PERSONALITY AND WORK ENGAGEMENT IN A FINANCIAL INSTITUTION

by

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DECLARATION

Student number: 3081-683-1

I, declare that the dissertation entitled **PERSONALITY AND WORK ENGAGEMENT IN A FINANCIAL INSTITUTION** is my own work and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references.

______________________
Mrs SN Moodley

______________________
Date
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SUMMARY

The relationship between personality and work engagement and work engagement and demographic variables is investigated. The Riso-Hudson Enneagram Type Indicator (RHETI) was used to measure personality and the Utrecht Work Engagement Scale (UWES) was used to measure work engagement. In contrast to the literature findings, no significant relations were found between personality and work engagement. An increased sample size per personality type or triad may yield different results. Furthermore, the RHETI operationalising of personality differs from previous research. Gender and job tenure were related to work engagement whilst ethnicity, marital status, job level and age were not. In general, results from this sample recognise that work engagement is stimulated by more than personality type, acknowledging influences of job resources, gender and job tenure. Personality is stable across situations whilst work engagement may fluctuate across employment situations. Relevant recommendations to the organisation and for future research in this regard are highlighted.

Key words:

Personality, Personality type, personality triads, work engagement, vigour, dedication, absorption, gender, ethnicity, marital status, job level, age, tenure
CHAPTER 1
INTRODUCTION TO RESEARCH

This dissertation focuses on the relationship between personality type and work engagement. This chapter entails the background to and motivation for the research; specifically focusing on the research opportunity, aims and the research methodology.

1.1 BACKGROUND AND MOTIVATION
Industrial and organisational psychology is the application of psychological theories, methods, facts and principles in a work context (Strümpfer, 2007). The growing importance of this field of study is pre-empted by an accelerated pace of change in the nature of work and a decline in market buoyancy. Globalisation and advances in technology constantly usher in transformation into flatter and boundary-less corporate landscapes (Coetzee & Roythorne-Jacobs, 2007). Cartwright and Cooper (1997) asserted that this constant organisational change will be a central source of stress in this millennium. Jobs become redundant, job descriptions change and communication and collaboration across the globe is hastened, resulting in harsh work stresses and complexities (Greenhaus, Callanan & Godshalk, 2000). This accelerated pace of change was reiterated by Kiyosaki and Lechter (2003), who state that the employee becomes outdated during every 18 months, as new information and technology demands emerge. Industrial and organisational psychology must seek to ensure economically sustainable work practices to improve the social fabric and quality of life for all people. Considering the current realities of work life and the constant threat of job loss, economic uncertainties, constant change and raging diseases, employees must become resilient, decisive and take ownership of their work life (Coetzee & Roythorne-Jacobs, 2007).

Since employees are the key source of competitive advantage for organisations (Clark, 2008), and not just an operational cost, leaders need to ensure that their workforce is well and engaged to manage the turbulent economic climate of today. Decreased career prospects and increased job insecurity present greater challenges for leaders and organisations to keep employees engaged (Bakker, 2011, Bosman, Rothmann & Buitendach, 2005).
Schaufeli, Salanova, Gonzalez-Roma and Bakker (2002, p. 74) defined work engagement “as a positive, fulfilling, work-related state of mind characterised by vigour, dedication and absorption”. Work engagement is not restricted to a singular or momentary experience but to a more persistent and pervasive work-related state of mind.

Work engagement can be defined as “a positive, fulfilling, work-related state of mind that is characterised by high levels of energy and mental resilience while working, the willingness to invest effort in one’s work, persistence even in the face of difficulties, feeling enthusiastic and proud about one’s job, feeling inspired and challenged by one’s job, and being happily immersed in one’s work” (Coetzee & Roythorne-Jacobs, 2007, p. 54).

Schaufeli, Salanova, Gonzalez-Roma and Bakker (2002) outlined the dimensions of work engagement in terms of vigour, dedication and absorption as a persisting affective-cognitive state. Work is viewed as a fulfilling, meaningful and emotional experience. Vigour refers to high energy, commitment and resilience in work. Dedication refers to finding personal meaning, pride, challenge and stimulation in one’s work. Absorption refers to spiritual and emotional immersion in one’s work.

Research has shown that the benefits of engaged employees are linked with higher profit margins and being more productive and customer fidelity; while employees who are not engaged cost exorbitant amounts per annum (Echols, 2005). Several other studies done locally and internationally, established work engagement as organisationally desirable. Work engagement is related to a harmonious passion for work activities (Gorgievski & Bakker, 2010), employee retention (Schaufeli & Bakker, 2004), organisational citizenship behaviours (Bakker, Demerouti & Verbeke, 2004), and job performance (Salanova, Agut & Peiro, 2005). Harter (2001) found that work force engagement was instrumental to leadership success. Pannell (2005) explored work engagement as necessary to enhancing employee morale and performance. Research revealed significant correlations between life satisfaction and occupational engagement in both leisure and activities of everyday living (Nilsson, Bernspång, Fisher, Gustafson & Löfgren, 2007). In other studies, work engagement was
illustrated as an important antecedent to innovativeness (Huhtala & Parzefall, 2007; Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009). The findings of these studies imply that work engagement is an opportunity to optimise work life and is a worthy concept for further investigation.

Given the myriad of benefits, it is also fitting to question the factors related to or influential of work engagement. Research has dominated organisational variables and their influence on work engagement. Individual variables such as personality, cognition and emotional intelligence factors have been relatively absent in literature in relation to work engagement. It is important to acknowledge that both organisational variables and individual factors are constantly at play in influencing work engagement (Rothmann & Joubert, 2007).

Work engagement is one of many internal career resources available to individuals and is represented as such in the career decision-making framework (Bakker, 2011). High levels of self knowledge, emotional intelligence and career resilience translate into behavioural adaptability and together represent individuals’ internal career resources (Coetzee & Roythorne-Jacobs, 2007). By implication, self knowledge such as personality type, emotional intelligence, resilience or adaptability may be concepts related to or influential to work engagement. According to Callahan (2008), emotional intelligence has gained much momentum in research and in contrast, according to Bartram and Brown (2005a) the person-centred approach and the individual exploration with reference to personality type is the road lesser travelled in research. In the spirit of contributing to the road less travelled in psychological research, this dissertation will focus on personality type and work engagement.

In the realm of personality theories, the type approach was pioneered by Carl Jung in 1913. The first types developed were introversion and extroversion (Jung, 1923), which evolved into sixteen types, eight variations of introversion and eight variations of extroversion, and also later became known as part of the “big five” in personality traits (Derlega, Winstead & Jones, 2005). Practitioners of psychology have since developed much more sophisticated and empirical typologies, such as the Type A and Type B typologies, the MBTI and the Enneagram typologies.
The Type A and Type B personality theory is a personality type theory which was first introduced in the 1950s by Friedman and Rosenman to describe patterns of behaviors that were once considered to be risk factors for coronary heart disease (Friedman, 1996). Since its inception in the 1950s, the theory has been widely popularized and subsequently also widely criticised for its scientific shortcomings.

The Myers Briggs Type Indicator (MBTI) was derived from Jung’s typology by Isabel Briggs Myers and Katharine Cook Briggs in 1958. The key divergence from Jung was the introduction of the back-up or stress recourse functions such as an extrovert reverting to introversion during stress. It describes 16 basic personality types and allows two choices for orientation:

- E and I for extroversion and introversion, two choices for information processing;
- S for sensing and N for intuition; two choices for gathering information;
- T for thinking and F for feeling, and two choices for decision making;
- J for judgment and P for perception.

The MBTI type stems from differences in people, the direction of attention, their source of energy and typifies their current preferences, given their current context resulting in a typology or version of normal, logical and valuable set of human behaviours (Myers, 1998).

From the 1970s, the work of Don Richard Riso and Russ Hudson focused on an older personality typology, namely the Enneagram. Their aim was to adapt methodology which would have greater suitability for organisation utility (Colina, 1998; Kamineni, 2005; Luckcock, 2007a). The Enneagram is depicted by nine personality types objectively illustrated by numbers but characteristically named by type, The Reformer, The Helper, The Achiever, The Individualist, The Investigator, The Loyalist, The Enthusiast, The Challenger and The Peacemaker. Together the nine personality types are advocated as a holistic view of the full range of human potential (Riso & Hudson, 2003).
Apart from the Type A and Type B methodology (Friedman, 1996), the MBTI (Myers, 1998) and the Enneagram (Riso & Hudson, 2003), there are other typologies in literature such as the DISC typology (Ewing, 2007) and the Keirsy Temperament Sorter (Keirsy & Bates, 1984). This dissertation will utilise the Enneagram personality typology. Studies using the Enneagram typology have been linked with improving customer relationships (Gallant, 2006), value in counselling (Matise, 2007); personal and professional development (Luckcock, 2007b); enhancing workplace spirituality (Kale, 2003); management development (Khan, 2002); improving self-understanding and ability to communicate with others (Cusack, 1996); leadership development (Luckcock, 2007a); and customer segmentation (Kamineni, 2005).

The benefit of this personality typology is that it is a logical way of dealing with individual differences, one that allows the understanding of individuals by assigning them to typical categories demonstrating archetypal characteristics, strengths, stress recurrence, relationship building, passions and anxieties (Riso & Hudson, 2003).

It is therefore only in understanding the dynamics, complexities and tendencies of the individual self that an employee can learn to manage their personal work challenges and that employers can learn to manage these employees effectively. The opportunity is for organisations to engage their employees more effectively by understanding their uniqueness’ and differences. The opportunities for individuals are to flourish if they find personal meaning in work, have an emotional allegiance to work or discover their greater potential in the face of work challenges.

Therefore, given the evidence that the study of work engagement and personality types independently do present organisational benefits, an investigation of personality type and work engagement does present an enticing opportunity for organisational exploration.
1.2 RESEARCH OPPORTUNITY

In previous studies, Langelaan, Bakker, Van Doornen and Schaufeli (2008) found that individual differences do make a difference in respect of work engagement. Work engagement correlated with low neuroticism and high extroversion (personality types found on the Big Five personality measures). In another study involving personality type, research conducted using police officers investigated Type A behaviour patterns in relation to work engagement. This investigation indicated direct relationships between Type A behaviour, job demands and health complaints. Work engagement, also partially mediated the effects of individual characteristics, job demands and job resources on organisational commitment and self-efficacy (Richardsen, Burke, & Martinussen, 2006). Research by Mostert and Rothmann (2006) also showed that emotional stability, conscientiousness, and extroversion predicted two of the subscales of work engagement, vigour and dedication. Other personality studies also indicated the relations with work engagement from a trait perspective (see Hallberg & Schaufeli, 2006; Hallberg, Johansson, & Schaufeli, 2007).

However, there is still much knowledge to be gained from research on personality type and work engagement. The historical research perspective on work engagement has been dominant in the areas on job demands and job resources. As outlined above, whilst various organisational variables and their influence on work engagement have been researched, individual variables such as personality types have been narrowly covered in research in relation to work engagement. It is acknowledged that both organisational variables and individual factors are constantly at play in influencing work engagement. As such, an explicit focus on individual factors such as personality type is value adding to current research on work engagement. The evolution of more sophisticated personality typologies like the MBTI and the Enneagram affords a more systematic and comprehensive view of personality types and work engagement. Although some typologies were used in research regarding work engagement, the Enneagram has not been used before and it will be beneficial because it is an integrated and holistic typology. This study on personality types using the Enneagram methodology seeks to illustrate the
connection between a system of typologies and work engagement; in addition to each engagement variable, vigour, dedication and absorption.

Apart from personality, demographic variables have also been shown to be other individual factors that may potentially influence the degree of work engagement of individuals. In this regard, previous studies found conflicting results. The demographic variables investigated include gender (Peter 2008; Schaufeli & Bakker, 2003); ethnicity (Bakken & Holzemer, 2000; Salamonson, Andrew & Everett, 2009); marital status (Bakker & Demerouti, 2009, Dikkers, Geurts, Kinnunen, Kompier, Taris, 2007); job level (Schaufeli & Bakker, 2003); tenure (De Lange, De Witte, Notelaers, 2008; Halbesleben & Wheeler, 2008) and age (Mostert & Rothmann, 2006; Schaufeli & Bakker, 2003). Therefore, demographic variables should also be taken into account when investigating individual factors that may potentially influence work engagement.

In addition to personality types and demographic variables, work context also contributes to work engagement. According to the South African Reserve Bank (2008), the South African financial industry is currently subjected to economic uncertainties. Increased costs in global oil, food, and basic goods have been significant. The rising inflation has a direct impact on local interest rates, decreased consumer spending and growing bad debts and is placing enormous tension in this sector. Most major South African banks have already placed embargoes on recruitment, printing, work related travel, client entertainment and initiated staff retrenchment in an effort to manage operational costs (Booysen, 2008). These institutions must optimise operations and can achieve this by optimising work engagement of each diverse staff member. Investigating personality and work engagement is critical to determine how to effectively manage individual personalities in organisations.

Work engagement is not restricted to a once-off experience but to a more continual, pervasive and optimistic work-related state of mind. An engaged employee would demonstrate the intensity aligned with positive energy, commitment and resilience; and find personal meaning, embrace challenges and feel an emotional allegiance towards work (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002).
In light of the above, the following research questions need to be investigated:

• How can personality type be conceptualised?
• How can work engagement be conceptualised?
• Is there a relationship between personality type and work engagement?
• Does work engagement manifest itself differentially across gender, ethnicity, marital status, job levels, tenure and age?

1.3 AIMS

The primary aim of this study was to understand the relationship between personality type and work engagement and the secondary aim to also investigate the demographical differences with regard to work engagement.

The specific aims of this study were:

• To conceptualise personality type from the literature;
• To conceptualise work engagement from the literature;
• To conceptualise the relationship between personality type and work engagement from the literature;
• To conceptualise the relationship between demographical variables and work engagement from the literature;
• To determine if there is a significant relationship between personality type and work engagement;
• To determine how work engagement differs with regards to gender, ethnicity, marital status, job levels, tenure and age.

1.4 RESEARCH METHODOLOGY

The research methodology explores the research design, population, measuring battery, data analysis and research procedure followed in this research.

1.4.1 Research design

A cross-sectional survey design was used in this research. This design entailed a cross-section or sample of a population (in this study the professional population in a financial institution) that was assessed by means of surveys or questionnaires at a single point in time to infer findings for the population (Terre Blanche & Durrheim,
1999). This method of research was selected due to the fact that it was a less time consuming, convenient and cost-effective design (Sekaran, 1992).

1.4.2 Population
The sample was drawn from the Marketing and Corporate Affairs Division of a major financial institute. This division is commonly referred to as a support division which concerns itself with marketing, communications, community social investment, government relations and human resources.

Non-probability or convenience sampling was used (Terre Blanche & Durrheim, 1999). This is a sampling technique where the probability of each element of the population being included in the sample is not known. The total population consists of 208 professionals. All 208 employees were invited to participate in this investigation.

1.4.3 Measuring Battery
The measuring battery consists of the Riso-Hudson Enneagram Type Indicator (RHETI) (Riso & Hudson, 2003) and the Utrecht Work Engagement Scale (UWES) (Schaufeli & Bakker, 2003). The RHETI was used to measure the personality type variable and the UWES was used to measure the work engagement variable.

1.4.4 The Riso-Hudson Enneagram Type Indicator (RHETI)
The description, reliability and validity of the RHETI are detailed.

a) Description
In the 1970s, Don Richard Riso and Russ Hudson discovered the Enneagram as a significant body of knowledge to be added to the field of psychology and human behaviour. They advanced this knowledge to develop the Riso Hudson Enneagram Type Indicator (RHETI). The RHETI was developed to provide a type indication of personality. The test is available via paper and pencil or on-line. The on-line medium was used for this study. The test taker must choose from 288 possible responses, of which a subset of 32 responses measure each of the nine personality types. The Enneagram consists of 144 paired forced-choices, self-report statements, such as a choice between these two statements: “I’ve been romantic and
imaginative” and “I’ve been pragmatic and down-to-earth”. The first statement is an item that indicates Type 5 or The Investigator type tendencies, whilst the second statement indicates Type 2 or The Helper type tendencies (Riso & Hudson, 2003, p. 20). Respondents choose from five choices from “strongly disagree” to “strongly agree” for each item. The resulting profile is presented by nine mean scores per personality type, where comparison is relative to the individual’s own mean scores and not a standard norm (Newgent, Parr, Newman & Higgins, 2004).

b) Reliability
The RHETI was scientifically validated for reliability and validity via a doctoral thesis (Newgent, 2001). The Cronbach alphas for each of the nine dimensions of personality were established as acceptable levels. Type 1: The Reformer-0.73, Type 2: The Helper-0.82, Type3: The Achiever-0.56, Type 4: The Individualist-0.70, Type 5: The Investigator-0.56, Type 6: The Loyalist-0.66, Type 7: The Enthusiast-0.80, Type 8: The Challenger-0.75, Type 9: The Peacemaker-0.79, and for overall Personality 0.72 (Newgent, 2001). Type 3- The Achiever, Type 5- The Investigator and Type 6- The Loyalist are less than the recommended level of 0.7 in terms of their Cronbach alphas and the results of these types should be interpreted with caution (Newgent, Parr, Newman, & Higgins, 2004).

Type 3- The Achiever, Type 5- The Investigator and Type 6- The Loyalist are less than the recommended level of 0.7 in terms of their Cronbach alpha and the results of these types should be interpreted with caution (Newgent, Parr, Newman, & Higgins, 2004).

c) Validity
Earlier studies using personality measures of the Millon Scales and the Myers Briggs Type Indicator indicated concurrent validity of the RHETI (Wagner & Walker, 1983). The NEO PI-R has been established as the benchmark for non-pathological personality measures. It is based on the five factor model of personality, measuring neurotism, extroversion, openness, agreeableness and conscientiousness. Newgent (2001) found strong correlations between the NEO PI-R and the RHETI. From a concurrent validity perspective, that is, when criterion measures obtained at the same
time as test scores (Huysamen, 1983); the RHETI was fairly consistent in predicting the factors on the NEO PI-R (Newgent, 2001).

Construct validity involves establishing a measure as it correlates with other variables that are known to be related to the construct (Huysamen, 1983). Construct validity was established using the OPQ32 (Bartram & Brown, 2005b) and the MBTI (Bartram & Brown, 2005a) by SHL. A strong association between the OPQ 32 and the MBTI has been established and subsequently establishing the empirical value of this tool.

1.4.5 Utrecht Work Engagement Scale
The description, reliability and validity of the UWES is detailed.

a) Description
The UWES instrument was developed by Schaufeli and Bakker (2003). The paper and pencil questionnaire reflects the three underlying dimensions of vigour, dedication and absorption which amount to an overall measure of work engagement. Originally the questionnaire comprised 24 items, and later evolved to 17, 15 and 9 items. The 17 item questionnaire is used for the current study. The UWES measures work engagement on a 7-point likert scale ranging from “never” (0) to “always” (6). Respondents respond to feeling and experience questions relative to work, recognising how often the feeling or experience prevails.

b) Reliability
Internal consistencies among the three engagement scales have been established using an iterative process (Schaufeli & Bakker, 2003). In an earlier study in the South African Police Services, the alpha coefficients reported 0.78 (vigour), 0.89 (dedication) and 0.78 (absorption) for the UWES (Storm & Rothman, 2003).

c) Validity
There were several validation studies on the relationship between burnout and work engagement (Schaufeli & Enzmann, 1998; Maslach, Schaufeli & Leiter, 2001; Storm & Rothmann, 2003). These studies continuously resulted in an overall negative correlation. Similarly a negative trend manifested between dedication and cynicism. However, a weak correlation was found between vigour and exhaustion, and
absorption and burnout scales (Schaufeli & Bakker, 2003). Prins (2007) re-validated the UWES and established its psychometric properties for a South African sample.

1.4.6 Data Analysis
In the context of this research, the relationship between personality and work engagement is analysed at an individual level of analysis. Descriptive statistics (Howell, 1985) were used to determine the type of personality and degree of work engagement of employees in the sample group. The mean, minimum and maximum values and standard deviations were reported in this regard. Correlation analysis and Chi-Square methods were utilised to investigate the relationship between personality type and work engagement. One-way analysis of variance (ANOVA) was used to determine the differences between demographic groups with regard to their work engagement.

1.4.7 Research Procedure
The relevant authorities of the Financial Institution were approached and the relevant approvals to conduct this research were obtained, and are contained in Annexure A. It was also agreed that feedback will be provided to participants. Test administration was twofold.

a) RHETI
Approval to use the RHETI measurement tool for this study was obtained from the Enneagram institute and is contained in Annexure B. An organisational development initiative was planned and communicated to employees via e-mail and a Line Manager Communiqué regarding the self-development and organisational development value of a personality assessment. Staff members were also informed that the data will be used for research purposes via management. The RHETI was administered via e-mail and participants will be directed to the website for on-line completion.

b) UWES
The UWES was administrated via a big systems event hosted for this division. Participants were informed that completion will be for research purposes. Questionnaires will be returned at the event and participants will also be given the
option of responding via e-mail. A consent form was attached to the questionnaire as a front page providing an opportunity for participants to consent prior to actual testing. The administrator was introduced as a student to reduce anxiety concerning unfair organisational discrimination.

Regarding both assessments, informed consent was elicited via the signing of a consent form which served as the cover page of the work engagement questionnaire and as such, participation was voluntary. Participant anonymity and confidentiality was contracted to ensure objectivity in responses. Special care was taken to reduce ambiguity in respondent understanding by simplifying communication and reinforcing instructions.

Reliability and validity were established by:
- using tests with acceptable psychometric properties,
- administering and evaluating tests by appropriately trained personnel;
- conducting an extensive literature review of the variables under study.
- assuring that participant confidentiality will be maintained.

1.5 CHAPTER OUTLINE
Chapter 1 provides an orientation to or the background to study. Reasons for conducting the study are provided as well as the aims of the research and how the study is to be conducted.

Chapter 2 provides a theoretical review on personality type. There is a specific focus on definition and measurement of this variable.

Chapter 3 provides a theoretical review on work engagement. There is a specific focus on definition and measurement of this variable.

Chapter 4 provides information of the empirical study that was conducted. The quantitative methodologies are explained. The sample, measuring instruments, how the information was gathered and the hypotheses formulated are discussed.
Chapter 5 provides the results of the study, that is, if there is a relationship between personality type and work engagement for the sample which was researched as well as biographical differences in terms of this relationship.

Chapter 6 provides the conclusions drawn, the limitations and possible recommendations for the organisation and future research.

1.6 CHAPTER CONCLUSION
Chapter 1 presents the background to and motivation for the research. It specifically focuses on the research opportunity, exploring the current economic climate and existing research, the aims and the empirical research methodology. The chapter closes with an outline of chapters to follow. The proceeding chapters will explore the relationship between personality and work engagement.

Chapter 2 explores the literature on personality in the context of this study.
CHAPTER 2
PERSONALITY TYPES

This chapter investigates the emergence, definitions and theories of personality type; as well as personality type dimensions, related concepts and the significance of personality type.

2.1 INTRODUCTION

The current economic downturn has placed great pressure on employees’ appetites for success and growth. The impact on employees is that they need to leverage their personality strengths and talents to be able to cope, be resilient and persevere toward success. Given the diversity of personalities prevalent in the work place, organisations face an even greater challenge of creating a work climate that promotes work engagement amongst all its employees. With this in mind, this study focuses on personality type and work engagement.

2.2 THE EMERGENCE OF PERSONALITY TYPES

The evolution of theoretical perspectives regarding individual psychological differences and personality has been broad and varied (Saucier & Simonds, 2006). One of the earliest founders of experimental psychology, Wilhelm Wundt, focused on researching the “generalised mind” and “universal … characteristics of mental life” in a scientific endeavour rather than unique factors relevant to human beings (Allport, 1937, p. 6-8). However, during a scientific experiment where researchers were recording the motion of the stars, there were differing records of the same instance, resulting in the realisation that there was unique differences among the researchers’ reaction time. Galton later popularised the value of differential psychology, as he focused on the variation in intellect and disposition among individuals. This was the beginning of the study of personality theories and its focus on the psychology of individual differences, and this interest has since grown exponentially. Personality has proven to be a highly complex and diverse body of knowledge. Many theorists have illustrated their unique blends of the theory to advocate the nature of human personality.
The word personality is derived from the Greek word *persona* referring to the character played by an actor in theatre (Hjelle & Ziegler, 1976, p. 4). This reference to a social and superficial representation has evolved into a more complex scientific area of study of differences among individuals.

Personality is “a relatively stable set of feelings and behaviours that have been significantly formed by genetic and environmental factors” (Ivancevich & Matteson, 2002, p. 124).

The evolution of personality theory revealed the emergence of two distinct variations in personality approaches, namely, the trait theories and the type theories of personality. The trait theory refers to default and consistent unitary dispositions or single dimension in behaviour that occur daily. However, the consistent aggregation of a set of traits may amount to a personality type (Furnham, 1989). The focus of this study is specifically on personality types.

Carl Jung pioneered introversion and extroversion as the first types (Jung, 1923). This evolved into sixteen types, eight variations of introversion and eight variations of extroversion. Introversion and Extroversion later became elemental in the “big five” in personality traits (Derlega, Winstead & Jones, 2005).

### 2.3 DEFINITION OF PERSONALITY TYPES

Jung (1923, p. 612) defined personality types as “a specimen, which reproduces in a characteristic way” in “general” circumstances. There is a specific focus on the deduction of characteristic behaviour in “general” circumstances, that is, natural tendencies that act as a filter or allow individuals to typically cope with normal circumstances. Jung further elaborated that “a type is a characteristic model of a general attitude”. A “general attitude” or filter helps us understand ourselves and the world around us. A filter is also a means of responding, expressing and defending ourselves, both adaptively and maladaptively. Furthermore, a filter facilitates how we relate to other people. As such, personality type facilitates both adaptive and maladaptive responses and orientations in general or normal circumstances.
Personality type is “an expression of one of the fundamental orientations (emotion, intellect, or instinct) or metaphors for the various psychological functions … and temperaments” operating in individuals (Riso & Hudson, 1996, p. 8; Riso & Hudson, 2003, p. 7-8). A significant aspect of this definition relates to the reference of an innate or natural orientation toward the environment. Habitual response behaviour or a psychological orientation is also implied via the “fundamental orientations”.

Furthermore, Miller (1991, p.16) described types as a “prototype”. A prototype refers to an archetype or a model of behaviour. An important aspect of this definition relates to a dominant and unique set of behaviours.

For the purposes of this research, personality type is defined as a unique cluster of innate, dominant, adaptive and maladaptive psychological orientations of an individual in response to social and environmental demands.

2.4 THEORIES OF PERSONALITY TYPES

Theoretical versions of personality types include Jung’s types (Jung, 1923), Myers and Briggs’ types (Myers & McCaulley, 1985), Keirsey’s re-conceptualised Jungian temperament types and the Enneagram types advocated by Riso and Hudson (2003).

Jung observed that evidence of psychological types was prevalent in Gnostic philosophy pre-160A.D. and identified three types “thinking, feeling and sensation”, also known as psychological areas of functioning (Jung, 1923; p. 18). In his observations of dominant controversies unveiled regarding Christian philosophy, Jung realised that each proponent of a differing view in these controversies held up to his own reality of the world. For instance, Tertullian and Origen held absolute opposing views of Christianity and this was thought to be driven by their introverted and extroverted natures respectively, suggesting dimensions of the human psyche (Jung, 1923). Jung identified eight mental preferences or types of behaviour. The human psyche develops in response to dialectic dimensions, continuously striving towards becoming a full human being (Jung, 1923).
In an alternative lexical and descriptive approach to personality, Myers and Briggs, well renowned theorists, analysed and operationalised Jung’s work on personality to produce types or four preference scales, that is, extroversion (E) – introversion (I), sensing (S) – intuition (I), thinking (T) – feeling (F) and judging (J) – perceiving (P). The preference scales, known as the Myers-Briggs Type Indicator evolved into a permutation of sixteen preference types and are psychological mechanisms used to identify differences in individuals with the intention to understand and grow the individual personally and interpersonally (Myers & McCaulley, 1985). The Myers and Briggs types are notationally represented as:

<table>
<thead>
<tr>
<th>Sensing Types</th>
<th>Intuitive Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introverts</td>
<td></td>
</tr>
<tr>
<td>ISTJ</td>
<td>INFJ</td>
</tr>
<tr>
<td>ISTP</td>
<td>INFP</td>
</tr>
<tr>
<td>Extroverts</td>
<td></td>
</tr>
<tr>
<td>ESTP</td>
<td>ENFP</td>
</tr>
<tr>
<td>ESTJ</td>
<td>ENFJ</td>
</tr>
</tbody>
</table>

Using the sixteen types initiated by Carl Jung, propagated by Katharine Briggs, and Isabel Briggs Myers, Dr Keirsy built on, but deviated from his predecessors in that he strongly believed that the dominant functions of introversion and extroversion were so powerful that they played a governing role to the remaining type indicators. The Keirsy Temperament Theory™ was subsequently developed by Dr David Keirsy (Keirsey & Bates, 1984). The Keirsy temperament instrument illustrates the following types:

- Extroverted Sensing (Myers and Briggs types: ESFP, ESTP)
- Introverted Sensing (Myers and Briggs types: ISTJ, ISFJ)
- Extroverted Intuition (Myers and Briggs types: ENFP, ENTP)
- Introverted Intuition (Myers and Briggs types: INFJ, INTJ)
- Extroverted Thinking (Myers and Briggs types: ESTJ, ENTJ)
- Introverted Thinking (Myers and Briggs types: ISTP, INTP)
- Extroverted Feeling (Myers and Briggs types: ESFJ, ENFJ)
- Introverted Feeling (Myers and Briggs types: INFP, ISFP)
The Enneagram system of personality types were used for the purpose of this study (Riso & Hudson, 2003). The Pythagorians popularised the Enneagram symbol over 4000 thousand years ago. The nine point geometric symbol is deliberated as illustrating nine personality types. Evidence of this symbol was also found amongst the works of Aristotle, Plato and subsequently neo-Platonists. Several religions were also found to sport variations of this symbol (Riso & Hudson, 1987). However, in the 1950s, George Gurdjieff, a Russian educator and contemporary of Freud, used the symbol to explain universal actuality. At the same time in another part of the world in Chile, Oscar Ichazo used the symbol to explain the human psyche holistically and dynamically (Riso & Hudson, 2003). By the 1970s, Claudio Naranjo, a gestalt psychiatrist, initiated the awareness of the Enneagram in North America.

From 1973 and 1988 respectively, Don Riso and Russ Hudson investigated the Enneagram system as a reflection of the psychological functions prevalent in the human psyche. Riso and Hudson built on the renowned works of Carl Jung to advance the Enneagram system. Individuals gravitate towards unique patterns of behaviour habitually. The patterns of behaviour are developed as a result of innate temperament, physical development, environmental influences, personal preferences and life experiences. Distinct and discrete patterns of behaviour emerge as unique types. The Enneagram represents a dynamic, all encompassing system of personality types.

2.5 DIFFERENTIATING PERSONALITY TYPES
The theories of Karen Horney, Sigmund Freud and Carl Jung are explored in contrast to the Enneagram.

2.5.1 Karen Horney and the Enneagram
Karen Horney was a psychoanalyst who proposed three neurotic clarifications (Riso & Hudson, 1996):
- “moving away from people” (the withdrawn types);
- “moving against people” (the aggressive types);
- “moving toward people” (the compliant types).
Expanding on her theoretical premise, the Enneagram focuses attention on more than people, but the entire internal and external environment. Internally people may be driven by their own fears and superegos whilst externally people may be driven by nature or general activity. Illustrated in Table 2.1, when Horney’s three clarifications are plotted against the Enneagram triads and types, a unique triad emerges depicting common and distinct patterns of behaviour. Furthermore, the comparison may suggest that she may have been on the verge of discovering a clinical three by three personality matrix. The connection between Horney’s work and the Enneagram is believed to be theoretically significant (Riso & Hudson, 1996).

2.5.2 Sigmund Freud and the Enneagram
Sigmund Freud’s contribution to the structural constitution of human nature involved the id, ego and superego. Like with the parallel drawn with Horney’s work, when the id, ego and superego are plotted against the nature depicted by the nine personality types on the Enneagram, a unique pattern of presence becomes evident (Riso & Hudson, 1996). Moreover, referring to Table 2.1, the parallel correspondence to Horney’s work also becomes evident. This implies that Freud’s work may have also evolved to the discovery of a three by three personality matrix.

2.5.3 Carl Jung and the Enneagram
It is evident in Table 2.1 that the one-on-one type comparisons become more challenging in reflecting on Jung’s work. Jung proposed that there were two general psychological attitudes known as introversion and extroversion and four psychological functions known as thinking, feeling, intuition and sensation. These dimensions result in a two by four type matrix. When plotted against the Enneagram types, Type 3 emerges as not having a direct comparison. Riso and Hudson (1996) attribute the adaptability of a Type 3 as not fitting neatly into any type, but may actually be represented in a few Jungian types.
Table 2.1
Horney, Freud and Jung’s Clarifications Plotted Against Enneagram Triads and Types

<table>
<thead>
<tr>
<th>Enneagram Personality Triad</th>
<th>Enneagram Type</th>
<th>Horney’s Clarification</th>
<th>Freud’s Clarification</th>
<th>Jung’s Clarification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instinct (Rage)</td>
<td>Type 1: The Reformer</td>
<td>Compliant</td>
<td>Superego</td>
<td>Extroverted thinking type</td>
</tr>
<tr>
<td></td>
<td>Type 8: The Challenger</td>
<td>Aggressive</td>
<td>Ego</td>
<td>Extroverted intuitive Type</td>
</tr>
<tr>
<td></td>
<td>Type 9: The Peacemaker</td>
<td>Withdrawn</td>
<td>Id</td>
<td>Introverted sensation type</td>
</tr>
<tr>
<td>Thinking (Anxiety)</td>
<td>Type 5: The Investigator</td>
<td>Withdrawn</td>
<td>Id</td>
<td>Introverted Thinking type</td>
</tr>
<tr>
<td></td>
<td>Type 6: The Loyalist</td>
<td>Compliant</td>
<td>Superego</td>
<td>Introverted Feeling type</td>
</tr>
<tr>
<td></td>
<td>Type 7: The Enthusiast</td>
<td>Aggressive</td>
<td>Ego</td>
<td>Extroverted Sensation type</td>
</tr>
<tr>
<td>Feeling (Shame)</td>
<td>Type 2: The Helper</td>
<td>Compliant</td>
<td>Superego</td>
<td>Extroverted feeling type</td>
</tr>
<tr>
<td></td>
<td>Type 3: The Achiever</td>
<td>Aggressive</td>
<td>Ego</td>
<td>No comparison</td>
</tr>
<tr>
<td></td>
<td>Type 4: The Individualist</td>
<td>Withdrawn</td>
<td>Id</td>
<td>Introverted Intuitive type</td>
</tr>
</tbody>
</table>
The Enneagram fit with these theorists indicate the universality and dynamic, yet complex nature of humans. Although not within the scope of this research, detailed comparisons between these theorists may yield rich and valuable information to further crystalise personality types.

2.6 DIMENSIONS OF PERSONALITY TYPES

As the basis of this study is grounded in the Enneagram types, personality type dimensions are explored from this perspective.

The Enneagram advocates nine dimensions or types of personality (Riso & Hudson, 1999; 2000; 2003). Although each individual is born with a dominant and unique orientation to the nine types, which is typically their distinctive possession of a combination of types which make up the individual’s profile of personality, all individuals have the capacity to develop characteristics of all types on the Enneagram. In the study of personality, this feature of the Enneagram becomes the most influential factor to the human capacity to grow and evolve into what Roger’s refers to as the “fully functioning human being” (Rogers, 1967, p.289). It is in identifying, understanding and becoming self-aware of default tendencies captured by personal orientation to individual’s unique type profile that individuals are liberated from personalities and are able to discover the true self.

Riso and Hudson (1999; 2000; 2003) explain that personality type remains typical of an individual throughout his/her life cycle; although he/she may develop new, adaptive and maladaptive skills, attitudes and behaviours. The types are not gender sensitive and equally apply to both males and females. Individuals may not manifest all aspects of their type profile as they transition between healthy, average and unhealthy states of their personality type.

However, the value placed on specific types of individuals may be culturally driven as some characteristics are valued more by one culture as opposed to another culture. This further indicates that specific types of individuals may prefer and tend toward certain circumstances while other types of individuals tend to entirely different circumstances. Each type has distinctive orientations, and, together is symbolic of
the full range of human potential. As individuals’ have the potential to grasp all nine areas of psychological functioning, making them uniquely similar, each individual has different levels of these functions, making them uniquely dissimilar (Lapi-Bogda, 2007; Riso & Hudson, 1987).

2.6.1 Types on the Enneagram

Ennea is the Greek word for nine and the meaning of gram is “points”. The Enneagram is illustrated as a nine pointed symbol on which the nine personality typologies are represented as indicated in Figure 2.1 (Lapi-Bogda, 2007, p. 1; Riso & Hudson, 1987).

The types on the Enneagram are referenced by numbers to ensure objectivity and to avoid unnecessary labelling. However, each type does show dominant tendencies and labels do provide an ease of reference. The labels derived from the RHETI were used in this study to align with the measuring instrument in use. Typical of employees in an organisation, each type is explored by referring to the labels, with a brief description and exploration of their relative characteristics as they pertain to their propensity for wellness in their work.

Type 1 is commonly referred to as “the Judge” (Callahan, 1992, p. 11), “the Educator” (Riso & Hudson, 1999, p. 107), or “the Reformer” on the RHETI (Riso & Hudson, 2000, p. 18) and is typically described as being reasonable, idyllic and righteous, and a purist. Type 1 or the Reformer employees strive to be correct,
idealistic and avoid condemnation at all costs. The strength that they display in their work environment is to be decisive and seeks change toward calculated improvement. The Reformer employee is likely to experience well-being at work providing the environment is conducive for progressive change. However, when inhibited the Reformer employee may become bitter and judgemental, inhibiting well-being.

Type 2 is commonly referred to as “the Caretaker” (Callahan, 1992, p. 19), “the Special Friend” (Riso & Hudson, 1999, p. 136), or “the Helper” on the RHETI (Riso & Hudson, 2000, p. 18) and is typically described as being caring, nurturing, compassionate, encouraging and giving. Type 2 or the Helper employees strive for recognition for their efforts. The strength that they display in their work environment is to be nurturing and generous. The Helper employee is likely to experience well-being at work providing the environment is conducive for nurturing relationships. In an environment that advocates isolated working conditions and individualistic targets, the Helper is less likely to be stimulated and engaged.

Type 3 is commonly referred to as “the Performer” (Callahan, 1992, p.27), “the Best” (Riso & Hudson, 1999, p. 162), or “the Achiever” on the RHETI (Riso & Hudson, 2000, p. 18) and is typically described as being driven, determined, motivated, accomplishment-oriented and pragmatic. Type 3 or the Achiever employees strive for recognition but for being comparatively better than other employees. The strength that they display in their work environment is to be ambitious and effective. The Achiever employee is likely to experience well-being at work providing the environment is conducive for healthy competitive achievement. However, in an environment of unhealthy competition, obsessive, egotistical and deceitful employee tendencies may emerge making the environment less conducive to well-being.

Type 4 is commonly referred to as “the Symbol Maker” (Callahan, 1992, p. 33), “the Special One” (Riso & Hudson, 1999, p. 189), as well as “the Individualist” on the RHETI (Riso & Hudson, 2000, p. 18) and is typically described as being sensitive, reserved, instinctive, expressive and self-centred. Type 4 or the Individualist employee strives to be distinguished and recognised for uniqueness. The strength that they display in their work environment is to be level-headed and in control. The Individualist employee is likely to experience well-being at work providing the
environment is conducive to surfacing the employee’s uniqueness as opposed to a regimental perspective of all employees or a “paint brush approach” to employees.

Type 5 is commonly referred to as “the Watcher” (Callahan, 1992, p. 43), the Expert” (Riso & Hudson, 1999, p. 218) or “the Investigator” on the RHETI (Riso & Hudson, 2000, p. 18) and is typically described as being deep, analytical, insightful, pioneering and cautious. Type 5 or the Investigator employee strives for mastery to protect the self from the environment. The strength that they display in their work environment is to be open-minded and resist attachment. Work, engaging their pioneering and investigative spirit, is likely to result in well-being at work. Barring this kind of environment, the Individualist employee can become anti-social and isolated, inhibiting well-being at work.

Type 6 is commonly referred to as “the Defender” (Callahan, 1992, p. 53), the Stalwart” (Riso & Hudson, 1999, p. 244) or “the Loyalist” on the RHETI (Riso & Hudson, 2000, p. 18) and is typically described as being dedicated, security-oriented, and dependable. Type 6 or the Loyalist employee strives to maintain security and enlist support of others. The strength that they display in their work environment is to be firm and bold. Synergy with the work environment is likely to illicit commitment and immersion in work. However, when the Loyalist feels insecure and apprehensive, attributes such as distrust is likely to inhibit well-being at work.

Type 7 is commonly referred to as “the Materialist” (Callahan, 1992, p. 61), the Energiser” (Riso & Hudson, 1999, p. 271) or “the Enthusiast” on the RHETI (Riso & Hudson, 2000, p. 18) and is typically described as being active, high-spirited, impulsive, proficient and excessive. Type 7 or the Enthusiast employee strives to feel liberated, stimulated and avoid pain. The strength that they display in their work environment is to be optimistic, proficient and clear-headed. However, the Enthusiast can become excessive and impulsive when under pressure, inhibiting well-being.

Type 8 is commonly referred to as “the Chief” (Callahan, 1992, p. 69), the Energiser” (Riso & Hudson, 1999, p. 298) or “the Challenger” on the RHETI (Riso & Hudson, 2000, p. 18) or and is typically described as being potent, controlling, self-assured,
decisive and forceful. Type 8 or the Challenger employees strive to be autonomous and in control. The strength that they display in their work environment is to show straightforwardness and self mastery. The challenger employee is likely to experience well-being as long as he/she feels in control of his/her work. When control is compromised, well-being may be inhibited as the Challenger succumbs to becoming dominating, dictatorial and confrontational.

Type 9 is commonly referred to as “the Peacemaker” (Callahan, 1992, p. 77; Riso & Hudson, 2000, p. 18) or the Energiser” on the RHETI (Riso & Hudson, 1999, p. 324) and is typically described as being pleasing, modest, approachable, supportive and delightful. Type 9 or the Peacemaker employee strives to preserve status quo and avoid anxiety. The strength that they display in their work environment is to be action-oriented, interactive and autonomous. In optimal capacity, the Peacemaker employee can be self possessed, dynamic, attentive, temperate and humble. When resisting change, work well-being can be compromised as the Peacemaker employee becomes complacent, neglectful and disengaged.

Indicating dominant personality types is the primary purpose of the Enneagram. However, it offers several secondary and additional applications. These secondary applications include personality triads, levels of development, wings of each type, the growth paths, the stress paths, the social styles, approaches to managing change, conflict handling of each type and problem solving of each type. Each of these secondary applications will be briefly discussed.

2.6.2 Secondary Dimensions on the Enneagram

Once an individual’s type is established, several implications arise, referred to as the secondary dimensions. For instance, once a dominant type is known, one can extrapolate the triad, growth path, stress path and social styles, etcetra. Further information becomes available to provide deeper understanding of the patterns of behaviour of a specific personality type and also reasons for variation in behaviour within that type.
a) Triads

The nine personality types form three triads or centers embedded within the Enneagram symbol which depict tendencies toward instinctive, thinking and feeling tendencies as illustrated in Figure 2.2. These tendencies, on the one hand, indicate the relatedness among the types within a center and on the other hand, indicate the differences in ego defences contracted by the nine types of personality. It is accepted that all types constitute the instinctive, thinking and feeling components of the human psyche. However, the dominance in leveraging one center over the other differs among the different types, as well as the actual manifestation in behaviour. As illustrated in figure 2.3, the ego defences associated with the instinctive triad is anger or rage, the thinking triad is anxiety and the feeling triad with shame. When these responses are activated, an employee is less likely to be prone to optimum well-being.

Figure 2.2 Centers of Dominance on the Enneagram (www.Enneagraminstitute.com)

Figure 2.3 The Dominant Ego Response Triad (www.Enneagraminstitute.com)
However, how each type responds to the characteristic emotion is quite different. For instance, within the instinct triad, a Type 8 will overtly react to anger, while a Type 9 may repress anger and a Type 1 may seek to stifle anger. Similarly in the thinking triad, a Type 5 may withdraw due to anxiety, a Type 6 may dubiously consult with others and a Type 7 may escape into a world of possibilities in response to anxiety. In the feeling triad, the Type 2 attempts to gain affection in response to shame, a Type 3 represses shame and a Type 4 focuses on personal uniqueness in response to shame (Riso & Hudson, 1999). Knowledge of the triad and the corresponding emotion provides more contexts to how employees manifest a specific type and how well-being is influenced.

b) Wings
An additional perspective to the nine types offered by the Enneagram theory is a sub-type called wings (Edwards, 1991; Riso & Hudson, 1999). As referenced in Table 2.2, the wing of a type is typically the type that falls on either side of an individual’s dominant personality type on the Enneagram diagram (Riso & Hudson, 1999; 2000; 2003). Individuals may develop one or/and two of their wing types adjacent to their dominant types. Illustrated in Table 2.2, an individual with a Type 3 dominant personality with an evolved Type 2 wing may exhibit the personality Type 3 quite differently to an individual with a Type 3 dominant personality with an evolved Type 4 wing. This dimension provides further depth to variances, understanding and self-awareness.
Table 2.2

*Potential Wing Types of Each Type*

<table>
<thead>
<tr>
<th>Dominant Type</th>
<th>Potential Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>Types 9, 2</td>
</tr>
<tr>
<td>Type 2</td>
<td>Types 1, 3</td>
</tr>
<tr>
<td>Type 3</td>
<td>Types 2, 4</td>
</tr>
<tr>
<td>Type 4</td>
<td>Types 3, 5</td>
</tr>
<tr>
<td>Type 5</td>
<td>Types 4, 6</td>
</tr>
<tr>
<td>Type 6</td>
<td>Types 5, 7</td>
</tr>
<tr>
<td>Type 7</td>
<td>Types 6, 8</td>
</tr>
<tr>
<td>Type 8</td>
<td>Types 7, 9</td>
</tr>
<tr>
<td>Type 9</td>
<td>Types 8, 1</td>
</tr>
</tbody>
</table>

c) Levels of Development Continuum

In addition to differences among types influenced by triad and wing dominance, the Enneagram theory advocates differences within a singular type. Each type of personality ranges on a continuum from healthy to average to unhealthy states, indicated by Table 2.3 (Riso & Hudson, 1999; 2000; 2003). This is an indication of the reason for the uniqueness among individuals manifesting the same types as well as an indication of the dynamic range of adaptation and maladaptation among individuals. The levels are an indication of an individual's psychological state of mind and assimilation with dominant type. This is also the reason why personality is in constant flux in response to personal and environmental influences. At each level there are particular behaviours that reveal level of development such as difficulties, social relatedness with other roles and apprehensions. Transforming from level 9 toward level 1 is an indication of developing adaptation or integration whilst transforming from level 1 toward level 9 is an indication of maladaptation or disintegration. It is believed that as individuals graduate from level 9 to level 1 towards a healthy state, well-being at work tends towards its optimum. Alternatively, as individuals deteriorate from Level 1 to level 9, work well-being declines.
### Table 2.3

**Levels of Development of Each Type**

<table>
<thead>
<tr>
<th>Healthy</th>
<th>Level 1</th>
<th>The level of liberation yields individuals who are content and free.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td></td>
<td>The level of Psychological Capacity indicates individuals who are in touch with themselves and their individuality.</td>
</tr>
<tr>
<td>Level 3</td>
<td></td>
<td>The level of Social Value demonstrates individuals who embody a spirit of collaboration and loyalty.</td>
</tr>
<tr>
<td>Average</td>
<td>Level 4</td>
<td>The level of Imbalance/Social Role illustrates individuals who are unbiased and value-driven.</td>
</tr>
<tr>
<td>Level 5</td>
<td></td>
<td>The level of Interpersonal Control is revealed by self-belief and perceived control of the environment.</td>
</tr>
<tr>
<td>Level 6</td>
<td></td>
<td>The level of Overcompensation yields a spirit of acute need for ego building.</td>
</tr>
<tr>
<td>Unhealthy</td>
<td>Level 7</td>
<td>The level of Violation is evidenced by violation of others to maintain ego needs.</td>
</tr>
<tr>
<td>Level 8</td>
<td></td>
<td>The level of Obsession and Compulsion shows an extreme lack of control and perception of reality.</td>
</tr>
<tr>
<td>Level 9</td>
<td></td>
<td>The level of Pathological Destructiveness illustrates evidence of extreme self-compromise.</td>
</tr>
</tbody>
</table>
d) Growth Path

The growth path of a type depicts movement towards a constructive remedy or path of integration of developmental gaps of that type, or movement from Level 9 through to level 1 (Riso & Hudson, 1999; 2000; 2003). The approach to development requires leveraging a predisposed strategy, indicated by Figure 2.4. For instance, a Type 1 learns to manage anger by adopting a more spontaneous and pleasant disposition similar to a healthy Type 7. Each type has a developmental or growth path towards traits of another type on the Enneagram. It is believed that as employees developmentally transition between levels, they increase in well-being. Further illustrations may be found in Table 2.4.

Table 2.4

The Direction of Integration of Each Type

<table>
<thead>
<tr>
<th>Dominant Type</th>
<th>Growth Path Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1 e.g. Anger</td>
<td>Type 7: Spontaneous</td>
</tr>
<tr>
<td>Type 2 e.g. Pride</td>
<td>Type 4: Emotional Awareness</td>
</tr>
<tr>
<td>Type 3 e.g. Deceit</td>
<td>Type 6: Committed</td>
</tr>
<tr>
<td>Type 4 e.g. Envious</td>
<td>Type 1: Principled</td>
</tr>
<tr>
<td>Type 5 e.g. Anxious</td>
<td>Type 8: Decisive</td>
</tr>
<tr>
<td>Type 6 e.g. Pessimistic</td>
<td>Type 9: Optimistic</td>
</tr>
<tr>
<td>Type 7 e.g. Gluttonous</td>
<td>Type 5: Focused</td>
</tr>
<tr>
<td>Type 8 e.g. Lustful</td>
<td>Type 2: Caring</td>
</tr>
<tr>
<td>Type 9 e.g. Laziness</td>
<td>Type 3: Energetic</td>
</tr>
</tbody>
</table>

Figure 2.4 The Direction of Integration (www.EnneagramInstitute.com)
e) Stress Path

Figure 2.5 The Direction of Disintegration (www.Enneagraminstitute.com)

Like the growth path, the stress path of a type depicts maladaptation or a path of disintegration of developmental gaps of that type, captured by Figure 2.5 (Riso & Hudson, 1999; 2000; 2003). For example, a Type 1 who is methodical may adopt the typical Type 4 irrationality. When stressed each type is pre-disposed to a stress path and traits typical of another type on the Enneagram. It is believed that as employees destructively transition between levels, they decline in well-being.

Table 2.5

The Direction of Disintegration of Each Type

<table>
<thead>
<tr>
<th>Dominant Type</th>
<th>Stress Path Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1 e.g. Methodical</td>
<td>Type 4: Irrational</td>
</tr>
<tr>
<td>Type 2 e.g. Needy</td>
<td>Type 8: Dominating</td>
</tr>
<tr>
<td>Type 3 e.g. Driven</td>
<td>Type 9: Apathy</td>
</tr>
<tr>
<td>Type 4 e.g. Aloof</td>
<td>Type 2: Clinging</td>
</tr>
<tr>
<td>Type 5 e.g. Detached</td>
<td>Type 7: Scattered</td>
</tr>
<tr>
<td>Type 6 e.g. Dutiful</td>
<td>Type 3: Arrogant</td>
</tr>
<tr>
<td>Type 7 e.g. Scattered</td>
<td>Type 1: Perfectionist</td>
</tr>
<tr>
<td>Type 8 e.g. Self-confident</td>
<td>Type 5: Fearful</td>
</tr>
<tr>
<td>Type 9 e.g. Complacent</td>
<td>Type 6: Worried</td>
</tr>
</tbody>
</table>
f) Social Styles
Riso and Hudson (1999; 2000; 2003) highlight that each type also adopts distinct social tendencies that help him/her to cope and support the individual’s self-image. Although each type illustrates the social tendency quite differently, there are similarities in approaches depicted in Table 2.6.

Table 2.6
Social Styles of Each Type

<table>
<thead>
<tr>
<th>Social Style</th>
<th>Enneagram Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assertive Social Style:</td>
<td>Type 3 e.g. Charming others</td>
</tr>
<tr>
<td>Individuals tend to strengthen their ego perspective.</td>
<td>Type 7 e.g. Sidetracking others</td>
</tr>
<tr>
<td></td>
<td>Type 8: e.g. Controlling others</td>
</tr>
<tr>
<td>Dutiful Social Style:</td>
<td>Type 1: e.g. Correcting others</td>
</tr>
<tr>
<td>Individuals tend to enforce being needed by others.</td>
<td>Type 2: e.g. Creating dependencies on self</td>
</tr>
<tr>
<td></td>
<td>Type 6: e.g. Testing commitment</td>
</tr>
<tr>
<td>Withdrawn Social Style:</td>
<td>Type 4: e.g. Being temperamental</td>
</tr>
<tr>
<td>Individuals withdraw into an inner world.</td>
<td>Type 5: e.g. Detaching emotionally</td>
</tr>
<tr>
<td></td>
<td>Type 9: e.g. Passive aggression</td>
</tr>
</tbody>
</table>

g) Approaches to Managing Change
Each type on the Enneagram also approaches change in a self-preservation manner and manage change in either an incremental or revolutionary manner (Riso & Hudson, 1999; 2000; 2003). Incremental change refers to adapting to change at a slower staggered pace as opposed to radical adaptation to change. In order to adapt to change, each type leverages a different strategy to aid making the change. Adapting and integrating to change suggests a typical path to adaptive transformation for each type. For instance in Table 2.7, a Type 1 individual is able to make incremental change by learning to accept the change, that is, acceptance. A Type 6 adapts to change rapidly by taking the courage to face change. Well-being is influenced positively by the adaptation or negatively by maladaptation that ensues in social relationships as well as in managing change.
Table 2.7

Approaches to Managing Change of Each Type

<table>
<thead>
<tr>
<th>Approach to Managing Change</th>
<th>Enneagram Type and Path to Transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revolutionary Change</td>
<td>Type 3: Truthfulness</td>
</tr>
<tr>
<td></td>
<td>Type 6: Courage</td>
</tr>
<tr>
<td></td>
<td>Type 9: Self-remembering</td>
</tr>
<tr>
<td>Incremental Change</td>
<td>Type 1: Acceptance</td>
</tr>
<tr>
<td></td>
<td>Type 2: Self-nurturing</td>
</tr>
<tr>
<td></td>
<td>Type 4: Forgiveness</td>
</tr>
<tr>
<td></td>
<td>Type 5: Compassion</td>
</tr>
<tr>
<td></td>
<td>Type 7: Gratitude</td>
</tr>
<tr>
<td></td>
<td>Type 8: Self-surrender</td>
</tr>
</tbody>
</table>

h) Approaches to Conflict Handling

There are primary tendencies illustrated by the different types in response to disagreement or dissonance (Riso & Hudson, 1999; 2000; 2003). Although three types typically respond in a similar manner such as a positive outlook, as shown in Figure 2.6, the manner in which they act out the response differs significantly, shown in Table 2.8.

Figure 2.6 Conflict Styles ([www.Enneagraminstitute.com](http://www.Enneagraminstitute.com))

*9-2-7: Positive Outlook Group *1-3-5: Competency Group * 4-6-8: Intensity Group
### Table 2.8

**The Conflict Style of Each Type**

<table>
<thead>
<tr>
<th>Conflict Style</th>
<th>Enneagram Type</th>
</tr>
</thead>
</table>
| Positive Outlook: These types tend to take an optimistic perspective on conflict | Type 2: Focus on others
|                                                                                 | Type 7: Focus on themselves
|                                                                                 | Type 9: Focus on others and themselves |
| Competency: These types tend to take a proficiency or objective view on conflict, by alleviating emotional content to issue. | Type 1: Focus within rules
|                                                                                 | Type 3: Focus outside rules
|                                                                                 | Type 5: Focus on using rules to their advantage |
| Intensity: These types tend to take an emotional perspective on conflict.        | Type 4: Focus on being parented
|                                                                                 | Type 6: Focus on being the parent
|                                                                                 | Type 8: Focus on being parented or on being the parent as is appropriate to situation. |

i) Approaches to Problem Solving

As referred in Table 2.9, the different types also tend to approach problem resolution in distinctly different ways (Riso & Hudson, 1999; 2000; 2003). Where a Type 1 may approach a work problem by focusing on the facts, a Type 2 will first attend to people involved, while a Type 3 will focus on results. It is this diversity in personality types that result in a diversity of approaches to work. As individuals, if employees do not have an appreciation for personality differences in conflict handling and problem solving and subsequent behaviours at work, they are likely to experience dissonance in situations given their different individual outlook. A raised awareness of these differences and the power of diversity is likely to positively influence well-being at work, which, in turn will positively influence these differences.
Table 2.9

Approaches to Problem Solving of Each Type

<table>
<thead>
<tr>
<th>Approaches to Problem Solving</th>
<th>Dominant Enneagram Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on Facts</td>
<td>Types 1, 6, 9</td>
</tr>
<tr>
<td>Consider Possibilities</td>
<td>Types 4, 7</td>
</tr>
<tr>
<td>Concentrate on meaning</td>
<td>Type 5</td>
</tr>
<tr>
<td>Focus on methods</td>
<td>Types 1, 5</td>
</tr>
<tr>
<td>Attend to People</td>
<td>Types 2, 4, 9</td>
</tr>
<tr>
<td>Focus on results</td>
<td>Types 3, 8</td>
</tr>
</tbody>
</table>

The Enneagram theory of personality is multi-dimensional, comprehensive and provides guidance on great depth for understanding human nature. The many variables such as triads, levels of development, wings, growth paths, stress paths, social styles, conflict styles and state of health and the other dimensions, allude to employee well-being, the complexity and uniqueness of each individual, but also the depth of analyses available via the Enneagram and substantiates the choice of theory for this study.

2.7 SIGNIFICANCE OF PERSONALITY TYPES FOR WELL-BEING

Personality has been associated with well-being, “a subjective emotional state of positive …, negative … and general life satisfaction” (Brodsky, 1988, p.9) and has definitely been established as an organisationally desirable area of study. Several international studies have linked personality to well-being (Adler, 2004; Dijkstra, Van Dierendonck, Evers & De Dreu, 2005; Grant & Langhan-Fox, 2007; Hui, Lo, Bond & Kam, 2008; Lucas, 2007; Luszczynska & Cieslak, 2005; Mostert & Rothmann, 2006; Noor, 2003; Steel, Schmidt & Schultz, 2008; Weiss, Bates & Luciano, 2008).

Using the NEO-Personality Inventory, focusing on agreeableness and extroversion, these personality factors were found to mediate psychological well being (Temane, 2006). This connection was earlier suggested in a South African study on archetypes, personality and psychological well-being (Els, 2004). Researchers, Hogan and Kaiser (2005), conducted an empirical literature review and concluded...
that good leadership, which is predicted by personality, is probably the most essential influence on great performance and subsequent well-being. Focussing on effect, the wisdom of personality has the potential to enhance personal leadership, talents and strengths, negotiation, effective communication, influence a culture of inclusivity, transformation, complex change, general performance improvement and work engagement (Lapi-Bogda, 2007; Levine, 1999; Riso & Hudson, 1999; 2000; 2003). This implies that investigating personality and its relatedness to well-being is of organisational value.

The specific well-being construct that is under scrutiny in this study is work engagement. Work engagement is understood to be the positive end of the well-being continuum (Storm & Rothmann, 2003) and is discussed in chapter 3 in detail. Personality is a significant psychological variable which has much to offer toward organisational well-being. It follows that a thorough understanding of personality and work engagement is pertinent to organisational success.

2.8 CHAPTER CONCLUSION
A focus and discussion on the emergence of personality type, its definition, theoretical platform, its dimensions and related constructs are paramount to understanding the construct in order to understand its impact in an organisational context.

Chapter 3 outlines the emergence of work engagement, its definition, theoretical platform, its dimensions, related constructs and integration of concepts.
CHAPTER 3
WORK ENGAGEMENT

This chapter investigates the emergence, definition, theories of work engagement, work engagement dimensions, related concepts and the significance of work engagement. The chapter concludes by contextualising work engagement in relation to personality type.

3.1 INTRODUCTION

The international cash and credit crisis, diminishing budgets, collapsing markets, shrinking employee morale, declining supplier utility and anxious stakeholders are some of the remnants typically found in the business landscape of today (Charan, 2009). Apart from this, the constant changes stimulated by globalisation, technological advancement and other factors, and the subsequent job insecurity, places greater pressure on employees and their abilities to cope and adapt to change (Greenhaus, Callanan & Godshalk, 2000; Weeks, 2002; Bosman, Rothman & Buitendach, 2005, Charan, 2009). According to Booysen (2008) employees in the financial industry are also casualties of these unsympathetic business circumstances. Businesses are forced to operate under capacity, retrench employees, continuously re-invent themselves and reduce resource spend on costs such as training and recruitment, in order to cope with dwindling markets.

The impact on employees is that they need to manage increased work volumes and reduced work-life balance and fatigue, cope with job insecurities resulting from organisational redesign, unemployment when they become redundant, and inhibited learning and career growth (Greenhaus, Callanan & Godshalk, 2000, Charan, 2009). Employees bear these challenges in their personal capacity and this can often result in fatigue, stress, mental or physical ailments, declining well-being and subsequent decrease in work engagement. The circumstances of the time suggest a necessary focus on employee health, resilience and coping. Research has suggested that work engagement is one factor that can assist employees from a coping perspective (Schaufeli & Bakker, 2004; Nilsson, Bernspång, Fisher, Gustafson & Löfgren; 2007).
3.2 THE EMERGENCE OF WORK ENGAGEMENT

It has been noted that in the face of extreme job demands and extended working hours, some employees do not burnout, but rather find a sense of satisfaction in these circumstances (Schaufeli & Bakker, 2001). This breakthrough initiated empirical research on the concept of work engagement. Maslach and Leiter (1997) proposed that burnout was the wearing down of engagement. Work that was once significant and consequential becomes insignificant and inconsequential. Burnout and engagement were seen as opposing concepts. Initially, Maslach and Leiter (1997) approached work engagement from the perspective that burnout and work engagement are two ends of the same work well-being continuum. Some employees respond negatively to work stress which results in burnout.

Burnout has been described as the “psychological syndrome in response to chronic interpersonal stressors on the job” (Maslach, Schaufeli & Leiter, 2001, p. 399). A distinguishing feature of burnout is “a persistent negative, work-related state of mind in ‘normal’ individuals” (Schaufeli & Enzmann, 1998, p. 36). Maslach and Leiter (1997) focused on burnout as a work-related stress reaction and is the attrition of engagement with work.

At the outset, a high burnout score on the Maslach Burnout Inventory (MBI) was also considered to be an inverse indication of a low work engagement score. Energy, involvement and efficacy constituted the concept of engagement whilst their direct opposites, exhaustion, cynicism and lack of proficient efficacy constituted the concept of burnout (Maslach & Leiter, 1997). By implication, low scores on MBI dimensions were inferred as high scores in the relevant work engagement dimension. According to Storm and Rothmann (2003), employee engagement was the positive deviance and employee burnout was the negative deviance on a health or well-being continuum.

Continued research on burnout, led to the explicit question of why other employees do not develop burnout but instead, respond positively to work stresses. This eventually led researchers to questions about elements that keep workers engaged. Research by Schaufeli et al, (2002) has since led to the emergence of a second
distinct approach to work engagement. Schaufeli et al, (2002) supported the conceptualisation that work engagement was the opposite of burnout, but advocated that the work engagement dimensional make-up is theoretically dissimilar and exclusive from burnout, and therefore cannot be measured by the same instrument. They differentiated engagement from burnout by operationalising and defining engagement as independent from burnout. Schaufeli et al, (2002) subsequently developed the Utrecht Work Engagement scale (UWES) in this regard. Burnout and engagement are therefore seen as a dichotomy of well-being, that is, engagement can be distinguished from burnout.

3.3 DEFINITION OF WORK ENGAGEMENT

Schaufeli, Salanova, Gonzalez-Roma and Bakker (2002, p. 74) defined work engagement “as a positive, fulfilling, work-related state of mind characterised by vigour, dedication and absorption”. Work engagement is not restricted to a singular or momentary experience but to a more persistent and pervasive work-related state of mind. Work challenges are experienced as eustress, a healthy response to stress, promoting engagement and enhancing well being.

Kahn (1990, p. 694) defines engagement as “the harnessing of organisation member’s selves to their work roles .... and express themselves physically, cognitively and emotionally during role performances”. Furthermore, Andreassen, Ursin and Eriksen (2007, p. 619) describe work engagement “as a relatively stable emotional condition”.

Schutte, Topinnen, Kalimo and Schaufeli (2000) define work engagement as work experienced in a spirited and vigorous state eliciting dedication to exceptional performance and confidence in efficiency.

The definition of work engagement in the current study is the consistent, optimistic, purposeful and constructive psychological orientation of an individual in the work context.
3.4 THEORIES OF WORK ENGAGEMENT

The Job Characteristics Theory (Hackman & Oldham, 1976) purports the presence of five job resources namely multiple skills, task distinctiveness, task importance, independence and feedback. These job resources can enhance work performance, motivation and low absenteeism, alluding to higher work engagement.

Kahn (1990) also proposed a model for employee engagement or disengagement. He defines work engagement as psychological presence and conversely disengagement as psychological absence from work. If the psychological conditions of work were purposeful, secure and accessible, employees were more likely to be engaged. Elements such as job enrichment and role fit positively predicted purposefulness. Factors such as rewarding peer workers and supportive superiors positively predicted security. Resource availability positively predicted accessibility. Alternatively, succumbing to peer norms and self-centredness negatively predicted security whilst involvement in external activities negatively predicted resource availability. This would result in work disengagement. This finding was validated by a subsequent study by May, Gibson and Harter (2004).

In the spirit of reciprocity, Fredrickson’s (2001) Broaden-and-Build Theory of Positive Emotions, does explain work engagement to some extent, although it is not a theory of work engagement. According to this theory, emotions experienced positively, broaden individuals’ cognitive-behavioural responses. This, in turn, encourages growth and reserves of personal resources to effectively cope in the future, resulting in persistent and varying degrees of engagement as experienced by employees in their personal work context.

A model of work engagement emerged from the literature on burnout (Maslach et al, 2001). In this model, burnout is the antipode of work engagement and each concept is pre-empted by six areas of work-life. They are:

- sustainable workload or workload perceived to not have adequate time for completion;
- feelings of having choice or having no control;
- appropriate or inappropriate acknowledgement and compensation;
opportunity to leverage a work community;
• experienced fairness or lack thereof, and
• and purposeful work or meaningless work.

Depending on employees’ perception of the six areas of work-life, positive orientations allude to work engagement, while negative orientations allude to burnout.

Another relevant theory, the Social Exchange Theory (SET), purports that mutual commitment develops via progressive interactions between entities under conditions of mutual interdependence (Saks, 2006). This theory suggests that work engagement results from tenets of exchange and conditions of give-and-take between employees and organisations. For example, the degree of work engagement is aligned to an employee’s experience of economic and socioeconomic resources from the organisation. Conversely the organisation responds with rewards and recognition in varying degrees, as aligned to perceived employee work engagement. The application of the SET to understand work engagement was supported by a study by Saks (2006) and explains why employees chose to engage with their work in varying measures, to some extent.

The job-demand-resource (JD-R) model has also dominated research on work engagement. Jackson, Rothmann and Van de Vijver (2006) highlighted the differences between job characteristics, that is, job demands and job resources. Job demands such as work volumes and time frames are thought to be the source of burnout. Job resources are qualitative factors such as “physical, psychological, social or organisational aspects of the job” and are thought to stimulate personal growth and to be the source of job engagement (Demerouti & Bakker, 2011, Demerouti et al, 2001, Jackson, Rothmann & Van de Vijver 2006, p. 265). This variance alludes to the fact that burnout and work engagement is not inversely related concepts, but mutually exclusive concepts.

The Conservation of Resources Theory asserts the motivational value of job resources (Llorens, Schaufeli, Bakker & Salanova, 2007; Mauno, Kinnunen &
Ruokolainen, 2007). When job resources are threatened, the stress potentially results in burnout, whilst if job resources are enhanced, well-being and motivation results.

It has been acknowledged that antecedents to work engagement can also vary by occupation (Mauno, Kinnunen & Ruokolainen, 2007). This has resulted in a focus on job resources and not job demands as job demands are generally more role specific. Job resources stimulate goal achievement and work engagement (Bakker & Salanova, 2007; Llorens, Schaufeli, Mauno, Kinnunen & Ruokolainen, 2007).

Job resources such as personal and professional development and job autonomy influence high work engagement (Salanova et al, 2005). In addition to this finding, Bakker and Geurts (2004) found that feedback on work performance resulted in feelings of absorption. Other job resources such as social support at work and supervisory coaching were also positively related with absorption (Bakker 2005). Other factors which have been found to be significant antecedents of work engagement include employee innovativeness, appreciation (Bakker, Hakanen, Demerouti & Xanthopoulou, 2007; Huhtala & Parzefall, 2007), job control, positive workplace climate, utility of one’s skills at work, challenges at work, commitment to family and even personality factors such as lower neuroticism and higher extroversion (Mauno, Kinnunen & Ruokolainen, 2007). Most of these studies were, however, cross-sectional studies and causality could therefore not be determined.

Maslach et al (2001); Kahn (1990), the Job-Demand-Resource (JD-R) model, the Conservation of Resources Theory and the Job Characteristics Theory allude to psychological conditions or antecedents which influence work engagement, but do not suggest why employees react to them differentially. The majority of the job resources highlighted in research speak to organisational variables which influence work engagement positively. However, Llorens, Schaufeli, Bakker & Salanova (2007) have highlighted the phenomena of the reciprocal nature of some relationships, such as efficacy beliefs and engagement. Efficacy beliefs may operate as an antecedent or consequence of work engagement.
The available theories and models are not yet comprehensive enough to holistically explain all the possible antecedents and consequences of work engagement (Saks, 2006). The job-demand-resource (JD-R) model which alludes to the fact that burnout and work engagement is not inversely related concepts, but mutually exclusive concepts, forms the basis for this investigation. Schaufeli and Bakker (2003) developed the UWES to measure work engagement distinct from burnout, based on the JD-R definition.

### 3.5 DIMENSIONS OF WORK ENGAGEMENT

Conceptually, most authors align to Schaufeli and Bakker (2003) and define the three dimensions of work engagement consistently as vigour, dedication and absorption; most stressing that vigour and dedication are the core concepts, whilst absorption is analogous to the concept of “flow” or a pinnacle experience, resulting from vigour and dedication to one’s job (Csikszentmihalyi, 1990; Llorens, Schaufeli, Bakker & Salanova, 2007; Mauno, Kinnunen & Ruokolainen, 2007; Rothmann & Jordaan, 2006; ). Absorption was identified as a third dimension in engagement via thirty in-depth interviews (Schaufeli and Bakker, 2003). Although some researchers focus on the core dimensions predominantly, for the purpose of the current exploratory study all three dimensions are considered as significant elements within work engagement and in line with research by Mostert, Cronje and Pienaar (2006) and Mauno, Kinnunen and Ruokolainen (2007).

Vigour refers to high levels of energy, mental toughness, willingness to exert effort, the show of fierce resolve in one’s work and perseverance. This aspect is conceptually related to work motivation but differs in that work engagement is more stable over time (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002; Mauno, Kinnunen & Ruokolainen, 2007). In addition, Rothmann and Jordaan (2006, p. 94) stressed that vigour included “physical strength, emotional energy and cognitive liveliness”. An example of an item on the UWES measuring vigour is “At my work I feel bursting with energy” (Schaufeli et al, 2002). Vigour is considered to be the positive dimension in contrast to the burnout dimension of emotional exhaustion (Bosman, Rothmann, & Buitendach, 2005; Mostert & Rothmann, 2006).
Dedication is depicted by intense personal importance of and passion for work and the experience of pride, stimulation, and encouragement about work and is conceptually comparable to job involvement (Mauno, Kinnunen & Ruokolainen, 2007; Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002). An example of an item on the UWES measuring dedication is “I am enthusiastic about my job” (Schaufeli et al., 2002). Dedication is considered to be the positive dimension in contrast to the burnout dimension of depersonalisation (Bosman, Rothmann, & Buitendach, 2005; Mostert & Rothmann, 2006).

Absorption is about the experience of being blissfully engrossed by work, being keen and possibly having an unconscious attachment to work, with little prospect for derailment or disruption (Mauno, Kinnunen & Ruokolainen, 2007; Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002). On this point, Strümpfer (2003) alluded to the perspective that some employees, in the absence of religious or other cosmic objectives, seek existential meaning in work. When this meaning is not achieved, obtained or realised, burnout can result. Conversely, finding meaning in work can result in engagement. An example of an item on the UWES measuring absorption is “I am immersed in my work” (Schaufeli et al., 2002).

May, Gibson and Harter (2004) based their research on the work of Kahn (1990) and identified three different but related (to Schaufeli & Bakker, 2003) sub-concepts of work engagement; the physical, emotional and cognitive elements of work engagement. Examples of items are “I exert a lot of energy in performing my job” (physical), “I really put my heart into my job” (emotional) and “performing my job is so absorbing that I forget about everything else” (cognitive), respectively align in spirit with vigour, dedication and absorption definitions.

In summary, the three elements used to conceptualise work engagement in this study, are vigour, dedication and absorption (Schaufeli & Bakker, 2003). Vigour refers to high levels of dynamism, mental hardiness, willingness to wield effort, resilience and determination. Dedication is depicted by intense personal importance of and enthusiasm for work and the experience of pleasure, inspiration, and encouragement about work. Absorption is about the experience of being blissfully occupied by work, being wholehearted and possibly having an unconscious attachment to work. As these
dimensions together constitute work engagement and are each significantly internally consistent (Schaufeli & Bakker, 2003), the research hypotheses suggested in this paper focuses on the sub-concepts as well as on overall concept of work engagement.

3.6 WORK ENGAGEMENT AND OTHER RELATED CONSTRUCTS

Like work engagement, there are many contemporary concepts that traffic the positive relations between employees and work. Often they may be semantically interchangeably utilised but are theoretically quite distinct. Some of these concepts include organisational commitment, organisational citizenship, job involvement, absorption and organisational engagement.

Organisational commitment is a construct which can easily be construed as work engagement (Ferrer, 2005). Organisational commitment refers to loyalty or attitude to an organisation as opposed to the dedication to one’s work. Organisational commitment is an indication of employees’ willingness to exercise effort and remain in membership to an organisation. In contrast, work engagement may be perceived as a precursor to organisational commitment (Hallberg & Schaufeli, 2006; Jackson, Rothmann, & Van de Vijver, 2006; Rothmann & Jordaan, 2006). Work engagement is about transitory personal involvement in work and the myriad of significant and successful relations it offers. Organisational commitment also depicts worker involvement, but at a deeper and sustainable organisational cultural level indicating a significant mutual alignment of beliefs, values, goals, loyalty and commonality. Traditionally organisational commitment occurred in the context of a psychological contract of mutual loyalty between employers and employees over a lifetime but trends of today imply a transitory and specific performance or outcome based on a relational contract spanning the delivery of a mutual objective (Greenhaus, Callahan & Godshalk, 2000) and is more likely to be facilitated by work engagement.

Another related concept is organisational citizenship behaviour. This concept has to do with voluntary and informal behaviours that facilitate socialisation in the organisation. Work engagement on the other hand, has specifically to do with employees’ formal role performance (Saks, 2006).
Job involvement is also aligned to work engagement but more specifically to the involvement dimension. Job involvement is distinct and describes a level of connection with work that influences personal identity and self-esteem (Hallberg & Schaufeli, 2006). This excludes the energy and effectiveness dimensions in work engagement. Job involvement results from a cognitive judgement about the job’s capacity to satisfy personal needs, expectations and self-image. Work engagement has to do with personal effort taken to perform a job (Hallberg & Schaufeli, 2006; Saks, 2006). The dimension of dedication embedded in the concept of work engagement is analogous to the concept of job involvement (Mauno, Kinnunen & Ruokolainen, 2007).

The exclusive concept of absorption (Schaufeli et al, 2001) is also closely aligned to engagement but is indicative of a more short-term or momentary experience, as opposed to a longer term, more pervasive experience, when an employee is engaged with work.

Another related construct is organisational engagement, which acknowledges that individuals may take up more than one role in an organisation and therefore refers to the multiple roles held by an employee within an organisation. Work engagement is disparate as it has to do with the formal job role taken-up by an employee (Saks, 2006).

Evidently work engagement, burnout, organisational commitment and job involvement are uniquely distinct psychological concepts. In summary, authors have contributed much to the clarity of what work engagement is and what it is not. It is neither the converse of burnout nor a concept indicating cultural identity associated with organisational commitment. Furthermore, work engagement is not a specific indication of job involvement or personal identity alignment. Schaufeli, Salanova, Gonzalez-Roma and Bakker (2002) focused on the constructs of vigour, dedication and absorption in a positive context as instrumental to work engagement. On a distinctive note, work engagement is a healthy and optimistic state of employee well-being depicted by purposeful commitment, fierce resolve and concentrated effort that pervades over time.
3.7 SIGNIFICANCE OF WORK ENGAGEMENT

Schaufeli, Taris, Le Blanc, Peters, Bakker and De Jonge (2001) highlighted eight characteristics of engaged workers. They are entrepreneurial, take personal responsibility for direction in their lives, they engender their own constructive response and so act self-supportive, they also have other interests outside of their employment, their values and norms are aligned to those of the organisation they work for, exhaustion is experienced in relation to satisfaction, they may experience burnout but are able to effectively cope with it, experience healthy attachment to their work but also occasionally aspire to do other things.

Work engagement has been associated with positive employee attitudes which influence job satisfaction, increased organisational commitment and decreased intention to resign (Demerouti, Bakker, Janssen & Schaufeli, 2001). Work engagement has also been linked to employee initiative and willingness to learn (Sonnentag, 2003), a proactive work approach (Salanova, Agut & Piero, 2005) and organisation-based self-esteem (Mauno, Kinnunen & Ruokolainen, 2007). Furthermore, Mostert, Cronje and Pienaar, (2006), found a correlation between work-home interaction and work engagement. Although organisations primarily aim to enhance employee performance, it is established that healthy workers perform better (Salanova, Agut & Piero, 2005; Schaufeli & Bakker, 2003). Other links to work engagement established by Mauno, Kinnunen and Ruokolainen, (2007) include job control, positive workplace climate, utility of one’s skills at work, challenges at work, commitment to family and even personality factors such as lower neuroticism and higher extroversion. Highlighting the link to lower neuroticism and higher extroversion, types on the MBTI, makes research on work engagement, with specific reference to personality types very significant for organisations.

3.8 PERSONALITY TYPE AND WORK ENGAGEMENT

The connection between personality and work engagement has been established by previous research, but is certainly not exhausted. A Turkish study of work engagement among women managers and professionals in a bank, found the personality trait of control predicted engagement (Koyuncu, Burke & Fiksenbaum, 2006). In a South African study (Mostert & Rothmann, 2006) focusing on predicting
well being; background variables, job stress and personality traits were assessed. Well-being was defined as burnout and work engagement. Using a stratified random sample (N= 1794 policemen), the study showed that vigour and dedication were sensitive to gender, ethnicity and age. Furthermore, vigour and dedication were found to be predicted by the personality characteristics of emotional stability, conscientiousness and extroversion.

In the same year, Richardsen, Burke and Martinussen (2006) conducted a Norwegian investigation using a sample (N=150) of policemen. They explored the relationship between personality types, job demands and job resources and engagement, amongst other variables. They also investigated the role of engagement in predicting work and health related outcomes. Type A behaviour was found to be associated with engagement. A positive relationship between job resources and engagement was also evident. A relationship between Type A and health complaints was also indicated. Several other studies also concluded that Type A characteristics influence a variance in work engagement (Richardsen, Burke & Martinussen, 2006; Hallberg & Schaufeli, 2006; Hallberg, Johansson, & Schaufeli, 2007).

In another empirical approach (Langelaan, Bakker, van Doornen & Schaufeli, 2008), the research involved understanding if burnout and work engagement could be differentiated on the premise of personality temperament. These researchers found that work engagement was associated with low neuroticism, high extroversion and high mobility. Personality and temperament was found to be a factor in work engagement.

The personality traits, job control and organisation self-esteem, were empirically found to influence dimensions of work engagement in a longitudinal study over two years of health care workers (Mauno, Kinnunen & Ruokolainen, 2007).

The present study aims at shedding further light on the relationship between personality types and work engagement. The job-demand-resource (JD-R) model differentiates between job demands such as work volumes and time frames which are associated to burnout, and job resources which are qualitative factors which
includes material, communal and emotional attributes of work (Demerouti et al, 2001). Job resources can serve to shield job demands evident in working conditions (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007). The expedition to understand personality types offers a potent means to appreciate the complexities and dynamics of the unconscious, the adaptations and maladaptation fostered during growth and more importantly the opportunity to transform and to optimise potential. Therefore, focusing on the nine personality types which may or may not align with job resources may allude to links between the personality types and work engagement. The theory of the Enneagram suggests that all personality types potentially exist in a healthy, average or unhealthy state (Riso & Hudson, 2003). It is understood that adaptation and coping in the healthy and average states gears employees toward greater levels of well-being as opposed to unhealthy states. Given that work engagement has been established as a significant factor in well-being, it is hypothesised that if all types of employees are operating between the average and healthy states, there will be a link between personality and work engagement.

A Type 1 or the Reformer is typically principled and purposeful. In a study (Harter, Schimdt, & Hayes, 2002), work engagement was established as related to purposeful business output. Furthermore, the Reformer is also associated with being organised; process oriented, and potentially rigid. In another study a positive relationship between work engagement and method control or job control was established (Sonnentag, 2003, Schaufeli, Taris, & Van Rhenen, 2008).

A Type 2 or the Helper is typically described as being grateful, appreciative, considerate and supportive. The positive link between the spirit of gratitude and work engagement was established (Schaufeli, Taris, Le Blanc, Peeters, Bakker & De Jong, 2001).

A Type 3 or the Achiever is results driven, persevering and proficient. As mentioned above, researchers (Schaufeli, Taris, Le Blanc, Peeters, Bakker & De Jonge, 2001) highlighted eight characteristics of engaged workers. Among these, include characteristics such as taking initiative, responsibility for direction in their own lives, self support, engendering their own positive feedback and ability to cope or meet demands, which are aligned to being results driven, persevering and proficient.
Furthermore, the Achiever bears resemblance to the sub-concept of vigour, as depicted by high levels of energy, mental toughness, willingness to exert effort, the show of fierce resolve in one’s work and perseverance.

Although the Type 4 or the Individualist bears traits of compassion, this type is generally inclined toward self-absorption, their own uniqueness and is self-renewing. The Individualist bears resemblance to the sub-concept of dedication, as depicted by intense personal importance of and passion for work and the experience of pride, stimulation, and encouragement about work.

The Type 5 or the Investigator is typically innovative, revolutionary, probing and enjoys socialising and having fun. Individuals found to enjoy socialising and having fun were also found to have higher levels of work engagement (Schaufeli, Taris, Le Blanc, Peeters, Bakker, & De Jong, 2001).

The Type 6 or the Loyalist generally seeks people connections, affiliation, stability, safety and sanctuary within the work environment. Kahn (1990) suggested meaningfulness, safety and availability as three psychological conditions which influence levels of engagement. Psychological safety refers to the experience of trust that engagement will not be at the expense of personal harm. Employees’ level of engagement will vary according to their perception of the environment.

The Type 7 or the Enthusiast is typically optimistic, seeks opportunities, is outspoken and boisterous. These descriptors may often find allegiance with extroversion style of behaviours. In a study by, Langelaan, Bakker, Van Dooren and Schaufeli (2008) high extroversion influences work engagement.

Type 8 or the Challenger is typically described as being in control, tough, confident, significant and autonomous. The Challenger is comfortable to be independent and assumes command of tasks. Researchers highlighted that one job resource which positively influences work engagement is job control (Schaufeli, Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007). In another study by Van Mierlo, Rutte, Vermunt, Kompier, and Doorewaard (2007), autonomy was a factor that influenced well-being, a construct which has been strongly linked to work engagement.
The Type 9 or the Peacemaker is typically content, comfortable, unassuming and happy. Their tendency is to strive to maintain this equilibrium at the risk of ignoring and avoiding negativity. The personal resources of optimism and control coping were found to positively influence work engagement. (Riolli & Savicki, 2003).

These patterns indicate that several people doing the same job, like a marketing consultant for instance are doing it to nourish different personal needs. For example, an Enthusiast type may love marketing because it engages his/her need to be innovative, whilst the Investigator type may enjoy the conceptualisation of a brand, product or service identity. Healthy and average states of each type may encourage engagement for different reasons.

As all nine types constitute the three triads, the instinctive triad, the thinking triad and the feeling triad on the Enneagram, it is also postulated that the personality triads, via their constituting types are linked to work engagement.

The initial hypothesises proposed are:

**Hypothesis 1:** There are significant differences between personality types and work engagement, vigour, dedication and absorption.

**Hypothesis 2:** There are significant differences between personality triads and work engagement, vigour, dedication and absorption.

### 3.9 DEMOGRAPHIC VARIABLES AND WORK ENGAGEMENT

Schaufeli and Bakker (2003) outlined various demographic influences on work engagement in the Utrecht Work Engagement manual. Differential influences between white collar workers or managers and blue collar workers, implying an influence of job levels on work engagement was investigated. Furthermore, other demographic variables like, gender, ethnicity, marital status, job level, tenure and age is also explored below.
In an investigation among entrepreneurs, Chu (2000) found significant differences in motivations in the work context between males and females, alluding to differences that may distinguish the sexes in the work context. An investigation revealed that where gender differences in work related stress and coping was investigated, females were found to experience higher levels of anxiety and concurrent coping responses (Amtén, Jansson & Archer, 2008; Fernandes, Kumar & Mekoth, 2009). British males reported more conflict around work time. In this same study, males were found relating their “bread winner” role in the context of work, more than females (Sowan & Goodwin, 2009, p.228). However, Schaufeli and Bakker (2003) found marginal differences in work engagement among gender groups but declared little practical significance in the finding. Mostert and Rothmann (2006) also found that gender influenced a marginal difference in vigour and dedication. However, work engagement was found to have a negative effect on the family role of females, unlike males (Rothbard, 2001). Karlsson and Archer (2007) investigated stress and energy and found higher levels of vigour among females than males. Peter (2008) also found that work engagement is gender sensitive and was influenced by factors such as reward, relationships and child care. Gender differences in the experience of work engagement was also identified in a study (Bakker & Demerouti, 2009). Given the literature perspective of marginal and existing differences amongst males and females, the third hypothesis proposed:

Hypothesis 3: There are significant differences between gender and work engagement, vigour, dedication and absorption.

While studies regarding ethnicity and work engagement are sparse, the South African history around racial differences suggests that ethnicity remains a relevant variable for investigation. In a recent investigation regarding engagement among student nurses, no dissimilarities were found in relation to ethnicity (Salamonson, Andrew, & Everett, 2009). Another study focused on perceptions of engagement in health care and found no significant relationships with ethnicity (Bakken & Holzemer, 2000). The fourth hypothesis is therefore:
Hypothesis 4: There are no significant differences between ethnicity and work engagement, vigour, dedication and absorption.

Although the job-demand-resource (JD-R) model of work engagement focuses on work resources that positively influence work engagement (Jackson, Rothmann & Van de Vijver, 2006), the experience of work and family life has been established as closely linked, with specific focus on the interdependency on both work and home experiences to mutually influence each other (Sonnentag & Niessen, 2008; Van Steenbergen, Ellemers & Mooijaart, 2007;).

A further implication of marital status arises from the influence of the well-being of one spouse on the other spouse’s well-being (Bakker & Demerouti, 2009; Dikkers, Geurts, Kinnunen, Kompier, Taris, 2007). In studying married couples, levels of vigour and dedication influenced spouse’s levels of vigour and dedication (Bakker & Schaufeli, 2003). This implies that if a wife shows higher levels of work engagement, it could become infectious to the husband’s level of work engagement and vice versa. Westman (2001) suggested that there are three ways that facilitate this kind of crossover between partners. The first way indicates that crossover of emotions occurs due to the caring relationship that exists between partners. The second way suggests that the stressor could be common to both partners and as such influences the same reaction, but separately. The third way suggests that stressor experienced by one partner may be so significant that the impact of interaction in the relationship may result in strong negative behaviour like abrupt communication.

Furthermore, Sonnentag and Niessen (2008) found that the experience of vigour at work was influenced by factors within as well as external to work life. It was found that marital status is a significant factor in understanding engagement (Bennett, 2005), postulating the fifth hypothesis:

Hypothesis 5: There are significant differences between marital status and work engagement, vigour, dedication and absorption.

Studies on job levels and work engagement remain sparse in literature. However, white collar workers or managers illustrated higher scores on vigour, dedication and
absorption and overall work engagement than blue collar workers (Schaufeli & Bakker, 2003). This implies the sixth hypothesis:

**Hypothesis 6: There are significant differences between job levels and work engagement, vigour, dedication and absorption.**

According to the job-demand-resource model, it is believed these engaged employees would have accumulated much social, physical and organisational resources which positively influenced engagement in work. Researchers investigating work engagement have highlighted that employees who are highly engaged in their work have invested much energy and dedication in their jobs, alluding to developing vigour and dedication over time (Halbesleben & Wheeler, 2008). Employees with more years of service would have had more time to accumulate these necessary resources than employees with lesser years of service. The accumulated resources create the motivation to remain engaged. Therefore, it is believed that recently employed employees may vary from employees with more years of service or tenure with regards to access to resources which keep them engaged. However, another longitudinal study (De Lange, De Witte, Notelaers, 2008) found that stayers, that is, employees with longer tenure, after time tend to show a decreasing tendency with regards to work engagement within the same work environment, suggesting a need for appropriate intervention to sustain work engagement. The seventh hypothesis proposed is:

**Hypothesis 7: There are significant differences between tenure and work engagement, vigour, dedication and absorption.**

It was found that younger employees feel less engaged than older employees, i.e. “the older the employees the more engaged they feel” (Schaufeli & Bakker, 2003, p. 31). Mostert and Rothmann (2006) also found that age influenced a marginal difference in vigour and dedication. However, the work engagement relationship with age is not conclusive (Peter, 2008). Health was found to be influenced by the experience of personal variables such as control, manageability and personal meaning. In another recent investigation regarding engagement among student nurses, no important dissimilarities were found in relation to age (Salamonson,
Andrew, & Everett, 2009). Furthermore, a study focused on perceptions of engagement in health care and found no significant relationships with age (Bakken & Holzemer, 2000). This study proposes the eighth hypothesis:

_Hypothesis 8: There are no significant differences between age and work engagement, vigour, dedication and absorption._

### 3.10 CHAPTER CONCLUSION

A focus and discussion on the emergence of work engagement, its definition, theoretical platform, its dimensions and related constructs were presented in this chapter. Existing research in this realm that establishes the connection between personality and work engagement were highlighted. Proposed hypothesis were subsequently presented.

Chapter 4 outlines the research design to investigate the relationship between personality type and work engagement.
CHAPTER 4
RESEARCH METHODOLOGY

Chapter 4 outlines the research methodology used to explore the relationship between personality type and work engagement in this study. The research design, population and sample, the measuring battery, statistical analyses, procedure and formulation of hypotheses are discussed.

4.1 RESEARCH DESIGN
The nature of the research is a quantitative research design. With the use of a cross-sectional study the investigation into the relationship between personality type and work engagement is probed (Terre Blanche & Durrheim, 2002). The advantage of the design is that it allows for the study of several variables simultaneously but the disadvantage is that it does not allow for a probe into causation (Sekaran, 1992).

4.2 STUDY POPULATION AND SAMPLE
The characteristics of the population, the sampling strategy and characteristics of the sample are discussed below.

4.2.1 Characteristics of the population
The population is from one organisation and originated from the Marketing and Corporate Affairs division within a large financial institution. A total staff complement of 208 people make up this division.

4.2.2 Sampling
A non-probability or convenience sample was drawn from the total population. 131 participants completed the UWES and 208 participants completed the RHETI. However, of those, comprising unspoilt questionnaires, only 128 participants completed both the UWES and RHETI, resulting in an overall 62% response rate.

4.2.3 Characteristics of the sample
Characteristics of the sample are illustrated in Table 4.1.
Table 4.1

**Characteristics of the Sample**

<table>
<thead>
<tr>
<th>Characteristic of the sample</th>
<th>Number of respondents</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>34</td>
<td>27</td>
</tr>
<tr>
<td>Female</td>
<td>94</td>
<td>73</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
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<tr>
<td>African</td>
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<td>43</td>
</tr>
<tr>
<td>White</td>
<td>45</td>
<td>35</td>
</tr>
<tr>
<td>Coloured</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>Indian</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>48</td>
</tr>
<tr>
<td>Not Married</td>
<td>67</td>
<td>52</td>
</tr>
<tr>
<td>Job Level</td>
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<td></td>
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<tr>
<td>Junior</td>
<td>38</td>
<td>30</td>
</tr>
<tr>
<td>Senior</td>
<td>90</td>
<td>70</td>
</tr>
<tr>
<td>Tenure</td>
<td>4 months - 27 years</td>
<td>128</td>
</tr>
<tr>
<td>Age</td>
<td>20 - 70 years old</td>
<td>128</td>
</tr>
</tbody>
</table>

Table 4.1 outlines the demographical characteristics of the sample. 73% of the sample was female while 27% of the sample was male. From an ethnicity perspective, the distribution of participants was 43% Africans, 35% Whites, 12% Indians and 10% Coloureds. There was a minimal difference in married and unmarried participants, 48% and 52%, respectively. The relevant job levels applicable to this organisation are administrative (BB level), clerical level (CC level), technical (TT level), professional level (PP level), managerial level (MM level), specialist level (SS level) and executive level (EE Level). The BB, CC and TT levels constitute junior job levels and amount to 30% whilst MM, PP, EE and SS constitute senior job levels and amount to 70% of the sample. The range of tenure was wide as well. The minimum years of service of participants were four months whilst the maximum years of service of participants were 27 years. The average years of service of participants were six years. The range of ages of participants is also broad, that is, the youngest participant was 20 while the oldest was 70 years old. The average age of participants was 37 years old.
4.3 THE MEASURING BATTERY

The measurements of personality type and work engagement are broadly discussed in this section, which hones in on the rationale and development, the description, the administration and scoring, interpretation, validity and reliability and motivation for the selection of each tool. The measuring battery consists of the Riso-Hudson Enneagram Type Indicator (RHETI) (Riso & Hudson, 2003) and the Utrecht Work Engagement Scale (UWES) (Schaufeli & Bakker, 2003). The RHETI is used to measure the personality type variable and the UWES is used to measure the work engagement variable. Demographic data was collected via the completion of the UWES. Participants were identified via their personnel numbers to verify who completed both the RHETI and the UWES.

4.3.1 Measurement of Personality Type

The Riso-Hudson Enneagram Type Indicator (RHETI) is explored below.

a) Rationale and development

From the 1970s, the Enneagram typology was popularised and further developed by Riso and Hudson (1996, 1999, 2000, 2003). They discovered the typology and pursued their interest in advancing personality research which culminated in version 2.5 of the RHETI, used in this study (Riso & Hudson, 2003). They utilised earlier works by Gurdjieff, Ichazo, Naranjo and others. Jung advocated that some aspects of personality are innate and their natural tendencies are unfolding throughout their development. This is asserted by the RHETI as well.

Nine personality types were assessed using the RHETI and indicated on the Enneagram.

b) Description

The RHETI (Riso & Hudson, 2003) is a self-report questionnaire comprising of 144 paired statements. It is a forced-choice test requiring the participant to choose the most appropriate description from two sentences. Choices reflect the array of nine types.
As the RHETI is ipsative in nature, it is not possible for an individual to score low on all types or high on all types (Newgent, Parr, Newman, & Higgins, 2004). The design is such that high scores on a type does result in low scores in another type. Furthermore, the resulting profile provides a relative view of an individual, where comparison is relative to the individual's own mean scores rather than a normative standard.

The RHETI types are illustrated as nine types or points on the Enneagram. The existence of personality types or categories has been empirically reiterated in research (Miller, 1991) and they provide a theoretical framework for researchers. Examples of the statements per type on the RHETI questionnaire (Riso & Hudson, 2003. p. 48) include:

Type 1, for example, “I’ve tended to avoid confrontations.” Type 1 is commonly referred to as “the Reformer” (Riso & Hudson, 2003, p. 20) and is typically described as employees on a mission, who live and pursue preferred standards and ethics, have a deep sense of purpose and can also be tempted by impatience and a lack of flexibility.

Type 2, for example, “I’ve been pragmatic and down to earth.” Type 2 is commonly referred to as “the Helper” (Riso & Hudson, 2003, p. 20) and expend much time and effort connecting with people. These employees typically have meaningful relationships, want to radiate good, display humility and can also veer toward possessiveness or clinginess.

Type 3, for example, “I have typically been diplomatic, charming, and ambitious.” Type 3 is commonly referred to as “the Achiever” (Riso & Hudson, 2003, p. 20) and are known for their lure to success. These employees typically portray an image aligned with success, are flexible, objective driven and hold great self-images. In times of stress they may tend toward competition, blow their own trumpet and ostentatious behaviour.
Type 4, for example, “I have typically been direct, formal, and idealistic.” Type 4 is commonly referred to as “the Individualist” (Riso & Hudson, 2003, p. 20). These employees withdraw and are very aware and responsive to their feelings. They have the capacity to delve deep within when they are in a balanced state. However, imbalances can elicit a highly strung and self-serving temperament.

Type 5, for example, “I have been romantic and imaginative.” Type 5 is commonly referred to as “the Investigator” (Riso & Hudson, 2003, p. 20). These employees are known to break new ground, are discerning, autonomous and if compromised, can disengage, be inflexible and confrontational.

Type 6, for example, “I have been a hospitable person and have enjoyed welcoming new friends into my life.” Type 6 is commonly referred to as “the Loyalist” (Riso & Hudson, 2003, p. 21). These employees persevere to ensure safety and stability. They are naturally alert, dedicated, guarded and, when under pressure, may become cynical, distrustful, blaming and apprehensive.

Type 7, for example, “I have tended to take on confrontations.” Type 7 is commonly referred to as “the Enthusiast” (Riso & Hudson, 2003, p. 20) who is busy and energetic. They generally have a positive, swift and spirited disposition. When strained, these employees may tend to react in a rash, extreme, adrenalin-seeking manner.

Type 8, for example, “I have tended to be focused and intense.” Type 8 is commonly referred to as “the Challenger” (Riso & Hudson, 2003, p. 20) and they are known to be commanding, influential, unrelenting and practical. When things are not going their way, these employees are usually equally strong in reaction.

Type 9, for example, “I have tended to be spontaneous and fun-loving.” Type 9 is commonly referred to as “the Peacemaker” (Riso & Hudson, 2003, p. 20) and is typically described as pleasant, amenable, compassionate and content. When under pressure, these employees may appear inconsiderate, thoughtless and obstinate.
c) Administration and scoring
The RHETI allows the participants to read the instructions on-line and gain access to the questionnaire via a password distributed by the Enneagram Institute. Pre-test instructions explain that the focus of the test is on self development and on the past of an individual. More specifically, the questionnaire attempts to measure the personality type one was born with, or remembers at the age of 18.

This questionnaire was available via the internet and scoring was automated. Reports were generated by the Enneagram Institute and provided to the researcher. Scores range from 1 to 32. A score above 24 is deemed to be a high score, from 20 to 23 is deemed to be above average, from 13 to 19 is average, from 9 to 12 reflects below average and below 8 is a low score. A score of 16 is the median for each type (Riso & Hudson, 2003). Although very rare, an individual with an overall 16 for each type implies an absolute balance in accessing of all nine types. The norm is that there are broad variations in medians resulting in the unique profile type per individual at that point in time. Individuals have the propensity to develop and variations are indications of levels of optimal functioning and development among the types. The variation does not in any way indicate pathology or dysfunction. One’s dominant type or most accessible type is generally indicated by the highest score. The second highest and all scores below that in descending order indicates relative predisposition for accessing that particular type within that individual.

d) Interpretation
The report provides scores for each participant for the nine types on the Enneagram. Where dominant scores were close or equal, discussions with participants were held to ascertain their real dominant type. This was planned and conducted as part of the organisational intervention. The other Enneagram variable of triads was inferred from the dominant type. Dominant types 1, 9 and 8 imply the instinctive triad, dominant types 5, 6 and 7 imply the thinking triad and dominant types 2, 3 and 4 imply the feeling triad (Riso & Hudson, 2003).

e) Reliability and validity
As part of her doctoral dissertation, Rebecca Newgent objectively investigated and established the validity and reliability of the RHETI (Newgent, 2001).
The Cronbach Alphas for each of the nine dimensions of personality was established as follows (Newgent, 2001): Type 1: The Reformer-0.73, Type 2: The Helper-0.82, Type 3: The Achiever-0.56, Type 4: The Individualist-0.70, Type 5: The Investigator-0.56, Type 6: The Loyalist-0.66, Type 7: The Enthusiast-0.80, Type 8: The Challenger-0.75, Type 9: The Peacemaker-0.79, and for overall Personality 0.72 (Newgent, 2001). Types 3, 5 and 6 fall below the suggested acceptable level of 0.7 and suggest an empirical concern (Riso & Hudson, 2003). Results regarding these types should therefore be interpreted with caution.

Performing multiple discriminant analysis, between OPQ 32 derived Big Five scales and the Enneagram Types yielded the following correlation statistics, Type 1- 82.2%, Type 2- 51.7%, Type 3- 71.4%, Type 4- 85.7%, Type 5- 75.0%, Type 6- 73.3%, Type 7- 72%, Type 8- 93.8%, Type 9- 76.5%. The majority of the Types illustrate a high degree of classification with OPQ 32 derived Big Five scales. The Type 8 is the easiest to classify with a 94% success rate while Type 2 showing only 51% success rate (Bartram & Brown, 2005b). Bartram and Brown, (2005a), conducted further research and found a high correlation between the OPQ 32 derived Big Five scales and the MBTI scales, and the OPQ 32 derived Big Five scales and the Enneagram Types, ultimately illustrating positive relationships between MBTI scales and the Enneagram types.

From a concurrent validity perspective, that is, when criterion measures obtained at the same time as test scores (Huysamen, 1983), the RHETI was repeatedly found to predict the factors on the NEO PI-R, a well established personality measure (Newgent, 2001). Wagner and Walker (1983) also confirmed concurrent validity of the Enneagram using the Millon Scales and the Myers Briggs Type Indicator.

Construct validity involves establishing a measure as it correlates with other variables that are known to be related to the construct (Huysamen, 1983). Construct validity was established using the OPQ (Bartram & Brown, 2005b) and the MBTI (Bartram & Brown, 2005a) by SHL. A strong association between the OPQ 32.i and the MBTI has been established and subsequently establishing the empirical value of this tool.
f) Motivation for choice
The Enneagram has been specifically developed to measure personality types and is consistent with the theoretical conceptualisation thereof. Therefore, the instrument has been selected as a tool for this research.

4.3.2 Measurement of Work Engagement
The Utrecht Work Engagement Scale (UWES) is further explored.

a) Rationale and Development
Schaufeli et al (2002) developed the UWES to assess work engagement. It is aimed at providing insight into how engaged an individual or group of individuals are with their work. As much as the UWES provides overall perspective on work engagement, it also provides granular insight at the levels of vigour, dedication and absorption.

The first UWES consisted of 24 positively re-stated Maslach Burnout Inventory (MBI) statements. Schaufeli et al (2002) proposed the first exploratory factor analysis that resulted in identifying the three well known sub-constructs of work engagement; vigour, dedication and absorption and the subsequent UWES instrument. Via an iterative process an instrument of 17 items was conceived. 15 and 9 items instruments were also developed with varying psychometric properties. Storm (2002) reported suitability of use for the UWES in a South African sample.

b) Description
The UWES was developed as a self-report questionnaire consisting of 17 items to measure work engagement on a 7-point likert scale They key for the 0-6 scores are, 0 = Never, 1 = A few times per year or less, 2 = Once a month or less, 3 = A few times per month, 4 = Once a week, 5 = A few times a week, 6 = daily, as indications of the frequency of feelings that are relevant to vigour, dedication, absorption and/or work engagement.

Vigour is characterised as power, buoyancy, resilience and command in one’s work even in the face of adversity. An example of a statement measuring vigour on the UWES questionnaire includes, “I am bursting with energy. “Dedication in one’s work
implies feelings of pride, meaning, stimulation and motivation”. An example of a statement measuring dedication on the UWES questionnaire includes, “I get carried away by my work.” Absorption occurs when one becomes positively, totally and involuntarily engrossed in their work, but is distinct from dysfunctional workaholism. An example of a statement measuring absorption on the UWES questionnaire includes, “I am very resilient, mentally, in my job.” Thus vigour, dedication and absorption constitute the sub-dimensions of work engagement and together the overall measure on work engagement.

c) Administration and scoring
The work engagement assessment is a paper and pencil questionnaire (Schaufeli & Bakker, 2003). There are six items underlying vigour, five items underlying dedication and six items underlying absorption. Responses are manually scored by the researcher according to the specific items underlying each sub-concept. Items 1, 4, 8, 12, 15 and 17 constitute the construct vigour, items 2, 5, 7, 10 and 13 constitute the construct dedication and items 3, 6, 9, 11, 14 and 16, constitute the construct absorption. Item scores were tallied per sub-construct and then the mean per sub-construct yielded to produce a final score per sub-construct, between 0-6. Alternatively, the tally of all items and then averaged, yields an overall work engagement score between 0-6.

d) Interpretation
A score of 0 to 1 indicates feelings of engagement at least once a year or less, a score of 1 to 2, indicates feelings of engagement at least once a year, a score of 2 to 3, indicates feelings of engagement at least once a month, a score of 3 to 4, indicates feelings of engagement at least a couple of times a month, a score of 4 to 5, indicates feelings of engagement at least once week and, a score of 5 to 6, indicates feelings of engagement at least a couple of times per week or daily.

Based on a Dutch population of 2313, the instrument norms were established as per Table 4.2:
Table 4.2

Statistical Norms of the UWES

<table>
<thead>
<tr>
<th></th>
<th>Vigour</th>
<th>Dedication</th>
<th>Absorption</th>
<th>Total Work Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low</td>
<td>$\leq 2.17$</td>
<td>$\leq 1.60$</td>
<td>$\leq 1.60$</td>
<td>$\leq 1.93$</td>
</tr>
<tr>
<td>Low</td>
<td>2.18-3.20</td>
<td>1.61 – 3.00</td>
<td>1.61 – 2.75</td>
<td>1.94 – 3.06</td>
</tr>
<tr>
<td>Average</td>
<td>3.21 – 4.80</td>
<td>3.01 – 4.90</td>
<td>2.76 – 4.40</td>
<td>3.07 – 4.66</td>
</tr>
<tr>
<td>High</td>
<td>4.81 – 5.60</td>
<td>4.91 – 5.79</td>
<td>4.41 – 5.35</td>
<td>4.67 – 5.53</td>
</tr>
<tr>
<td>Very High</td>
<td>$\geq 5.61$</td>
<td>$\geq 5.80$</td>
<td>$\geq 5.36$</td>
<td>$\geq 5.54$</td>
</tr>
<tr>
<td>M</td>
<td>3.99</td>
<td>3.81</td>
<td>3.56</td>
<td>3.82</td>
</tr>
<tr>
<td>SD</td>
<td>1.08</td>
<td>1.31</td>
<td>1.10</td>
<td>1.10</td>
</tr>
<tr>
<td>SE</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Range</td>
<td>0.00 – 6.00</td>
<td>0.00 – 6.00</td>
<td>0.00 – 6.00</td>
<td>0.00 – 6.00</td>
</tr>
</tbody>
</table>

The current research design does not deviate from factors as originally devised by the test developers. Furthermore, Storm (2002) and Prins (2007) reviewed the UWES and found the instrument suitable for the South African environment.

e) Reliability and Validity

On the subject of internal consistency of the UWES, Cronbach coefficients have been determined between 0.68 and 0.91 (Schaufeli et al, 2002). Using an iterative process, unwanted items were removed to yield the three engagement dimensions with sufficient internal consistency, vigour – 0.83, dedication – 0.92 and absorption – 0.80 (Schaufeli et al, 2002). In assessing the suitability to the South African environment, Storm (2002) reported alpha coefficients of 0.78 (vigour), 0.89 (dedication) and 0.78 (absorption) for the UWES in a South African sample. Using test-retest method, the UWES was found to be stable over time for vigour, dedication and absorption (Schaufeli & Bakker, 2003).

The stability coefficients for the Norwegian sample for vigour were 0.70-0.71, dedication was 0.66-0.69 and absorption was 0.63-0.69. The stability coefficients for the Australian sample for vigour was 0.61-0.64, dedication was 0.56-0.58 and absorption was 0.57-0.58.
Several validation studies were conducted on the correlation between burnout and work engagement and consistently yielded an overall negative correlation (Schaufeli et al., 2002; Schaufeli & Bakker, 2001; Schaufeli & Bakker, 2003, Storm & Rothmann, 2003; Strumpfer, 2003). There is a strong negative correlation between dedication and cynicism. However, a weak negative correlation between vigour and exhaustion was found. There is also a very weak correlation between absorption and burnout scales (Schaufeli & Bakker, 2003). Prins (2007) re-validated the UWES and established its psychometric properties for relevance in a South African sample.

f) Motivation for choice
Given the progress in defining burnout and work engagement, the UWES is consistent with the theoretical conceptualization of work engagement in this study. Due to the empirical evidence available and established suitability for the South African environment, the current research supports the view that work engagement is more appropriately measured by the UWES.

4.4 PROCEDURE
The use of the RHETI and the UWES is discussed. Approval to utilise the employee data on completion of the RHETI and UWES was obtained from the financial institution.

4.4.1 RHETI
Permission to utilise the RHETI instrument for research purposes was obtained from the Enneagram Institute. An organisational development initiative was initiated via e-mail and a Line Manager Communiqué to all staff regarding the self-development and organisational development program which included a personality assessment. Staff were informed that the data was also to be used for research purposes. The RHETI was administered via e-mail and participants were directed to the website for on-line completion. In completing the RHETI, employees’ were advised to reflect on their personalities when they were around the ages of sixteen to eighteen and respond to questions speedily and refrain from much deliberation. Only one answer per pair of questions was allowed. Participants were also asked to attempt all questions and only in the exceptional case where an answer was really not possible, could they leave-out one or two questions at most. Participants were also asked to
complete the questionnaire on their own. The questionnaire takes about forty-five minutes to complete but no time restriction was applicable.

4.4.2 UWES
The UWES used in this study was a paper and pencil-based questionnaire. The UWES was administrated via a big systems event hosted for this division. Participants were informed that completion was for research purposes. Questionnaires were distributed and placed at each table setting. The master of ceremony provided context that this questionnaire was for research purposes for a master's dissertation. He confirmed that it was voluntary and completely confidential. The questionnaire takes approximately ten minutes to complete, but no time restrictions were imposed. Questions and queries were directed to the researcher. They were also asked to try and attempt all questions. Participants were also asked to complete the questionnaire on their own. Participants were instructed to respond in terms of how they felt the majority of the time. The administrator was introduced as a student to reduce anxiety concerning unfair organisational discrimination. Questionnaires were returned at the event and via e-mail as well.

Regarding both assessments, informed consent was elicited via the signing of a consent form which formed the cover of the work engagement questionnaire and as such, participation was voluntary. Participant anonymity and confidentiality was contracted to ensure objectivity in responses. Special care was taken to reduce ambiguity in respondent understanding by simplifying communication and reinforcing instructions. Feedback was assured in terms of the findings of this research. Feedback on the RHETI was conducted via the organisational development program.

4.5 STATISTICAL ANALYSIS

The SPSS computer package was used to conduct the statistical and data processing.
4.5.1 Descriptive statistics

In the context of this research, the relationship between personality type and work engagement is analysed at an individual level of analysis. Descriptive statistics (Howell, 1985) is used to determine the type of personality and degree of work engagement. The mean, minimum and maximum values, standard deviations, skewness and kurtosis are reported in this regard.

According to Tabachnick and Fidell (2001), to assess if data is normally distributed, skewness and kurtosis are considered. A skewness value of zero implies a normal distribution. The significance of the skewness value is assessed taking into account the standard error for skewness which is determined by calculating the square root for 6 divided by sample size. As an estimate, when the skewness result is less than two times its standard error, symmetry is implied. Kurtosis is another view of distribution of scores. Short and thick tails refer to peakedness whilst long and thin tails refer to flatness of distribution.

4.5.2 Reliability

The internal consistency of the questionnaires was established by using Cronbach alpha coefficients. As a guideline, Cronbach alpha are deemed acceptable at levels of equal to or greater than 0.7 (Nunnaly & Bernsein, 1984).

4.5.3 Correlation

The Pearsons Correlation Coefficient is a practical approach to test for the strength of a relationship between variables (Sekaran, 1992). The scale ranges on a continuum from -1.00 to +1.00. The closer to either end of this continuum that a correlation score features, the stronger or weaker the relationship between the two variables researched. The Pearson’s Correlation Coefficient narrates the potential for a linear relationship as opposed to either no relationship or a curvilinear relationship. Furthermore, this technique does not indicate cause and effect relationships.

Effect sizes are also used to decide on the practical significance of findings. According to Cohen (1988) the following cut-off points in terms of the correlation
coefficient are recognised as practically significant (independent of direction of the relationship):

- \( r = 0.10 \): small effect;
- \( r = 0.30 \): medium effect;
- \( r = 0.50 \): large effect.

R-values larger than 0.30 (medium effect) will be considered as practically significant for the purposes of this study.

4.5.6 Analysis of variance (ANOVA)

ANOVA is used when research involves three or more levels of a single independent variable or more than three variables (Terre Blanche & Durrheim, 1999). In this study, the independent variables are the nine personality types. The null hypothesis for ANOVA is that the mean (average value of the dependent variable) is the same for all groups. The alternative or research hypothesis is that the average is not the same for all groups.

There are three assumptions that predispose a research to this procedure. The population from which the sample is sourced must be normally distributed. Secondly, the assumption is that variances in the different groups of the design are equal. The third assumption is that there are no mean differences between groups in the population (www.statsoft.com).

The ANOVA test procedure generates an F-statistic. At a significance level of \( p < 0.05 \), the null hypothesis is rejected. The implication is that the average of the dependent variable is not the same for all groups (Sekaran, 1992). Furthermore, it implies that at least 2 groups are different from each other. Although out of scope for this research, in order to determine which groups are different from which, post-hoc t-tests (Scheffe or Tukey tests) are performed using some form of correction (such as the Bonferroni correction) to adjust for an inflated probability of a Type I error (Hair, Anderson, Tatham & Black, 1998).
The ANOVA is appropriate to test for significant differences between means by comparing variances. The appropriateness of using these techniques is that it allows the calculation of many means such as personality types and if necessary the incorporation of more than one independent variable such as work engagement and its three dimensions (Sekaran, 1992).

4.5.7 Chi-Square
Chi-Square may be used as a descriptive statistic or an inferential statistic (Neuman, 2000). In analysing the demographic data such as ethnicity, marital status, job level, gender, age and tenure, the chi-square method will be used due to the nominal or categorical nature of the data. The chi-square is appropriate as it can accommodate greater than two independent samples (Howell, 2004, Sekaran, 1992).

An alpha of 0.05 is used in this research as a cut-off for statistical significance (Bless & Kathuria, 1993).

4.6 FORMULATION OF HYPOTHESES
Building on the literature reviews in Chapter 2 and specifically the integration in Chapter 3, the question of a relationship between personality type and work engagement is empirically pertinent. In conjunction with the specific aims of the research, stated in Chapter 1, the following research (alternative) hypotheses are formulated:

Hypothesis 1: There are significant differences between personality types and work engagement, vigour, dedication and absorption.

Hypothesis 2: There are significant differences between personality triads and work engagement, vigour, dedication and absorption.

Hypothesis 3: There are significant differences between gender and work engagement, vigour, dedication and absorption.

Hypothesis 4: There are no significant differences between ethnicity and work engagement, vigour, dedication and absorption.
Hypothesis 5: There are significant differences between marital status and work engagement, vigour, dedication and absorption.

Hypothesis 6: There are significant differences between job levels and work engagement, vigour, dedication and absorption.

Hypothesis 7: There are significant differences between tenure and work engagement, vigour, dedication and absorption.

Hypothesis 8: There are no significant differences between age and work engagement, vigour, dedication and absorption.

4.7 CHAPTER CONCLUSION

This chapter outlines the research design with specific reference to the population and sample, the measuring battery, procedure, statistical analyses, and formulation of hypotheses.

In Chapter 5 the results of the data analyses will be reported.
CHAPTER 5
RESEARCH RESULTS

This chapter reports and interprets the results of the empirical investigation. The reliability of the measuring instruments, descriptive statistics, the differences between personality types and work engagement, and the differences between biographical groups is discussed. A cut-off point of 0.05 is used in this research to constitute statistical significance.

5.1 RELIABILITY OF THE MEASURING INSTRUMENTS

The Cronbach alpha coefficients for the RHETI and the UWES measuring instruments are discussed.

As there was a limitation in sample sizes of the respective personality types the calculation of reliability of the RHETI is not possible. The reliability of the RHETI, as reported in previous studies, was discussed in Chapter 4. Based on the reliability reported in previous research, the results for the Achiever, the Investigator and the Loyalist types should be interpreted with caution as they were found to be less than the recommended level of 0.7 in terms of their Cronbach alpha (Newgent, 2001).

The Cronbach-alpha coefficient for the UWES measuring instrument is reported in Table 5.1.

Table 5.1
Cronbach-alpha Coefficients of Work Engagement as measured by the UWES

<table>
<thead>
<tr>
<th>Factor</th>
<th>Cronbach Alpha Co-efficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Engagement</td>
<td>0.896</td>
</tr>
<tr>
<td>Vigour</td>
<td>0.695</td>
</tr>
<tr>
<td>Dedication</td>
<td>0.857</td>
</tr>
<tr>
<td>Absorption</td>
<td>0.724</td>
</tr>
</tbody>
</table>

Table 5.1 indicates that the alpha coefficients are in line with the acceptable alpha coefficient cut off point of 0.70 (Nunnaly & Bernstein, 1994).
5.2 DESCRIPTIVE STATISTICS

The distribution, mean, standard deviation, variance, skewness, kurtosis, minimum and maximum scores are reported on to describe the distribution of the scores.

5.2.1 Personality Types

The sample distribution per personality type, the frequency, the mean, standard deviation, variance, skewness, kurtosis, minimum and maximum values are presented in Table 5.2.

Table 5.2

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Distribution %</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Variance</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reformer</td>
<td>24</td>
<td>18.75</td>
<td>17.48</td>
<td>4.57</td>
<td>20.91</td>
<td>-0.40</td>
<td>0.92</td>
</tr>
<tr>
<td>Helper</td>
<td>18</td>
<td>14.06</td>
<td>16.20</td>
<td>5.10</td>
<td>25.99</td>
<td>-0.03</td>
<td>-0.45</td>
</tr>
<tr>
<td>Achiever</td>
<td>13</td>
<td>10.16</td>
<td>16.58</td>
<td>3.28</td>
<td>10.73</td>
<td>-0.09</td>
<td>0.25</td>
</tr>
<tr>
<td>Individualist*</td>
<td>3</td>
<td>2.34</td>
<td>11.27</td>
<td>4.61</td>
<td>21.27</td>
<td>0.38</td>
<td>-0.37</td>
</tr>
<tr>
<td>Investigator*</td>
<td>1</td>
<td>0.78</td>
<td>13.03</td>
<td>3.51</td>
<td>12.33</td>
<td>-0.06</td>
<td>-0.40</td>
</tr>
<tr>
<td>Loyalist</td>
<td>16</td>
<td>12.50</td>
<td>16.10</td>
<td>4.39</td>
<td>19.29</td>
<td>0.05</td>
<td>-0.29</td>
</tr>
<tr>
<td>Enthusiast</td>
<td>10</td>
<td>7.81</td>
<td>14.15</td>
<td>4.99</td>
<td>24.93</td>
<td>-0.13</td>
<td>0.11</td>
</tr>
<tr>
<td>Challenger</td>
<td>28</td>
<td>21.88</td>
<td>17.66</td>
<td>5.25</td>
<td>27.59</td>
<td>-0.03</td>
<td>-0.68</td>
</tr>
<tr>
<td>Peacemaker</td>
<td>15</td>
<td>11.72</td>
<td>14.91</td>
<td>5.22</td>
<td>27.21</td>
<td>0.20</td>
<td>-0.37</td>
</tr>
</tbody>
</table>

* Types which are excluded from analysis

Some pertinent conclusions can be drawn from Table 5.2. The Individualist and the Investigator types are excluded in subsequent analysis due to insufficient representation in the sample. The Leader of this sample is known to be a type 8, Challenger type. The highest and second highest types prevalent among the subordinates are the Challenger and the Reformer types. All mean scores per personality type fall within the RHETI average norm of scoring (Riso & Hudson, 2003) which is between 12 to 20. There is also a tendency of type mean scores to fall slightly on either side of the RHETI median of 16.

Skewness refers to the extent that scores positively or negatively deviate from a normal distribution (Howell, 1989). Minor positive and negative skewness of all types confirm that results are more or less normally distributed. Like skewness, kurtosis...
also indicates if results point to normal distribution Kurtosis provides an illustration of how the scores at tail ends collate (Howell, 1989). When results are non-peaked, less clustered and have shorter tails, a very slight negative kurtosis is indicated as in the case of the Helper; the Challenger and the Peacemaker types.

### 5.2.2 Triads

The descriptive statistics for personality triads are illustrated in Table 5.3:

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instinctive</td>
<td>67</td>
<td>37.90</td>
<td>7.770</td>
<td>25</td>
<td>62</td>
</tr>
<tr>
<td>Feeling</td>
<td>34</td>
<td>36.62</td>
<td>9.832</td>
<td>22</td>
<td>59</td>
</tr>
<tr>
<td>Thinking</td>
<td>27</td>
<td>35.89</td>
<td>9.082</td>
<td>23</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>128</td>
<td>37.13</td>
<td>8.607</td>
<td>22</td>
<td>62</td>
</tr>
</tbody>
</table>

This sample has more respondents from the instinctive triad than feeling and thinking triads, as indicated in Table 5.3.

### 5.2.3 Work Engagement

The descriptive statistics for the UWES is presented in Table 5.4.

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Variance</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigour</td>
<td>131</td>
<td>4.76</td>
<td>0.72</td>
<td>0.54</td>
<td>-1.01</td>
<td>1.52</td>
<td>2.17</td>
<td>6.00</td>
</tr>
<tr>
<td>Dedication</td>
<td>131</td>
<td>4.84</td>
<td>0.95</td>
<td>0.91</td>
<td>-1.61</td>
<td>3.51</td>
<td>0.80</td>
<td>6.00</td>
</tr>
<tr>
<td>Absorption</td>
<td>131</td>
<td>4.69</td>
<td>0.89</td>
<td>0.82</td>
<td>-1.44</td>
<td>2.72</td>
<td>1.33</td>
<td>6.00</td>
</tr>
<tr>
<td>Work Engagement Total</td>
<td>131</td>
<td>4.76</td>
<td>0.75</td>
<td>0.57</td>
<td>-1.59</td>
<td>3.71</td>
<td>1.80</td>
<td>6.00</td>
</tr>
</tbody>
</table>

The following can be seen from Table 5.4.
With reference to norms established by Schaufeli and Bakker (2003) illustrated in Table 4.2 in Chapter 4, the mean scores for vigour is indicated as average, for dedication as average, for absorption as high and overall work engagement as high. A mean score also provides a general view of work engagement. The mean scores in Table 5.4 indicate that the employees in this sample experience feelings of engagement at least once a week.

The skewness results indicate that the total work engagement as well as all subscales is skewed. To further highlight this finding, results that are peaked, more clustered and have longer tails, a positive kurtosis is indicated, as is the case for all work engagement constructs.

5.3 PERSONALITY TYPES AND WORK ENGAGEMENT

ANOVA was used to determine if significant differences exist between the various personality types and their work engagement scores. The results of the ANOVA are displayed in Table 5.5.

Table 5.5

<table>
<thead>
<tr>
<th>Differences Between Personality Types and Work Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Vigour</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Dedication</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Absorption</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total Work engagement</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant at the 0.05 level
From Table 5.5, it can be seen that there are no statistical significant differences between the various personality types with regard to their work engagement scores. At a significance level of \( p < 0.05 \), no statistical differences of means were found. A further exploration to personality types is personality triads.

Table 5.6

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Sum of squares</th>
<th>Mean Squares</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigour</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>0.854</td>
<td>0.427</td>
<td>1.236</td>
<td>.294</td>
</tr>
<tr>
<td>Within Groups</td>
<td>42.847</td>
<td>0.346</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>43.701</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dedication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>0.609</td>
<td>0.305</td>
<td>0.790</td>
<td>0.456</td>
</tr>
<tr>
<td>Within Groups</td>
<td>47.832</td>
<td>0.386</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>48.441</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absorption</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>0.788</td>
<td>0.394</td>
<td>0.785</td>
<td>0.459</td>
</tr>
<tr>
<td>Within Groups</td>
<td>62.251</td>
<td>0.502</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>63.039</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant at the 0.05 level

From Table 5.6 it can be seen that there are no statistical significant differences between the various personality triads with regard to their work engagement scores. At a significance level of \( p < 0.05 \), no statistical differences of means were found.

5.4 WORK ENGAGEMENT SCORES AND DEMOGRAPHIC GROUPS

Biographical groupings such as gender, ethnicity, marital status, job levels, age and tenure provide valuable perspectives to possible differences in work engagement and its sub-dimensions by distinctive groups.

The difference between gender and their work engagement scores are presented in Table 5.7 and Table 5.8.
### Table 5.7

**Descriptive Statistics of Work Engagement and Gender**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigour</td>
<td>Males</td>
<td>35</td>
<td>5.1143</td>
<td>0.53431</td>
<td>3.83</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>96</td>
<td>4.6423</td>
<td>0.07630</td>
<td>2.17</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>131</td>
<td>4.7684</td>
<td>0.72599</td>
<td>2.17</td>
</tr>
<tr>
<td>Dedication</td>
<td>Males</td>
<td>35</td>
<td>5.2000</td>
<td>0.64352</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>96</td>
<td>4.7208</td>
<td>1.01421</td>
<td>0.80</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>131</td>
<td>4.8489</td>
<td>0.95147</td>
<td>0.80</td>
</tr>
<tr>
<td>Absorption</td>
<td>Males</td>
<td>35</td>
<td>4.9240</td>
<td>0.61059</td>
<td>3.17</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>96</td>
<td>4.6128</td>
<td>0.97258</td>
<td>1.33</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>131</td>
<td>4.6960</td>
<td>0.89881</td>
<td>1.33</td>
</tr>
<tr>
<td>Work Engagement</td>
<td>Females</td>
<td>96</td>
<td>4.655</td>
<td>0.8062</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>131</td>
<td>4.766</td>
<td>0.7518</td>
<td>1.8</td>
</tr>
</tbody>
</table>

From Table 5.7 males indicate higher mean scores than females. From Table 5.8 it can be seen that statistical significant differences were found between men and women with regards to vigour and their overall work engagement, specifically.

### Table 5.8

**Differences Between Work Engagement by Gender**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigour: Between Groups</td>
<td>5.71</td>
<td>1</td>
<td>5.71</td>
<td>11.73</td>
<td>0.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>62.80</td>
<td>129</td>
<td>0.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>68.51</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dedication: Between Groups</td>
<td>5.88</td>
<td>1</td>
<td>5.88</td>
<td>6.79</td>
<td>0.10</td>
</tr>
<tr>
<td>Within Groups</td>
<td>111.79</td>
<td>129</td>
<td>0.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>117.68</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absorption: Between Groups</td>
<td>2.48</td>
<td>1</td>
<td>2.48</td>
<td>3.12</td>
<td>0.79</td>
</tr>
<tr>
<td>Within Groups</td>
<td>102.53</td>
<td>129</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>105.02</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Work: Between Groups</td>
<td>4.46</td>
<td>1</td>
<td>4.46</td>
<td>8.35</td>
<td>0.005</td>
</tr>
<tr>
<td>Within Groups</td>
<td>69.00</td>
<td>129</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>73.47</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant at the 0.05 level
In this sample, gender does influence vigour and overall work engagement, with specific reference to men scoring higher than females.

The difference between ethnicity and work engagement scores are presented in Table 5.9:

**Table 5.9**

*Differences Between Work Engagement by Ethnicity*

<table>
<thead>
<tr>
<th>Construct</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>0.30</td>
<td>3</td>
<td>0.10</td>
<td>0.19</td>
<td>0.90</td>
</tr>
<tr>
<td>Within Groups</td>
<td>68.21</td>
<td>127</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>68.51</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dedication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>0.50</td>
<td>3</td>
<td>0.16</td>
<td>0.18</td>
<td>0.90</td>
</tr>
<tr>
<td>Within Groups</td>
<td>117.18</td>
<td>127</td>
<td>0.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>117.68</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absorption</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2.36</td>
<td>3</td>
<td>0.78</td>
<td>0.97</td>
<td>0.40</td>
</tr>
<tr>
<td>Within Groups</td>
<td>102.65</td>
<td>127</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>105.02</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>0.77</td>
<td>3</td>
<td>0.25</td>
<td>0.44</td>
<td>0.71</td>
</tr>
<tr>
<td>Within Groups</td>
<td>72.70</td>
<td>127</td>
<td>0.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>73.47</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Statistically significant at the 0.05 level

From Table 5.9 it can be seen that there are no statistical significant differences among ethnic groups in terms of work engagement.

The difference between marital status and work engagement scores are presented in Table 5.10.
Table 5.10

**Differences Between Work Engagement by Marital Status**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Between Groups</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vigour</td>
<td>2.29</td>
<td>1</td>
<td>2.29</td>
<td>4.46</td>
<td>0.37</td>
</tr>
<tr>
<td></td>
<td>66.22</td>
<td>129</td>
<td>0.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>68.51</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dedication</td>
<td>2.74</td>
<td>1</td>
<td>2.74</td>
<td>3.07</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>114.94</td>
<td>129</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>117.68</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absorption</td>
<td>0.18</td>
<td>1</td>
<td>0.18</td>
<td>0.22</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td>104.83</td>
<td>129</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>105.021</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Overall Work Engagement**

| Between Groups | 1.37 | 1  | 1.37 | 2.46 | 0.11 |
| Within Groups  | 72.09 | 129| 0.55 |      |     |
| Total          | 73.47 | 130|     |      |     |

From Table 5.10 it can be seen that there are no statistical significant differences among married and unmarried groups in terms of work engagement.

The differences between job level and work engagement scores are presented in Table 5.11.

Table 5.11

**Differences Between Work Engagement by Job Level**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Between Groups</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vigour</td>
<td>0.00</td>
<td>1</td>
<td>0.00</td>
<td>0.002</td>
<td>0.96</td>
</tr>
<tr>
<td></td>
<td>68.51</td>
<td>129</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>68.51</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dedication</td>
<td>0.82</td>
<td>1</td>
<td>0.82</td>
<td>0.91</td>
<td>0.34</td>
</tr>
<tr>
<td></td>
<td>116.86</td>
<td>129</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>117.68</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absorption</td>
<td>1.59</td>
<td>1</td>
<td>1.59</td>
<td>1.98</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>103.42</td>
<td>129</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>105.021</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Overall Work Engagement**

| Between Groups | 0.52 | 1  | 0.52 | 0.93 | 0.33 |
| Within Groups  | 72.95 | 129| 0.56 |      |     |
| Total          | 73.47 | 130|     |      |     |
From Table 5.11 it can be seen that there is no statistical significant difference in terms of the various job levels and their work engagement scores.

Age and tenure analyses was determined by means of a correlation as the data is continuous and is illustrated in tables 5.12 and 5.13, respectively.

Table 5.12

<table>
<thead>
<tr>
<th>Construct</th>
<th>Tenure</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigour</td>
<td>r</td>
<td>0.147</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>0.095</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>130</td>
</tr>
<tr>
<td>Dedication</td>
<td>r</td>
<td>0.195*</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>0.026</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>130</td>
</tr>
<tr>
<td>Absorption</td>
<td>r</td>
<td>0.155</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>0.078</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>130</td>
</tr>
<tr>
<td>Total Work</td>
<td>r</td>
<td>0.188*</td>
</tr>
<tr>
<td>engagement</td>
<td>p</td>
<td>0.032</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>130</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed)

From Table 5.12 it can be seen that there is a positive correlation indicating that as tenure increases, dedication and overall work engagement increases, at a 0.05 level of significance. As r-values larger than 0.30 are considered as practically significant for the purposes of this study, the positive correlation between tenure and dedication, and tenure and work engagement is of small effect in terms of the practical significance.
Table 5.13

**Correlations Between Vigour, Dedication, Absorption and Overall Work Engagement and Age**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigour</td>
<td>$r$ 0.110</td>
</tr>
<tr>
<td></td>
<td>$p$ 0.215</td>
</tr>
<tr>
<td></td>
<td>N 130</td>
</tr>
<tr>
<td>Dedication</td>
<td>$r$ 0.093</td>
</tr>
<tr>
<td></td>
<td>$p$ 0.294</td>
</tr>
<tr>
<td></td>
<td>N 130</td>
</tr>
<tr>
<td>Absorption</td>
<td>$r$ 0.009</td>
</tr>
<tr>
<td></td>
<td>$p$ 0.918</td>
</tr>
<tr>
<td></td>
<td>N 130</td>
</tr>
<tr>
<td>Total Work engagement</td>
<td>$r$ 0.075</td>
</tr>
<tr>
<td></td>
<td>$p$ 0.394</td>
</tr>
<tr>
<td></td>
<td>N 130</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed)*

From Table 5.13 it can be seen that there are no statistically significant correlations between vigour, dedication, absorption and overall work engagement and age at a 0.05 level of significance.

5.5 DISCUSSION

Previous chapters included a literature review of the variables under study. This chapter outlined the reporting and interpretation of results of the empirical investigation. This section explores an integrated discussion of these aspects.

There was a limitation in not having adequate sample sizes of the respective personality types in order to be able to calculate the reliability of the RHETI. The reliability of the personality types on the RHETI was reported in Chapter 4, with a cautionary interpretation of the Achiever, the Investigator and the Loyalist types as they were found to be less than the recommended level of 0.7 in terms of their Cronbach alphas (Newgent, 2001). The Individualist and the Investigator types are excluded in subsequent analysis due to insufficient representation in the sample.
The alpha coefficients for the work engagement scales are in line with the acceptable alpha coefficient cut off point of 0.70 (Nunnaly & Bernstein, 1994).

From the descriptive statistics and sample representation, the lack of representation of the Individualist type employees and the Investigator type employees is prone to create a strengths gap in this organisation. For instance, the strengths of the level-headedness and the open-mindedness typical of Individualist and Investigator types respectively may be lacking among this group of employees. On the other hand, the leader and the majority prevalence within the sample is the type 8 Challenger type. This is an indication that there will be a greater typical preference to work autonomously and vigorously in this group of employees that was sampled. The second highest in type prevalence among these subordinates was the Type 1 Reformer. The Reformer types are likely to seek continuous calculated progressive change. Furthermore, this sample is also constituted by majority representation of the Instinctive triad, that is, the Reformer, the Challenger, and the Peacemaker types. The ego defences contracted by this triad is associated with anger or rage as opposed to anxiety of the Thinking Triad and shame of the Feeling Triad. Balance is indicated on the Enneagram symbol by highlighting the need for all types and triads to realise holistic potential. The lack and overcompensation of strengths of some types is likely to skew organisational tendencies, if this dynamic is not understood.

The mean distribution, skewness and kurtosis have indicated the tendency of the mean scores to fall slightly on either side of the RHETI median and within the RHETI norm of scoring that individual’s are typical of their dominant types.

The mean distribution, skewness and kurtosis have indicated that the UWES results are not normally distributed. The mean scores found indicate that the sample employees are likely to experience feelings of vigour, dedication, absorption and work engagement at least once a week.

As no statistical differences of means were found between personality and work engagement via types and triads, this finding differs from previous research. In a South African study (Mostert & Rothmann, 2006) vigour and dedication was found to be predicted by the personality characteristics of emotional stability,
conscientiousness and extraversion. Richardsen, Burke and Martinussen (2006) conducted another investigation and found Type A behaviour was associated with engagement. In personality type investigations, several other studies also concluded that Type A characteristics does influence a variance in work engagement (Burke, Richardsen & Martinussen, 2006; Johansson, & Schaufeli, 2007; Hallberg & Schaufeli, 2006; Hallberg). In another empirical approach, a Turkish study of personality trait and work engagement found the personality trait of control predicted engagement (Koyuncu, Burke & Fiksenbaum, 2006). Researchers (Langelaan, Bakker, van Doornen & Schaufeli, 2008), found that work engagement was associated with personality traits of low neuroticism, high extraversion and high mobility. Personality and temperament was found to be a factor in work engagement. The personality traits, job control and organisation self-esteem, were empirically found to influence dimensions of work engagement in a longitudinal study over two years of health care workers (Mauno, Kinnunen & Ruokolainen, 2007). It must be noted that an influencing factor on this empirical study may have emerged due to a small sample size per personality type grouping. A larger sample size of employees per personality type or triad may have resulted in different findings. Furthermore, another possibility for this deviation is that previous studies researched, did not use the RHETI as a measure of personality type with reference to the link with work engagement. The way this instrument measures personality type may have influenced the empirical outcome.

Like previous studies, statistical significant differences were found between gender groups, in terms of work engagement. Previous research by Chu (2000) highlighted significant differences in motivations in the work context between males and females. Schaufeli and Bakker (2003) found marginal differences in work engagement among gender groups but declared little practical significance in the finding. Mostert and Rothmann (2006) also found that gender influenced a marginal difference in vigour and dedication. On the other hand, work engagement was found to have a negative effect on the family role of females, unlike males (Rothbard, 2001). Contrary to the finding in this study, Karlsson and Archer (2007) investigated stress and energy and found higher levels of vigour among females than males. Peter (2008) also found that work engagement is gender sensitive and was influenced by factors such as reward, relationships and child care.
This study confirmed, as with previous studies, that there are no statistical significant differences among ethnic groups, in terms of work engagement. The literature review revealed various studies which dispelled a significant link among ethnic groups, in terms of work engagement (Bakken & Holzemer, 2000; Mostert & Rothmann, 2006; Salamonson, Andrew, & Everett, 2009).

In contrast to previous studies, no statistical significant differences were found between married and unmarried groups, in terms of work engagement. In a previous study an implication of marital status arises from the influence of the well-being of one spouse on the other spouse’s well being (Bakker & Demerouti, 2009, Dikkers, Geurts, Kinnunen, Kompier, Taris, 2007). Westman (2001) elaborated on the crossover between partners. In studying married couples, levels of vigour and dedication influenced spouse’s levels of vigour and dedication (Bakker & Schaufeli, 2003). This involves that if a wife shows higher levels of work engagement, it could become infectious to the husband’s level of work engagement and vice versa.

With regards to job levels and work engagement, this study differs from previous research. Schaufeli and Bakker (2003) found differential influences between white collar workers or managers and blue collar workers, suggesting differences in the experience of work engagement. No statistical significant differences in terms of work engagement across various job levels were found in this study. A factor that may be relevant is that the senior personnel constituted 70% of the sample, whilst the junior personnel constituted 30%. A more representative sample of junior personnel may yield different results.

Consistent with literature review, the finding of a positive correlation, that is, as tenure increases, dedication and overall work engagement increases. Research has highlighted that employees who are highly engaged in their work have invested much energy and dedication in their jobs, alluding to developing vigour and dedication over time (Halbesleben & Wheeler, 2008).

A dichotomy in literature findings was highlighted regarding the correlation between vigour, dedication, absorption and overall work engagement and age. However, this study found no correlations among these variables. Consistent with the literature
review (Bakken & Holzemer, 2000; Salamonson, Andrew, & Everett, 2009) in the healthcare sector, age is not a significant factor for work engagement.

The conclusions with respect to hypotheses stated in Chapter 4 are mentioned below.

**Hypothesis 1:** There are significant differences between personality types and work engagement, vigour, dedication and absorption. This hypothesis could not be confirmed in this research.

**Hypothesis 2:** The hypothesis that there are significant differences between personality triads and work engagement, vigour, dedication and absorption could not be confirmed by this research.

**Hypothesis 3:** This hypothesis that there are significant differences between gender and work engagement is partially confirmed in this research.

**Hypothesis 4:** The hypothesis that there are significant differences between ethnicity and work engagement, vigour, dedication and absorption could not be confirmed by this research.

**Hypothesis 5:** The hypothesis that there are significant differences between marital status and work engagement, vigour, dedication and absorption could not be confirmed by this research.

**Hypothesis 6:** The hypothesis that there are significant differences between job levels and work engagement, vigour, dedication and absorption could not be confirmed by this research.

**Hypothesis 7:** The hypothesis that there are significant differences between tenure and work engagement is partially confirmed by this research.
Hypothesis 8: The hypothesis that there are significant differences between age and work engagement, vigour, dedication and absorption could not be confirmed by this research.

5.6 CHAPTER CONCLUSION
This chapter constituted reporting and interpretation of results of the empirical investigation. Firstly, reliability was established. Secondly, the personality types and work engagement were presented. Descriptive statistics, correlation, ANOVA and Chi-square methods were used to explore personality and work engagement. The demographic impact of data was also investigated. Significant findings emerge from this study, but the link between personality and work engagement is not established. Valuable conclusions emerge from this investigation and will be discussed in the next chapter.
CHAPTER 6
CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter contains conclusions, limitations and recommendations regarding the research.

6.1 CONCLUSIONS

The economic downturn has lead to organisational challenges regarding employee work engagement in the midst of increased job insecurity, declining profits and decreased growth rates globally (Bosman, Rothman & Buitendach, 2005; Charan, 2009; Greenhaus, Callanan & Godshalk, 2000; Weeks, 2002). This implies that organisations require more focused effort to keep employees continuously engaged (Nilsson, Bernspång, Fisher, Gustafson & Löfgren; 2007; Schaufeli & Bakker, 2004). As there is a diversity of personalities that constitute any workforce, each with its own strengths and development areas and complexities, the general aim of this study was to understand the relationship between personality types and work engagement, as well as the biographical differences with regard to work engagement. The theoretical and empirical conclusions are specifically addressed in terms of the aims stated in Chapter 1:

- To conceptualise personality type from the literature;
- To conceptualise work engagement from the literature;
- To conceptualise the relationship between personality type and work engagement from the literature;
- To conceptualise the relationship between demographical variables and work engagement from the literature;
- To determine if there is a significant relationship between personality type and work engagement;
- To determine how work engagement differs with regards to gender, ethnicity, marital status, job levels, tenure and age.
6.1.1 Theoretical Conclusions

In accordance with the aims of this study, the theoretical conclusions are based on the exploration of the conceptualisation of personality type, work engagement, and demographical variables and work engagement from the literature.

6.1.1.1 Personality Types

The evolution of personality theories yielded great contributions from Wilhelm Wundt, Galton (Allport, 1937) to Jung (Jung, 1923). The two distinct variations in personality theory emerged were traits and type theories. Personality traits refer to a singular and habitual dimension in behaviour (Furnham, 1989) whereas personality types refer to a consistent aggregation of traits to conceptualise a category of personality (Jung, 1923). This study focussed on personality type as an area of investigation.

As such, personality type is defined as a unique cluster of innate, dominant, adaptive and maladaptive psychological orientations of an individual in response to social and environmental demands. Significant aspects of this definition include the influence of both innate and environmental influences on personality type. Furthermore, there are both constructive and destructive response elements to personality types. Lastly, personality type functions as a filter to individual responses to demands.

Personality types provide a theoretical framework for researchers, an insight into self-understanding, individual differences, psychological functioning and a compass of contrast and point of reference (Jung, 1923). A significant influence in the theory of personality type emerged from Carl Jung. He proposed that the human psyche develops in response to dialectic dimensions, continuously striving towards becoming a full human being (Jung, 1923). Theories which used Jung’s methodology included the Myers-Briggs Type indicator, the Kiersey Temperament Theory (Kiersey & Bates, 1984) and the one under study is the Enneagram theory of personality types (Riso & Hudson, 2003).

The Enneagram is depicted as a nine point symbol on which the nine personality types are approximately diametrically illustrated in a circular manner. The Enneagram constitutes nine personality types, labelled to reflect their dominant and unique tendencies. The label of each personality type which serves as an indicator
of dominant features are as follows, the Reformer, the Helper, the Achiever, the Individualist, the Investigator, the Loyalist, the Enthusiast, the Challenger and the Peacemaker. Consistent with the definition employed in this research, personality according to the Enneagram is influenced by innate and environmental factors. Aligned to adaptive and maladaptive responses interpersonally and environmentally, the Enneagram positions personality on a continuum of healthy, average and unhealthy states.

Each individual has the capacity to develop any aspects of the nine types on the Enneagram. Apart from personality types, the Enneagram offers another theoretical dimension of type distinction. The nine types may be further assimilated to highlight apparent similarities among the types to form three personality triads with thematic dominant functioning patterns, that is, the instinctive triad, the thinking triad and the feeling triad. Each triad consists of three personality types, illustrating the dominant function commonly embedded within the constituting personality types. For instance, the instinctive triad is associated with anger or rage response patterns and comprises the Reformer, the Peacemaker and the Challenger types.

The Enneagram suggests that the nine types together exhibit the full range of human potential and that each personality type becomes a subset or component of that potential. The Enneagram theory also provides secondary features such as a perspective on wing types, levels of development, growth, stress, social interactions, managing change, approaching conflict, and problem solving distinctions that emerge from the types. There may be significant difference in manifestation of a personality type due to variations in secondary features.

Personality theory has been the subject of much empirical attention. The organisational value of focusing on understanding and developing personality has been linked with good leadership, personal leadership, talents and strengths, negotiation, effective communication, influencing a culture of inclusivity, transformation, complex change, general performance improvement and work engagement (Levine, 1999; Riso & Hudson, 1999; 2000; 2003; Hogan & Kaiser, 2005; Temane, 2006; Lapi-Bogda, 2007).
Personality types have also been established as an important variable in well-being, making it a significant choice in this research (Adler, 2004, Dijkstra, Van Dierendonck, Grant & Langhan-Fox, 2007; Hogan & Kaiser, 2005; Hui, Lo, Bond & Kam, 2008; Lucas, 2007; Luszczynska & Cieslak, 2005; Mostert & Rothmann, 2006; Steel, Schmidt & Schultz, 2008; Weiss, Bates & Luciano, 2008). Another important variable in the domain of employee well-being is work engagement and as such been selected as a relevant area for further investigation.

6.1.1.2 Work Engagement

The concept of work engagement emerged in the context of theory on burnout. Although initially positioned as two ends of the same continuum or inversely related (Maslach & Leiter, 1997), work engagement and burnout are today theorised as two distinct variables. Work engagement and burnout are also noted as significant indicators of well-being. Schaufeli et al. (2002) developed the UWES as a measure of this discrete variable, work engagement.

The definition of work engagement employed in this research is the consistent, optimistic, purposeful and constructive psychological orientation of an individual in the work context. A significant implication of this definition highlights the regularity of positive response and expression in the face of demands in the work context. Instead of disparaging responses, individuals respond productively toward work challenges.

Many theoretical perspectives regarding work engagement has emerged in recent times. These include the Job Characteristics Theory (Hackman & Oldham, 1976), employee engagement or disengagement (Kahn, 1990, May, Gilson & Harter, 2004), the Broaden-and-Build Theory of Positive Emotions (Fredrickson, 2001) burnout being the antipode of work engagement (Maslach et al, 2001), the Social Exchange Theory (Saks, 2006), the job-demand-resource model (JD-R model) (Demerouti et al, 2001, Jackson, Rothmann & Van de Vijver, 2006), the Conservation of Resources Theory (Llorens, Schaufeli, Bakker & Salanova, 2007; Mauno, Kinnunen & Ruokolainen, 2007), and that antecedents to work engagement can also vary by occupation (Llorens, Schaufeli, Bakker & Salanova, 2007; Mauno, Kinnunen &
The theoretical perspective relevant to this research is the job-demand-resource (JD-R model).

This popular perspective identifies job characteristics, specifically job demands and job resources. Job demands like capacity challenges and stressful deadlines can result in burnout. Job resources are quite discrete and include autonomy, and development. Job resources are indicated as qualitative factors such as “physical, psychological, social or organisational aspects of the job” which influences personal growth and to be the source of job engagement (Demerouti et al, 2001; Rothmann & Van de Vijver, 2006, p. 265). These resources positively influence work engagement. As burnout and work engagement are not opposite ends of the same continuum, neither are job demands and job resources. This implies that while stressful deadlines influence burnout, relaxed deadlines will not necessarily influence an increase in work engagement. Schaufeli and Bakker (2001) captured the distinction by developing the UWES, a distinct measure of work engagement, based on the JD-R model.

In general most authors are aligned to the UWES dimensional perspective of work engagement that is, vigour, dedication and absorption (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002; Mauno, Kinnunen & Ruokolainen, 2007). Vigour is a relatively stable characteristic manifested as energy, rigour and thoroughness of effort in work. Dedication is manifested by passion, enthusiasm and pride in work. Absorption refers to an unconscious attachment to work and is experienced as a significant personal connection to work. Although vigour, dedication and absorption constitute work engagement, each sub-concept has also been found to be internally consistent (Schaufeli & Bakker, 2003). As such, work engagement and its three sub-dimensions vigour, dedication and absorption were in scope for this investigation.

There were other variables identified in literature which were semantically similar to work engagement but were found to be empirically distinct. Organisational commitment focuses on organisational loyalty and a personal identification with its culture (Hallberg & Schaufeli, 2006; Jackson, Rothmann, & Van de Vijver, 2006; Rothmann & Jordaan, 2006). Organisation citizenship behaviour bears spotlight on informal and voluntary behaviours that influence socialisation (Saks, 2006). Job
involvement is an indication of personal identification with work from a self-esteem and self-image perspective (Hallberg & Schaufeli, 2006; Saks, 2006). The discrete variable of absorption is an indication of fleeting engagement with work as opposed to a more sustained experience (Schaufeli et al, 2001). Organisational engagement differs as the connection is with the organisation and may be vested in many roles, as opposed to a connection with the formal appointed role (Saks, 2006). Work engagement is quite distinct from these variables as it refers to a healthy, positive, energised and passionate approach to work that is sustainable over a period of time.

The organisational value of work engagement was established via many studies. Work engagement has been found to be positive influence in job satisfaction, organisational commitment, decreased intention to resign (Demerouti, Bakker, Janssen & Schaufeli, 2001), employee initiative and willingness to learn (Sonnentag, 2003), a proactive work approach (Salanova, Agut & Piero, 2005) and organisation-based self-esteem (Mauno, Kinnunen & Ruokolainen, 2007). Noting the impact of well-being, healthy workers were found to be performing better (Schaufeli & Bakker, 2003, Salanova, Agut & Piero, 2005). Other factors such as job control, positive workplace climate, utility of one’s skills at work, challenges at work, commitment to family and even personality factors such as lower neuroticism and higher extroversion were also found to be linked to work engagement (Mauno, Kinnunen & Ruokolainen, 2007).

The links between personality theory and work engagement is present in literature. A study of work engagement among women managers and professionals in a Turkish bank, found the personality trait of control predicted engagement (Koyuncu, Burke & Fksenbaum, 2006). In a South African study (Mostert & Rothmann, 2006) vigour and dedication were found to be predicted by the personality characteristics of emotional stability, conscientiousness and extroversion. In another study investigating the role of engagement in predicting work and health related outcomes, Type A behaviour was found to be associated with engagement. Many other studies also concluded that Type A characteristics influence a variance in work engagement (Burke, Richardsen & Martinussen, 2006; Hallberg & Schaufeli, 2006; Hallberg, Johansson, & Schaufeli, 2007). Researchers also found that work engagement was associated with low neuroticism, high extroversion and high mobility (Langelaan, Bakker, van
Doornen & Schaufeli, 2008). In the health care sector, the personality traits, job control and organisation self-esteem, were empirically found to influence dimensions of work engagement in a two year longitudinal study (Mauno, Kinnunen & Ruokolainen, 2007). Although some research establishes the link between personality theory and work engagement, it is acknowledged that there is scope for further investigations. Another specific aspect explored in this research was the link between demographic variables and work engagement.

6.1.1.3 Demographical Variables and Work Engagement

Schaufeli and Bakker (2003) highlighted several demographic variables in their study on work engagement and in the conceptualisation of work engagement. The specific demographic variables explored in this study were gender, ethnicity, marital status, job level, tenure and age.

Several researchers focussed on the gender link to work engagement and findings ranged from marginal differences with little practical significance to work engagement is gender sensitive (Mostert & Rothmann, 2006; Peter, 2008; Schaufeli & Bakker, 2003).

Ethnicity remains a relevant variable in South Africa given the country's historical emergence. Although Mostert and Rothmann (2006) found that race influenced a marginal difference in vigour and dedication, other studies found no significant links between ethnicity and engagement (Bakken & Holzemer, 2000; Salamonson, Andrew, & Everett, 2009).

The need to study marital status is probably well explained by Westman’s (2001) explanation of how the crossover between partners’ is facilitated. The first way indicates that crossover of emotions occurs due to the caring relationship that exists between partners. The second way suggests that the stressor could be common to both partners and as such influences the same reaction, but separately. The third way suggests that stressor experienced by one partner may be so significant that the impact of interaction in the relationship may result in strong negative behaviour like inappropriate exchanges. This implies that the work experience has implications for the home experience and vice versa because of the nature of marital relationships.
Research findings on married couples illustrated that levels of vigour and dedication influenced spouse’s levels of vigour and dedication (Bakker & Schaufeli, 2003). This implies that if one spouse shows higher levels of work engagement, it could become transmittable to the other spouse’s level of work engagement and vice versa.

Research on the link between job levels and work engagement remain sparse. However, in their work on conceptualising the UWES, Schaufeli and Bakker (2003) found differential influences between white collar workers or managers and blue collar workers.

As employees accumulate years of service they accumulate social, physical and organisational resources which positively influenced engagement in work. Researchers investigating work engagement have highlighted that employees who are highly engaged in their work have invested much energy and dedication in their jobs, alluding to developing vigour and dedication over time. (Halbesleben & Wheeler, 2008). However, a longitudinal study (De Lange, De Witte, Notelaers, 2008) showed that even with the accumulation of resources over longer tenure, work engagement levels off and may even show a decreasing tendency. The implication is that work engagement must be further stimulated, perhaps by a continued availability and renewal of significant resources.

Although age was found to be marginally significant in the link to work engagement (Mostert & Rothmann, 2006; Schaufeli & Bakker, 2003); other studies were slightly more conclusive and found no significant relationships with age (Bakken & Holzemer, 2000; Salamonson, Andrew, & Everett, 2009).

The demographic variables were found to be a significant variable in the effort to understand the dynamics of work engagement. The hypothesis conceptualised in this study were based on the literature findings and were subsequently tested in the empirical investigation.
6.1.2 EMPIRICAL CONCLUSIONS

Although the alpha coefficients of six of the nine personality types were acceptable (Nunnaly & Bernstein, 1994), the three types, the Achiever, the Investigator and the Loyalist types were interpreted with caution (Newgent, Parr, Newman, & Higgins, 2004) as they were found to be less than the acceptable level of 0.70. The alpha coefficients for the work engagement scales (Schaufeli & Bakker, 2003) were acceptable.

The Individualist and the Investigator types were excluded in the statistical analysis due to insufficient representation in the sample. As the Enneagram suggests that the nine types together exhibit the full range of human potential and that each personality type becomes a subset or component of complete potential, the lack of representation of the Individualist type employees and the Investigator type employees within this sample is prone to specific consequences. In their healthy state, the Individualist type represents employees who are in touch with their feelings, sensitive to the feelings of others and gets pleasure from authentic relationships. With the presence of Individualists in teams, their dominant focus on emotions can be particular team strength toward cohesiveness. In their healthy state, the Investigator type represents employees who are loyal, focused, creative and seek purposeful relationships. Similarly, with the presence of Investigator types in teams, their dominant focus on dedicated, imaginative and resourceful approaches to work is of great organisational value, especially during the times of rapid change and pace. The relative strengths of the two personality types may be prone to a characteristic deficiency among this group of employees that was included in this study.

In contrast, the Challenger type prevails dominantly in this sample. This personality type is characterised as potent, controlling, self-assured, decisive and forceful. There would be a preference to work autonomously and vigorously in this sample. The Challenger employees are likely to experience well-being as long as they feel in control of their work. Given the lack of Individualists and the Investigator types and a dominant presence of the Challenger type, particular group characteristics may emerge. For instance, a lack of people, relationship and emotional focus, a dominant focus on task orientation and a partiality to control may emerge. Given
that 70% of this sample constituted senior personnel, their management style may be prone to the Challenger type as well. If control is ever compromised, well-being may be inhibited as the Challenger succumbs to becoming dominating, dictatorial and confrontational. At their best, Challenger type management are likely to portray empowering, giving, stimulating and decisive leadership.

The Instinctive triad comprising of the Reformer, the Challenger, and the Peacemaker types constitutes the majority representation in this sample. Typical ego defences contracted by this triad is associated with anger or rage. The lack and overcompensation of strengths and development areas of some types or triads are likely to skew group tendencies, if these dynamics are not understood.

Overall work engagement and feelings of vigour, dedication, and absorption are experienced by this group of employees at least once a week. Although when compared to the UWES scales this measure is relatively high, there is some effort required to ensure that work engagement and feelings of vigour, dedication, and absorption are experienced daily.

Continuing the focus on the aims of this study as outlined in Chapter 1, the empirical conclusions are further explored with reference to the link between personality type and work engagement as well as the demographical variables and the link with work engagement.

6.1.2.1 Personality Type and Work Engagement
The empirical finding of this study differs from previous research as no statistical differences of means were found between personality types and work engagement, as well as between personality triads and work engagement. There may be two possible reasons for this deviation. Firstly, an increase in sample size of employees per personality type or triad may yield different results. Secondly, another possibility for this deviation is that previous studies did not use the RHETI as a measure of personality type with reference to the link with work engagement. Many of the previous studies built on the personality trait methodology which is significantly different from the personality type methodology (Furnham, 1989). With reference to other previous studies, the application of the Type A and Type B personality theory
dominantly leverages Jung’s functional focus on introversion and extroversion and therefore also significantly differs from how the RHETI operationalised personality type (Friedman, 1996). These factors may have influenced the empirical outcome.

6.1.2.2 Demographic Variables and Work Engagement
The demographic variables investigated were gender, ethnicity, marital status, job level, tenure and age.

Aligned to some findings reviewed in literature, the empirical investigation found a significant link between gender groups and work engagement in this sample. More specifically Rothbard (2001) found work engagement to have a negative effect on the family role of females, unlike males, alluding to the finding that males scored higher than females on vigour and overall work engagement.

The literature review revealed various studies which dispelled a significant link among ethnic groups and work engagement (Bakken & Holzemer, 2000; Mostert & Rothmann, 2006; Salamonson, Andrew, & Everett, 2009). This finding was validated by the empirical research as there were no statistical significant differences among ethnic groups in the experience of work engagement.

In comparison to previous studies, no statistical significant differences were found between married and unmarried groups, in terms of work engagement for this sample.

Divergent from the literature research which suggested the link between job level and work engagement, this empirical study found no statistically significant difference in terms of work engagement and job level for this sample.

Consistent with literature review, the positive correlation, that is, as tenure increases, dedication and work engagement increases was found. Work engagement is influenced by tenure. Research has indicated that the more years of service an employee is associated with; the greater the propensity for work engagement. However, this is not necessarily sustainable as the trend will eventually level off and decrease in work engagement will result over time (Halbesleben & Wheeler, 2008).
Literature research yielded studies that found the age and work engagement link as well as those studies that did not establish the link. This study found no correlations between vigour, dedication, absorption and overall work engagement and age. Consistent with the literature review (Bakken & Holzemer, 2000; Salamonson, Andrew, & Everett, 2009) in the healthcare sector, age is not a significant factor for engagement in this sample.

6.2 LIMITATIONS
The limitations of the research relate to the literature review and the empirical study.

Empirical literature on the link between personality types and work engagement is limited. There is a few existing studies and no previous studies could be found which specifically used the RHETI and the UWES.

A limitation in sample sizes of the respective personality types resulted in the inability to calculate the reliability of the RHETI. Apart from Type 4, the Individualist, and Type 5, the Investigator, not being adequately represented in the sample and omitted from analyses, the remaining personality types and triads may have also been too small. The biggest sample size was 28 for personality Type 8, the Challenger, and the biggest sample size for the Instinctive triad was 67.

The quantitative approach to this study has implications for the research. The self-report questionnaires for personality and work engagement can lead to linear, subjectivity and faking due to factors such as a social desirability bias. One way in which this limitation may be managed is to complement the design with a 360-degree evaluation. However, in this study confidentiality and purpose of information was stressed to avoid this bias.

The use of valid and reliable instruments is necessary in empirical research. As personality types, the Type 3, The Achiever, Type 5, The Investigator and Type 6, The Loyalist, indicated reliability levels not conducive to this study, they were excluded from analyses to maintain an acceptable level of reliability in the overall study, inhibiting complete analyses of all personality types.
As convenience sampling was employed in the research, the sample constituted a homogeneous group of marketers and communicators in a financial institute. These factors limit the potential to widely generalise the findings.

6.3 RECOMMENDATIONS
Given the findings in this research, the following recommendations are made regarding personality types, work engagement and demographic variables.

6.3.1 The Organisation
The literature research indicated a link between personality and work engagement, while the empirical study dispelled this connection. However, from results of this sample, it must firstly be noted that work engagement is of worthy significance. Vigour, absorption and dedication are key variables in work engagement and specifically suggest an alignment of mutual purpose between employee and organisation.

Secondly, the results from this sample suggest that work engagement is stimulated by more than personality type, such as gender and tenure. This means recognising that a supportive work environment consistent with individual employee needs across situations is vital. For instance, manager relationships may need to address individual employee needs, flexing management style from micro-management to autonomy as the situation demands and varies.

Although ethnicity, marital status, job level and age demographic factors did not emerge as influential on work engagement, gender and job tenure emerged as a significant factors, irrespective of personality type. For instance, a Type 8, Challenger type as a new hire may require a compelling career direction, whilst a Type 8, Challenger type employee with greater tenure may seek cross functional exposure or specific work challenges to address work engagement.

Personality is stable across situations whilst work engagement may fluctuate across employment situations. Therefore, work engagement may be influenced by personal dispositions but is also influenced by other factors. This is consistent with the JD-R
model theoretical perspective espoused in this study. Job resources must be integrally understood and managed. Organisations must take this into account when seeking to engage employees in their work.

6.3.2 Future Research

This study should be considered as a preliminary study into this subject. Additional research is required to examine the relationship between personality type, as conceptualised by the RHETI and work engagement using a diversity of organisations and professions with consideration of diverse biographical impacts. An approach that establishes the well-being status of the sample will also add value in such a study.

Future research on personality types and work engagement may also investigate the possibility of specific job resources which may pre-dominantly influence some personality types as opposed to other types. For instance, a job resource like social support at departmental level might possibly be more likely to encourage work engagement in a Type 2, Helper type employee than a Type 4, Individualist type employee. Investigating strategies such as or new ways of working or job crafting may enable different personality types to optimise on their inherent strengths. New ways of working is defined by allowing flexi work times, flexi work venues and enabling new communication media (Bakker, 2010). Job crafting refers to enabling employees to define their jobs by using their personal resources to optimise performance (Bakker, 2010; Demerouti & Bakker, 2011).

By investigating a broader population of Marketing and Corporate Affairs professionals in other organisations, factors unique to this profession may emerge. This may influence recruitment and management of these professionals to optimise their propensity to be engaged with work.

Comparative studies using more than one personality typology instrument for greater depth to understand personality types and work engagement, vigour, dedication and absorption should be conducted to add to this body of knowledge.
Bigger and more representative samples should be used to validate demographic findings regarding gender, ethnicity, marital status, job level, tenure and age, and work engagement.

6.4 CHAPTER CONCLUSION
This chapter explored the theoretical and empirical conclusions, limitations and recommendations for organisations and for future research. Although the link between personality types and work engagement has been established in the theoretical study, it has not been established in the empirical research. The value of this research is the worthy questions that arise to motivate future research to establish new scientific truths.
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