Khapova, 2006).

Many retention theories have been put forward and some existing theories related to other constructs have even been used to study retention and turnover. The organisational equilibrium theory is a retention theory which posits that an individual will stay with a company as long as the inducement provided by the organisation is equal to, or more than, the contribution required by the company (March & Simon, 1985). The POS retention theory asserts that perceived organisational support adds to the establishment and preservation of the employee-employer relationship, which adds to the employee's commitment to the organisation and his or her contributing behaviours to the company's goals, which in turn influence the worker's intention to stay (Eisenberger, Huntington, Hutchison & Sowa, 1986). In the unfolding model of turnover, four primary paths to turnover are named, indicating that these paths are often initiated by a shock, an event that leads an individual to start thinking about resigning from his or her job (Lee & Mitchell, 1994). In the unfolding model of turnover the third path entails employees who have a "script" or a plan in place, which involves consideration of resignation in reaction to certain events: "I will quit as soon as this project is over". Engagement is used in the realm of retention and is especially relevant to organisations, as it is a significant predictor of employees' intention to leave (Bakker, Demerouti, Hakanen & Xanthopoulou, 2007).

### *4.1.1.3. Work-related engagement as a construct*

The third and final aim of the literature study was to discuss work-related engagement as a construct.

Research has shown engagement to be related to numerous positive organisational outcomes, probably explaining why academics and practitioners have paid so much attention to this construct (Park & Gursoy, 2012). Positive organisational outcomes include higher levels of motivation and job performance, increased client satisfaction, higher return on assets, elevated profits and an increase in working safely and lower levels of intention to leave (Bakker, Demerouti

& Schaufeli, 2003; Bakker, Schaufeli, Leiter & Taris, 2008; Harter, Schmidt & Hayes, 2002; Schaufeli & Bakker, 2004).

Six types of work-related engagement could be identified (Du Plooy & Roodt, 2010). As these differ in their antecedents and consequences, it is important to differentiate between them (Saks, 2006; Simpson, 2009). For the purposes of this study I defined engagement as a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption. Vigour is characterised by high levels of energy and mental resilience while working, willingness to invest effort in one's work and persistence even in the face of difficulties. Dedication is characterised by a sense of significance, enthusiasm, inspiration, pride and challenge. Absorption is characterised by being fully concentrated and happily engrossed in one's work, where time passes quickly and one experiences difficulty to detach oneself from one's work (Schaufeli et al., 2002; Schaufeli & Bakker, 2004)

### **4.1.2. Conclusions drawn from the empirical study**

The following conclusions were drawn from the empirical study.

#### *4.1.2.1. Work-related engagement as a construct*

The first empirical aim was to explore the lived work experiences of Generation Y engineers.

For participants, working as a Generation Y engineer in South Africa means being engaged when one is developing and progressing at a faster tempo, gaining sought-after experience and exposure and learning from the experts. Engagement means being rewarded instantly, intrinsically and particularly through the sense of accomplishment one derives from successfully completing a project. Engagement means working on groundbreaking technology, having something to show for one's effort and making a meaningful contribution and impact through one's work. Engagement is about having a work setup where one has autonomy and freedom to organise one's life. Although task and work-setup engagement are essential to retention, it is

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necessary to know that engagement cannot ensure retention when it comes to leaving the company to follow one's heart or being engaged in terms of one's career aspirations for which the company cannot provide. Furthermore, it means leaving the company prematurely when one feels that one is not getting what one expects in terms of certain hygiene retention factors, such as money, promotion, experience, growth and development, challenge, support, transparency, human dignity, functioning work relationships and work-life balance.

### *4.1.2.2. Factors that may inhibit or facilitate retention*

The second aim was to explore the lived work experiences of Generation Y engineers for factors that may inhibit or facilitate their retention.

I found that although task and work-setup engagement is essential to retention, it will not ensure retention. No matter how engaged the participants were at their respective companies and how much they enjoyed working there, they would still leave their companies, or even the engineering profession, to follow their hearts in terms of their career. This can be seen as career engagement.

In addition, participants may leave their companies prematurely when they feel they that are not getting what they expect in terms of money, promotion, experience, growth and development, challenging work, support, transparency from management, basic human dignity, functioning work relationships and work-life balance. These factors will not keep them from leaving, but can rather be seen as hygiene factors or baseline necessities for retention.

### *4.1.2.3. Elements of engagement*

The third empirical aim was to identify elements of engagement in the lived work experiences of Generation Y engineers.

I found evidence of task engagement, work-setup engagement (more than work engagement and

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organisational engagement) and career engagement (more than occupational engagement) in the text. Instances of task and work-setup engagement enticed the participants to stay at their companies, but as soon as career engagement became more important (and their present companies could not provide what they felt they desired in this regard), they reported turnover intentions either in the near or more distant future, depending on their career scripts. The following elements of task and work-setup engagement were identified:

- Gaining sought-after experience and exposure (also global)
- Learning from the experts
- Seeing success as the biggest reward
- Getting instant gratification
- Working on groundbreaking technology
- Having something to show
- Making a meaningful contributing and an impact
- Having autonomy and freedom to organise your life.

Conclusions regarding the final aim, namely: To provide recommendation to companies regarding the retention and engagement of their Generation Y engineers, will be discussed in the recommendations section below.

### **4.2. LIMITATIONS**

I only included Generation Y engineers in my sample and not participants from other cohorts, making it impossible to compare results among various cohorts. Future studies could consider including other generational cohorts to make such comparisons possible. Secondly, my sample only consisted of engineers working either in Gauteng or Mpumalanga and I did not include engineers from all race groups or from all engineering categories. Future research could include participants from other geographical areas in South Africa, coloured participants and participants working as civil engineers. Even though the small sample size affected the generalisability of my study, these findings may be transferable to other similar contexts.

### 4.3. RECOMMENDATIONS

Given the scarcity and high demand for engineering talent in South Africa, paired with the increasing number of ageing Baby Boomers leaving the workforce, the need to retain and engage Generation Y engineers in South Africa becomes evident. Based on the results and conclusions presented above, recommendations are put forward below.

I propose that the companies where these engineers are employed (and possibly other engineering companies employing Generation Y engineers), their career psychologists and human resource professionals move from a strong focus on retention toward engagement as a focal point. The task and work-setup engagement elements identified in this study can form a basis for making decisions on an engagement policy and an intervention design. This shift in focus should result in not only prolonged retention, but also higher performance associated with engaged employees.

Companies need to encourage their Generation Y engineers to inform them of their career scripts and then where possible be willing to accommodate these career engagement desires of the engineers in order to retain them. Companies could also institute “shaped” work weeks, which allow these workers to pursue a passion or certain career interest for part of the week and work at the engineering company for the rest of the week. Where practical and profitable, these ventures may even be undertaken in association with the company. Offering Generation Y engineers extended unpaid leave to pursue a particular interest related to their career scripts and then return to work at the company is also an option. Finally, a “swop shop” approach could be considered. Here companies offer their Generation Y engineers the opportunity to rotate among different companies and different industries in line with the exposure, experience and career they desire.

Even though engagement is of the utmost importance, companies should not negate retention factors. Not providing Generation Y engineers with what they expect may result in these engineers leaving the company prematurely. The hygiene retention factors identified in this study could direct the formulation of retention interventions, programmes and policies. Provided

that the stated hygiene retention factors are congruent with the Generation Y engineers' work identities and work identity needs, recurrent focus groups or individual interviews could be conducted with these workers, firstly to understand their work identity needs and then also to determine whether they feel they are getting what they expect from the company. Transparency is important in that these workers should know how what they receive from the company in terms of money, promotions, experience, growth and development, challenging work, support and work-life balance compares to what other internal and external employees receive.

For me as a researcher and other IO psychologists, I suggest that the career scripts of Generation Y engineers be studied to identify how Generation Y engineer career paths could be enhanced within and across companies to allow for higher levels of engagement and retention. The hygiene retention factors and engagement elements identified in the study could be researched quantitatively across the wider Generation Y engineering population in South Africa. Here the research should focus on determining whether the wider Generation Y engineering population also have career scripts and whether they show evidence of career and work-setup engagement. Finally, research could also establish whether the broader population see the same elements and factors as significant and whether these should be categorised under hygiene retention factors or elements of engagement.

#### **4.4. MY REFLECTION ON THE STUDY**

I did not complete this study without being changed by the process of completing a dissertation and even more by researching this particular subject. Being so involved with other individuals' stories made me think very deeply about my own. Most of the engineers I interviewed reported engagement in their working lives and this made me ask myself where I stood with regard to the issues of my engagement, retention and career script. Measuring my work situation and career aspirations against those of the engaged engineers has left me with a kind of dissatisfaction and curiosity about what is still out there for me to harness in my career. Studying their stories has left me with a feeling that I want to know what I want from my career and to make an effort to pursue opportunities for engagement.

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Being a Generation Y worker and the wife of a Generation Y engineer definitely affected my interpretation of the data. It was as if I was looking for answers to my own career decisions in their stories. There was constant tension between interpreting their stories about retention and engagement as I believed they meant them and trying to find an interpretation that was congruent with my feelings and sense-making about my retention and engagement and those of my husband. I identify with the notion that there are certain hygiene retention factors that need to be provided by my company; the specific factors are just slightly different. Working as a consultant hired out by the consulting firm I work for means working in a very flat structure. I believe that because of this I have never felt that promotion is a significant factor in my retention. In accordance with the findings of this study, I also feel that task engagement is an important element of my engagement. I believe that I chose to work for a consulting firm especially because having freedom and autonomy in my work setup is so important to me. Concerning career engagement, I do, however, feel that unlike most of the engineers, I will not leave the profession in which I am currently working. In the field of IO psychology there are many different avenues to pursue and at this stage I can do everything in which I am interested in this occupation and in the consulting company I work for.

On a personal level my thinking about the phenomena of retention and engagement has definitely evolved and deepened. Even though I knew at the start of the research project that there is a strong relationship between these two variables in literature, I still saw them as two very separate concepts. Now, at the end of my study, I am having difficulty thinking about either of them as separate entities, but rather see them as closely woven together and interdependent. After listening to the narrations of the engineers, I think I have lifted my expectation of the workplace and the company I am working for, as well as my expectations of myself. I think my career script has changed in that I want to search out opportunities to be engaged and if I do not find them in my current situation, I will have to leave to pursue them. I started feeling that there is a responsibility resting on myself as worker, the consulting company I am employed at and the companies I am consulting for to engage me in terms of my tasks and work setup.

#### **4.5. CHAPTER SUMMARY**

In this chapter conclusions and recommendations were provided, based on the findings of the research, and limitations were also discussed. I also provided my own reflection on the study and indicated how my views influenced the interpretation of the results and how conducting this study has influenced me and my feelings about my own work and career.

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