

**THE RELATIONSHIP BETWEEN
EMOTIONAL INTELLIGENCE, WORK
ENGAGEMENT, CREATIVITY AND
DEMOGRAPHIC VARIABLES**

by

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submitted in partial fulfilment of the requirements for the degree

MASTER OF COMMERCE

in the subject

INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY

at the

UNIVERSITY OF SOUTH AFRICA

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AUGUST 2015

DECLARATION

I, Sindy Bartlett, 34568050, declare that the dissertation of limited scope entitled,

“The relationship between emotional intelligence, work engagement, creativity and demographic variables”

is my own original work, and that all the sources I have used or have quoted from have been indicated and acknowledged by means of complete references. This work has not been submitted before for any degree or examination in any other university.

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

SINDY BARTLETT

AUGUST 2015

ACKNOWLEDGEMENTS

I would like to express my gratitude to the following people for their assistance in the completion of this dissertation:

- Aden-Paul Flotman, my supervisor, for his guidance, patience and support
- Professor Frans Cilliers for his academic wisdom and expertise
- The University of South Africa (UNISA) for the opportunity to conduct this research
- Andries Masenge for conducting the statistical analysis
- Jeremy Mitonga Monga for his advice regarding the statistical interpretations
- The South African insurance company under study for their support, as well as the respondents in this research, for their willingness to participate
- My husband, Wesley Bartlett, for his support and encouragement. My family, friends and colleagues for believing in me and supporting me.
- Barbara Wood who completed all language and technical editing as well as for the final layout

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SUMMARY

The objective of this study was to investigate the relationship between emotional intelligence, work engagement, creativity and demographic variables. A non-experimental and cross-sectional survey design was used and the population consisted of 180 employees working within a call centre division of an insurance organisation in South Africa. The participating sample consisted of 85 respondents which indicated a response rate of 47.2%.

The Trait Emotional Intelligence Questionnaire (TEIQue-SF), Utrecht Work Engagement Scale (UWES-17), the Creative Personality Scale (CPS) and the Alternate Uses Tasks were administered to all participants. A theoretical relationship was found by means of a literature study. The results of the empirical study suggest that there was a significant positive relationship between emotional intelligence, work engagement and creative personality. Emotional intelligence was reported to be a significant predictor of work engagement. Significant results were also found in terms of these constructs and demographic factors.

Keywords: emotional intelligence, work engagement, creative personality, demographics

CHAPTER 1

SCIENTIFIC ORIENTATION TO THE RESEARCH

This dissertation examines the relationship between emotional intelligence, work engagement, creativity and demographic variables. In this chapter, the background to and motivation for the research are outlined. The problem statement will be discussed and the aims highlighted. The paradigm perspectives, which demarcate the boundaries of the study, the research design and methodology, will also be discussed. The final section indicates the chapter layout and concludes with a chapter summary.

1.1 BACKGROUND AND MOTIVATION

The contemporary business arena is characterised by globalisation, fierce competition and technological advancements, with the only perpetual factor organisations can be sure of, being the change itself (Marshak, 2002). Challenges are experienced by 21st century organisations of all sizes and structures, and to succeed and maintain a competitive advantage, organisations need to constantly enhance their performance (Castro & Martins, 2010). Many organisations are, however, “littered with the debris of yesterday’s (change) initiatives” (Mayo, 2002, p. 40) and would benefit from innovative initiatives.

Service organisations are faced with the dual imperatives of cost minimisation and customer-focused enhanced service quality (Korczynski, 2002). Call centres in particular tend to recruit employees who have to possess a complicated set of skills and competencies so that they are capable of “micro-self-managing” (Wray-Bliss, 2001). De Waal (2002) found that the experience of working within a call centre places demands on employees as a result of constant technological change, shift work and pressure from clients.

In most organisations, the selection of employees is based on experience, technical skills and qualifications. Call centres, however, often recruit young talent entering the workforce, most of whom do not have experience that can be evaluated. Recruiting young talent does, however, assist companies in maintaining a competitive advantage, as organisations need to stay relevant through attracting and retaining enthusiastic young workers (Doherty, 2010). This does, however, emphasise the importance of investigating alternative recruitment criteria to enhance competitive advantage.

Voola, Carlson and West (2004) described competitive advantage as a superior position in the marketplace, providing superior value or low costs, leading to a dominant position in market share with comparatively better financial performance. Voola et al. (2004) added that the sustainability of competitive advantage is determined by how easily competitors are able to imitate competitive strategies and the capabilities forming the foundation for their development. The Resource Based View (RBV) (Barney, 1991) serves as a model for understanding competitive advantage, and argues that the reason for differences in firm profitability within the same industry is due to the internal capabilities of a company. The RBV suggests that competitive advantage is attained by combining unique organisational resources (tangible or intangible) to obtain virtual monopoly positions in their respective markets (Hamel & Prahalad, 1994). From a Resource Based View, a key component of strategic change in an organisation is the organisation's ability to adapt to substantial, uncertain and fast-occurring changes in the environment that have a meaningful impact on its performance (Prastacos, Soderquist, Spanos & Van Wassenhove, 2002).

Appleby and Mavin (2000) found that competitive advantage is not based on natural resources, technologies or economies of scale, but rather on the valuable, rare and hard-to-imitate resources. Tangible assets are easy to imitate by competitors, thus human capability and commitment are what distinguishes successful organisations (Appleby & Mavin, 2000). Appleby and Mavin (2000) highlight the importance of the human capital pool, and state that the human capital advantage is dependent on securing exceptional talent. The American Society for Training & Development (2006) (as cited in Coetzee, 2013) reinforces this view by asserting that an organisation's competitive advantage is determined by its workforce and how it is established, used and maintained.

EI is central to an organisation's competitive advantage, as it is considered a critical factor for sustaining high performance and profitability (Freedman & Everett, 2004). Resistance to change is commonly an illogical emotional reaction (Werther, 2003). EI (EI) has been proven to be essential for effective leadership, especially when facilitating organisational change (Higgs, 2001). Herkenhoff (2004) found that being emotionally intelligent enables individuals to focus on and address costly organisational problems while allowing for better understanding between individuals. Additionally, Herkenhoff (2004) found a link between EI and positive employee health, with EI possibly playing a vital role in employee initiative and

innovation.

In stating the business case for EI, Freedman and Everett (2004) considered customer relationships to be the most important component to any business, with EI at the core of relationships. This is particularly relevant within a call centre environment, where employees are constantly in direct contact with clients (Healy & Bramble, 2003) and successful call centre agents are required to be highly adaptable, while anticipating and dealing effectively with complaints (De Waal, 2004). Vitello-Cicciu (2002) considered EI to be an asset in contexts where it is important to understand other people. Business leaders consider EI to be a core skill set underlying performance and are thus committed to bringing these assets on board (Freedman & Everett, 2004).

The extent to which employees are willing to provide “discretionary effort” beyond the ordinary, is critical to an organisation’s competitive advantage (Buhler, 2006). An engaged workforce is more likely to be committed, accept change efforts, have higher productivity levels and ensure greater customer satisfaction (Buhler, 2006). The engaged workforce is also likely to present with fewer withdrawal behaviours such as staff turnover and absence (Borda & Norman, 1997). Engagement reflects a willingness to invest focused effort towards the attainment of organisational goals (Albrecht, 2010). Rothmann and Joubert (2007) found that WE is influenced by both organisational and individual factors, and personal resources have been investigated in predicting WE (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009).

WE represents cognitive-affective motivation in the workplace, which, according to Schaufeli and Bakker (2004), includes high levels of energy and mental resilience at work; willingness to invest effort; not becoming fatigued easily; persistence in the face of difficulties; a strong involvement in one’s work; enthusiasm and pride regarding one’s job; feelings of inspiration and challenge as a result of one’s work; and a pleasant state of full concentration and immersion in work. WE pertains to any type of challenging work and describes the employees’ ability to bring their full capacity to solving problems, connecting with people and developing innovative services (Bakker & Leiter, 2010), all of which are central to gaining competitive advantage.

Management creativity is a fundamental ingredient in shaping and sustaining competitive advantage (Beaver, 2001). The use of creative techniques and the development of novel ideas

have assisted many organisations in improving the quality of their products and procedures as well as to expand their current product of service portfolios (McFadzean, 2001). Batey and Furnham (2006) stated that creativity and innovation are central to the health of the global economy, with Amabile and Khaire (2008) concurring by having considered creativity as central to organisational innovation, which drives economic prosperity.

Creativity serves as a precursor to innovation. Creativity involves developing new ideas and ways of facing problems and possibilities; and innovation is the ability to perform creative solutions in order to enhance people's lives (Ramadani & Gerguri, 2011). Amabile (1998) stated that business people often undermine the factors that support and evoke creativity. Brown (2012) declared that people tend to protect and hide their creativity so as to avoid making mistakes or looking bad in front of leaders and peers. However, in the hunt for competitive advantage, it may be beneficial for organisations to re-examine the value of creativity.

Changing workforce demographics have a notable effect on organisations across various industries and geographies (Lesser, 2006). Shifting demographics are changing the way in which organisations attract, retain and develop their talent, resulting in diversity and inclusion becoming a business imperative (Derven, 2013). The heterogeneous workforce –particularly in a diverse South Africa – needs to embrace an integrative approach where differences are appreciated (Allard, 2002). Organisations are furthermore realising the value of attracting and retaining employees from different demographic groups to improve workforce performance and in doing so, improve their competitive position (Torrington, Hall, Taylor & Atkinson, 2009).

According to the broaden-and-build theory of positive emotions (Fredrickson, 2001), positive emotions share the capacity to broaden people's momentary thought-action repertoires and build their personal resources (ranging from physical and intellectual to social and psychological resources). Emotions should therefore influence creativity through effects on cognitive flexibility or persistence (George & Zhou, 2002; Isen & Baron, 1991). Emotions should also influence WE, as employees need to manage their emotional state (Frederickson, 2001) to remain engaged with their work. Both creativity and EI can be considered as personal resources affecting WE (Hobfoll, 2001). The three constructs have, however, not been studied together directly to determine their relationship. Furthermore, in South Africa,

diversity (including gender, ethnic group and age) is an important factor for organisations to consider when strategising on how to attract and retain committed employees (Rothmann & Cilliers, 2007).

The context of this study is thus to explore new notions with regard to human capital measurement used in workforce strategies. Industrial and organisational psychologists work with the application of psychology and its theories, facts and principles within an organisational context (Strümpfer, 2007). The main rationale for the research study is to contribute to the broader research community by generating new knowledge and enhancing existing knowledge concerning EI, WE, creativity and demographic factors, particularly within the South African multicultural call-centre context. No research currently exists to measure the relationship between the three constructs and demographic variables.

1.2 PROBLEM STATEMENT

Against the aforementioned background, it appears as though knowledge of employees' EI, WE, creativity and demographic factors (and the relationship between these constructs), could increase the understanding of employees at work. Call centres are faced with high staff turnover, absenteeism and burnout due to elevated standards, increasingly high performance speed and consistent quality pressure (Hauptfleisch & Uys, 2006). These workplace challenges could be reduced by selecting and developing individuals with higher EI to fulfil these roles or by developing the EI of current employees and especially leaders (Nel & De Villiers, 2004).

While research has focused on EI, WE, creativity and demographic factors separately or in relation to other variables, very little research has been found on the relationship between any of the constructs. Ravichandran, Arasu and Kumar (2011) found a significant linear relationship between overall EI and overall WE. Although research has focused on the influence of EI on individual behaviours, little work has been done in order to understand the link between EI and creativity (Joseph & Newman, 2010), despite both constructs being considered character strengths and virtues (Peterson & Seligman, 2004) in positive psychology. Carmeli, McKay and Kaufman (2014) pioneered some research on this topic, finding EI to be positively related to generosity and vigour (a sub-construct of WE), which in

turn are positively associated with creativity. There is a need for further research to explore the relationship between these constructs.

A review of the current literature on EI, WE, creativity and demographics indicates the following research challenges:

- No theoretical models exist to clarify the relationship between EI, WE, creativity and demographic factors
- There is a lack of knowledge regarding the theoretical and empirical relationship between EI, WE, creativity and demographic factors
- The relationship dynamics between EI, WE, creativity and demographic factors and the implications of the relationship for human capital measurement are not fully known, particularly within a South African call centre context, hence the need for exploration.

Flowing from the background and identified problem, this research was designed to answer the following literature and empirical questions:

1.2.1. Research questions relating to the literature review

- How is EI conceptualised in the literature?
- How is WE conceptualised in the literature?
- How is creativity conceptualised in the literature?
- How are demographics within the South African workforce conceptualised?
- How do individuals from various demographic groups (including gender, ethnic group, work level, tenure, length of total work experience and age) theoretically differ with regard to EI, WE and creativity?
- Does a theoretical relationship exist between EI, WE, creativity and demographic factors?

1.2.2. Research questions relating to the empirical study

- What is the nature of the empirical relationship between EI, WE, two measures of creativity and demographic variables as manifested in a sample of respondents in a call centre environment in the South African context?

- Does EI predict WE and creativity?
- How do individuals from different demographic groups (including gender, ethnic group, work level, tenure, length of total work experience and age) differ with regard to EI, WE and creativity?
- Based on the results of this research, what recommendations can be made for the practice of industrial and organisational psychology, and for call centre organisations?

1.3 AIMS

The next section clarifies both the general and specific aims of this research.

1.3.1 General aim

The general aim of this research is to determine the relationship between EI, WE, creativity and demographic variables.

1.3.2 Specific aims

The specific aims relating to the literature review are;

- To review the construct of EI in literature
- To review the construct of WE in literature
- To review the construct of creativity in literature
- To review the construct of demographics within the South African workforce in literature
- To explore the extent to which individuals from different demographic groups differ in literature with regard to EI, WE and creativity
- To explore the theoretical relationship between EI, WE, creativity and demographic variables (including gender, ethnic group, work level, tenure, length of total work experience and age).

The specific aims relating to the empirical study are;

- To investigate the relationship between EI, WE, creativity and demographic variables (tenure, length of total work experience and age) as manifested in a sample of respondents in a call centre environment in the South African context
- To determine whether EI predicts WE and creativity
- To determine how individuals of different demographic groups (gender, ethnic groups and work level) differ with regard to EI, WE and creativity
- To make recommendations for the practice of industrial and organisational psychology,

research and for call centre organisations in relation to the management of EI, WE, creativity within separate demographic conditions.

1.4 THE PARADIGM PERSPECTIVE

The paradigm perspective refers to the intellectual climate or variety of meta-theoretical, theoretical and methodological beliefs and assumptions underlying the theories and models that form the definitive context of a study (Mouton & Marais, 1990). Terre Blanche, Durrheim, and Painter (2006) stated that paradigms are central to research design as they impact on the nature of research and the manner in which the research question will be studied. This section discusses the paradigms relevant to this research as well as the meta-theoretical constructs, behavioural models and theories, applicable concepts and constructs, methodological convictions and the central hypothesis.

1.4.1 Psychological paradigms

This study will be conducted from within the positive psychology paradigm as it aims to understand constructs that allow individuals, communities and societies to thrive (Bergh, 2006). Seligman and Csikszentmihalyi (2000) described positive psychology as a psychology of positive human functioning, which achieves a scientific understanding and effective interventions to build thriving individuals, families and communities. Positive psychology is the study of optimal human functioning and experience and examines competencies and resources that people possess, such as their positive attributes, psychological assets and strengths (Kobau, Seligman, Peterson, Diener, Zack, Chapman & Thompson, 2011).

The empirical study focuses on measuring EI, WE, creativity and demographic variables, according to the functionalist and positivist paradigms. The functionalist paradigm assumes that society is concrete, systematic and provides a regulated way of life (Stonefield, 1999), which influences an individual's behaviour. Within this paradigm tests, questionnaires and aids are used to determine individual differences (Bergh & Theron, 2004). With psychometric theories and procedures being applied to the constructs underpinning this research, the functionalistic paradigm is relevant. The quantitative analysis will be conducted from the positivist paradigm using standardised psychometric instruments (Terre Blanche, Durrheim &

Painter, 2006) to measure EI, WE, creativity and demographic variables. Positivism is the view that human behaviour, amongst other aspects, ought to be studied using only the methods of the natural sciences. It emphasises empirical measurement as the appropriate methodology to study social science (Colman, 2009).

1.4.2 Meta-theoretical concepts

This research was conducted within the field of I/O Psychology. The two objectives of I/O Psychology are to conduct research to increase knowledge and understanding of human behaviour and to apply that knowledge to improve work behaviour, the work environment and the psychological conditions of workers (Schreuder & Coetzee, 2010). This research is relevant from an I/O Psychology perspective as it aims to understand individual work behaviour in order to enhance quality of work life and performance (Bergh, 2006). The applicable subfields of I/O Psychology included in this research are organisational psychology, personnel psychology and psychological assessment.

Organisational psychology aims to understand how an organisation functions as a whole as well as how workers function in an organisation (Schreuder & Coetzee, 2010). Furthermore, organisational psychology focuses on the influence of the organisational context on the employee's behaviours and attitudes, and is concerned with social and group influences (Coetzee & Schreuder, 2011). Within this research study, EI, WE, creativity and demographic factors will be investigated, all of which influence human and organisational behaviour.

Personnel psychology as a sub-field of I/O Psychology, refers to human resource management (Bergh & Theron, 2004). Personnel psychology is concerned with individual differences in the work setting (Schreuder & Coetzee, 2010) to enhance recruitment, selection and placement. Personnel psychology is an important discipline to consider in this study as individual differences are considered in assessing EI, WE, creativity and demographic variables.

Psychological assessment, which involves psychometrics, is a process-orientated activity of gathering information through assessment measures (Foxcroft & Roodt, 2009) and is used to identify attributes, make the best selection choices and to provide feedback for personal and

career development (Bergh & Theron, 2004). Psychological assessment will be used in this research to measure the constructs of EI, WE and creativity and to collect demographic information.

1.4.3 Applicable behavioural models and theories

The construct of EI are presented from the mixed-model perspective with particular emphasis on the trait perspective. Mixed models do not involve emotion or intelligence (Mayer, Salovey & Caruso, 2002a), but rather social behaviours, traits and competencies (Mandell & Pherwani, 2003). The trait-based perspective is included within the mixed-model group as the factors evaluated consist of both emotional abilities and traits that are considered personality components or EI “products” (Mayer, et al., 2002a).

The construct of WE is viewed in line with the theory of Schaufeli and Baker (2003), whereby it is comprised of vigour, dedication and absorption. Vigour and dedication are the core concepts whilst absorption is the concept of “flow”, which results from vigour and dedication to one’s job (Llorens, Schaufeli, Bakker & Salanova, 2007). Schaufeli and Bakker (2003) developed the UWES to measure WE distinct from burnout, based on the definition provided by the Job Demands-Resources model.

Most approaches to creativity research use the term "creativity" to describe either a personal quality, a process, a behaviour or a characteristic of a product. In this research, creativity will be viewed as both a personal quality through measuring creative personality (Gough, 1979) as well as a creative product, through measurement of divergent thinking or behaviour (Guildford, 1967).

In understanding demographic variables, social identity theory (Tajfel, 1969) is relevant to this research. This theory states that social identity is an individual’s sense of who they are based on within their group membership, which in this study includes gender, ethnic group, work level, tenure, length of total work experience and age.

The theoretical models underpinning each of these constructs will be elaborated on further in Chapter 2.

1.4.4 Applicable concepts and constructs

The range of intellectual resources includes EI, WE, creativity and demographic variables. EI – from the trait perspective, as conceptualised by Petrides (2009) – is defined formally as a constellation of emotional self-perceptions located at the lower levels of personality hierarchies (Petrides, Pita & Kokkinaki, 2007). Mayer, Caruso and Salovey (1999) classified trait-based EI as “a concentration of EI that includes not only mental abilities related to intelligence and emotion, but also other personality dispositions and traits such as motives, sociability and warmth” (p. 399).

This research operationalises WE in its own right rather than the antithesis of burnout as postulated by Maslach, Jackson and Leiter (1997). WE is, therefore, defined as a positive, fulfilling, work-related state of mind (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002). Schutte, Toppinen, Kalimo and Schaufeli (2000:53-66) further defined WE as an energetic state in which the employee is dedicated to produce excellent performance at work and is confident of his or her effectiveness.

No universally accepted definition of creativity exists, but the term is generally used to describe a personal quality, a process, behaviour or a characteristic of a product. Puccio (1999) viewed these to be interdependent with the basic facets of creativity including – but not limited to – individual qualities, aspects of the process and characteristics of the products, and the nature of the environment. For the purpose of this research, creativity is defined as certain personality traits that are characteristic of creative potential as well as cognitive thinking abilities, which may assist individuals in producing creative work.

Demographics are defined as studies of a population based on factors such as age, ethnic group, gender, economic status, level of education, income level and employment, among others (Investopedia, n.d.). In this research, the demographic factors of gender, ethnic groups, work level, tenure, length of total work experience and age are considered relevant.

A breakdown of the constructs being studied and their dimensions is provided in Table 1 below.

Table 1*Constructs applicable to this research*

Construct	Dimensions
Trait emotional intelligence	Well-being
	Self-Control
	Emotionality
	Sociability
Creative Personality	
Divergent Thinking	Flexibility
	Originality
	Fluency
	Elaboration
Work Engagement	Vigour
	Dedication
	Absorption
Demographic Variables	Gender
	Ethnic Group
	Work Level
	Tenure
	Length of Total Work Experience
	Age

1.4.5 Methodological convictions

The constructs being studied consist of a stable and unchanging external reality (Terre Blanche et al., 2006). The epistemology of this research is objectivism, which asserts detachment in assessing reality. The methodological conviction is one of controlling and manipulating reality and follows a quantitative and experimental approach to research (Terre Blanche et al., 2006). The empirical study will be conducted within a positivist paradigm as objective measures will be used to aim to understand the existence of definite social facts in a distanced and quantitative manner (Terre Blanche et al., 2006).

1.4.6 Central Hypothesis

The central hypothesis of this research is formulated as follows:

A statistically significant relationship exists between EI, WE, creativity and demographic constructs with EI predicting WE and creativity. Moreover, individuals of different genders, ethnic groups, work levels, tenure, length of total work experience and ages differ significantly in terms of EI, WE and creativity.

1.5 RESEARCH DESIGN

Sellitz (as cited in Mouton & Marais, 1990, p. 32), defined the research design as the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. The research serves as an outline, plan or strategy for the investigation of the problem (Christensen, 2006), concentrating on the fundamental question of which type of study will be assumed (Mouton, 2001).

1.5.1 Research approach

For this study, a quantitative tradition is followed. The benefits of conducting quantitative research (as opposed to qualitative research) are that findings are generalisable and the data is objective (Terre Blanche et al., 2006). A non-experimental and cross-sectional survey design is used in this research. This design typically consists of different people being examined by researchers, using one or more variables (Huysamen, 1994) by means of assessments, at a single point in time, in order to infer findings for the population (Terre Blanche & Durrheim, 1999). This method of research has been selected as it is a less time-consuming, convenient and cost-effective design (Sekaran, 1992). The nature of the data gathered is a self-report online questionnaire constructed primarily from existing instruments. Constructs are measured once at a specific time and point with the primary aim of establishing relationships between variables (Shaughnessy & Zechmeister, 1997).

Primary data has been used and a partly descriptive and partly inferential approach is followed in analysing the data. In the literature review, descriptive research has been used so that the conceptual characteristics and relationship between EI, WE, creativity and demographic factors could be described. The empirical relationship between the constructs was then studied through descriptive and correlational analyses. Correlational studies are useful when building theory about constructs through understanding what it consists of, determining the degree and direction of its relationship with other constructs (Dahl, 2010). However, as no causal claims can be made as a result of correlational studies, inferential statistics are applied to draw inferences from the data to more general conditions.

1.5.2 Unit of analysis

Four different units of analysis exist in social research, including an individual person, a group, an organisation or social artefacts that are the products of human action (Terre Blanche et al, 2006). Units of analysis are the focus of the investigation. The unit of analysis for this study was individuals within a department of an organisation and inferences made will be applicable to collectives.

1.5.3 Research variables

Variables are defined as concepts that can take on two or more values (Terre Blanche et al, 2006). An independent variable is the hypothesised causal variable that does not depend on anything else. The dependent variable is the variable that is being measured and whose value depends on the value of the independent variable. This research entailed an empirical, correlational and inferential study to determine whether the three variables have a relationship with one another as well as to further investigate the causal relationship between the independent variable (EI) and the dependent variables (WE and creativity).

1.5.4 Methods to ensure reliability and validity

Ensuring validity requires making a series of informed decisions about the purpose of the research, theoretical paradigms that will be used in the research, the context within which the research will take place and the research techniques that will be used to collect and analyse data (Terre Blanche et al, 2006). The validity of the literature review was ensured by using

literature that is relevant to the research topic, problem statement and aims. In the empirical study, the validity of the research was ensured by using standardised instruments of measurement. Three of the instruments used were objective psychometrically proven instruments, whereas one instrument was subjective using a single-rater system. The validity was determined by how appropriate, meaningful and useful the instrument was; and validity coefficients were calculated with a normal range of a low score of zero to a high score of one. The randomised nature of sampling increased external validity.

In terms of the research process, reliability was ensured by inviting only staff that had been permanently employed at the organisation for a minimum of three months. Participants were allocated a set time early in the mornings, in an enclosed room, to complete the assessments. This increased external validity by reducing the impact of environment factors. All data collected was stored electronically by the Survey Gizmo administrator. Access to this information is restricted to the researcher by the use of a password. Furthermore, statistical analysis appropriate to the measuring instruments was used. Cronbach alpha coefficients were used to establish internal consistency and resultant reliability of the instruments used to collect data.

1.5.5. Ethical considerations

Ethical guidelines, as stipulated by the Health Professions Councils of South Africa (HPCSA) and the Department of Industrial and Organisational Psychology at UNISA, formed the basis of the study. Ethical clearance to conduct the study was granted by the Unit Ethics and Review Committee of the UNISA Department of Industrial and Organisational Psychology. Informed consent was obtained from the participants, and all data and results were handled confidentially. In ensuring confidentiality, the participants were requested not to indicate their names or write any information that may compromise their identity. The results obtained were communicated only to the organisation from which the data was collected and any recommendations were made for the benefit of the organisation. No harm was brought on the participants during or after the study.

1.6 RESEARCH METHOD

The research method consists of two phases: a literature review and an empirical study. Figure 1 below provides an overview of the different phases.

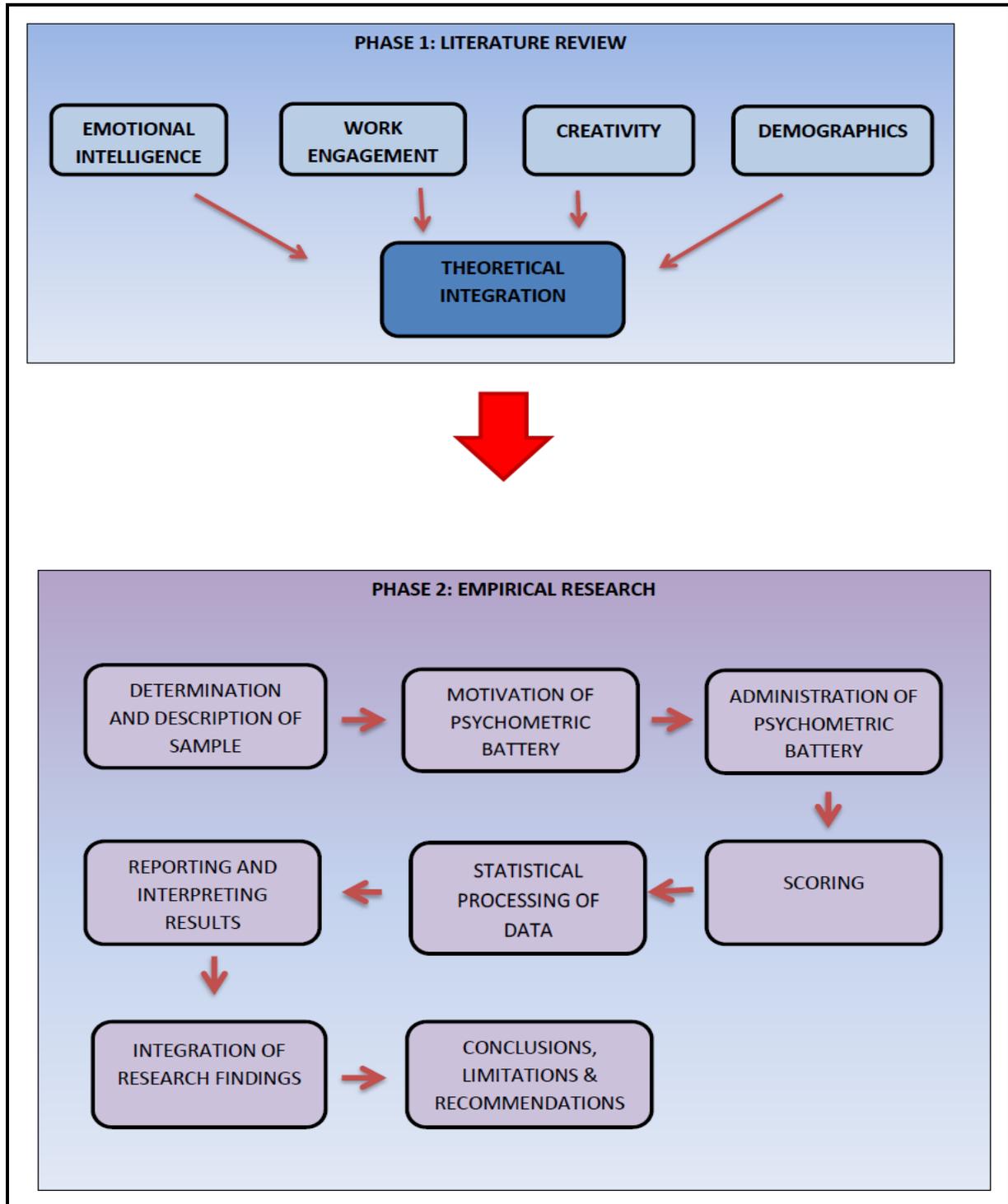


Figure 1: Flow diagram of the research method

1.6.1 Phase 1: Conceptualisation and Literature Review

The literature review focuses on the historical development and conceptualisation of the constructs of EI, WE, creativity and demographic variables. Applicable models are explored and the importance of studying each of the constructs was investigated. The general aim of the literature study is to establish the theoretical link in the relationship between EI, WE, creativity and demographic variables.

1.6.2 Phase 2: Empirical Investigation

The empirical study is presented as part of a research article in Chapter 3 of this dissertation. Eight steps are followed in conducting the empirical study:

Step 1: Population and Sample

Babbie and Mouton (2001) maintained that a population possesses all the potential elements required as they are defined. The population for this study consists of 180 employees working within a call centre division of an insurance organisation in South Africa. The population was specifically utilised because the organisation runs a call centre and has a young workforce. The researcher was provided with access to the full population and electronic invitations were sent to all 180 employees. The sample is, however, dependent on the number of respondents who voluntarily completed the questionnaires. As a result, a purposive convenience sampling method is utilised.

The total size of the participating sample is 85 individuals, which indicates a response rate of 47.2%. This is well above the sample size of 10% as recommended by Curry and Gary (1987), allowing for the generalisation of results to the total population. Males comprise 58.8% of the sample and females 41.2%. Ethnic groups are represented as follows: African (41.2%), White (27.1%), Indian (16.5%) and Coloured (15.3%). According to work level, the majority of employees are employed as sales advisors (85.9%), with the rest of respondents working at either a team leader (9.4%) or management (4.7%) level. The mean tenure of the sample is 2.4 years and the mean length of total work experience is 6.9 years. The average respondent age is 27, ranging between 19 and 38.

Step 2: Psychological Measures

Four instruments are used to measure the constructs being studied: the Trait EI Questionnaire (Petrides & Furnham, 2003), the Utrecht Work Engagement Scale (Schaufeli & Bakker, 2003), the Creative Personality Scale (Gough, 1979) and Guilford's Alternate Uses (Guilford, 1967). In selecting measuring instruments, levels of reliability and validity, affordability, accessibility and ease of administration are considered.

The Trait Emotional Intelligence Questionnaire (TEIQue)

The construct of EI is surrounded by much debate with some theorists arguing its true importance and unique relevance (Matthews, Zeidner & Roberts, 2003). Much disagreement exists between EI researchers regarding the nature, meaning, definition and measurement of the construct. This controversy has resulted in conflicting findings and low measurements (Tapia, 2001) and consequently, EI has been defined along different models. Some theorists view EI from the ability perspective, which involves cognitive processing of emotional information, whereas other theorists view EI as a dispositional tendency. These viewpoints and models are discussed in greater detail in Chapter 2. All models do, however, generally represent four areas; emotional perception, regulation, understanding and utilisation (Ciarrochi, Chan & Caputi, 2000).

EI is measured in this study from the trait perspective, where EI is conceptualised as a part of the personality framework and includes "all personality traits that are specifically related to affect" (Petrides et al., 2007, p. 285). Viewing the concept of EI as having a personality base is valuable as it explains how we can manage our personality traits in order to guide our behaviour (Maddocks, Cooper & Sparrow, 2005).

Due to limitations imposed by the sample organisation on administration time, the TEIQue-short form (Petrides, Pérez, & Furnham, 2003), which is based on the full version, is used in this study. The scale includes 30 short statements (e.g. 'I often find it hard to understand other people') and is responded to on a seven-point Likert scale varying from 1 ("Completely Disagree") to 7 ("Completely Agree"). The questionnaire was completed in under 10 minutes, ensuring that participants did not suffer question fatigue (Bryman & Bell, 2007).

The sampling domain of Petrides (2009) was identified through a content analysis of early EI and related models. The sampling domain of TEIQue-SF includes:

- Well-being (Six items such as ‘on the whole, I’m pleased with my life’)
- Self-Control (Six items such as ‘others admire me for being relaxed’)
- Emotionality (Eight items such as ‘I often pause and think about my feelings’)
- Sociability (Six items such as ‘I can deal effectively with people’).

The TEIQue-SF provides highly reliable global trait EI scores that correlate meaningfully with a wide range of diverse criteria, including coping styles, life satisfaction, personality disorders, perceived job control and job satisfaction (Petrides & Furnham, 2003).

Tett, Fox and Wang (2005) conducted validity studies yielding internal alpha consistency of .86, with subscales ranging from .61 to .91 and criterion validity was .70. The TEIQue is the only assessment tool that comprehensively covers the sampling domain of trait EI (Austin, Saklofske, Huang, & McKenny; 2004). Cooper and Petrides (2010) conducted two studies using item response theory (IRT) in order to examine the psychometric properties of the TEIQue-Short Form. They reported high levels of internal consistency ($\alpha=.89$ for men; $\alpha=.88$ for women) for global trait EI. The TEIQue-SF has extensive construct validity (Cooper & Petrides, 2010). Test-retest reliability is high over a three-month period (Macran, Weatherly & Kind, 2003). Wilks, Neto and Mavroveli (2014) reported Cronbach’s alpha scores of .77 and .87 for the total TEIQue-SF score. Petrides (2009) reported Cronbach’s alpha coefficient scores of 0.88 for global trait EI.

The reliability values found in this study are fairly consistent with those of similar studies with Cronbach alpha coefficients for global trait EI at .822. This is acceptable according to the guidelines of $\alpha>0.70$ (Nunnally & Bernstein, 1994). However, the subscales of well-being, self-control, emotionality, sociability and originality are lower than the expected guideline. The low alpha coefficient of the subscales limits the possibility of generalising the findings. It is common to find low Cronbach alpha values when there are fewer than 10 items per subscale (Pallant, 2010).

Measurement of WE can be approached from two perspectives. Firstly, it can be considered as the positive antithesis of burnout, with the two concepts considered as opposite poles of a

continuum (Maslach & Leiter, 1997). The second approach considers the two constructs as independent states, with WE being operationalised in its own right (Schaufeli & Bakker, 2010). The Utrecht Work Engagement Scale (UWES) was developed by Schaufeli and Bakker (2003) in response to developments in positive psychology, which focused on studying human strengths and optimal functioning. The original UWES consisted of 24 items, but as a result of comprehensive psychometric analysis, 7 items were found to be unsound and therefore rejected.

Due to this study being conducted within the positive psychology paradigm, the UWES is considered the most appropriate instrument. Furthermore, as a psychometric tool, the UWES receives considerable attention in research and is a widely accepted reliable and valid indication of WE (Schaufeli & Baker, 2010; Schuck, 2011). The UWES has been found to be applicable across ethnic groups both internationally (Schaufeli et al., 2002) and in South Africa (Storm & Rothmann, 2003).

This self-report instrument consists of 17 items (e.g., I can continue working for very long periods of time), responding on a 7-point Likert scale varying from 0 (“never”) to 6 (“every day”). The instrument took between 5 and 10 minutes to complete. The measure has three subscales (Schaufeli et al., 2002) which are described as:

- Vigour (Six items such as ‘I am bursting with energy in my work’)
- Dedication (Five items such as ‘I find my work full of meaning and purpose’)
- Absorption (Six items like ‘when I am working, I forget everything else around me’).

By investigating the factor structure of the UWES using a two-step approach, Schaufeli and Bakker (2003) reported high correlations between the three factors (from 0.83 to 0.97) indicating a one-dimensional structure. However, the fit of the three-factor solution is reported to be superior to that of the one-factor solution. This implies that a combined one-dimensional variable could be used to study general engagement, while a three-dimensional variable could be used to study the factors of WE (Seppala, Mauno, Feldt, Hakanen, Kinnunen, Tolvanben & Schaufeli, 2008). This research considers a one-dimensional approach when measuring overall WE scores in relation to other constructs. This study also

follows a three-dimensional approach when measuring the sub-constructs of WE in relation to other variables.

Internal consistencies among the three engagement scales were established using an iterative process (Schaufeli & Bakker, 2003) and ranged from a Cronbach alpha coefficient of 0.68 to 0.91. Schaufeli and Bakker (2003) conducted two longitudinal studies to measure test-retest reliability. They found high stability coefficients, which indicated stability. Seppala et al. (2008) confirmed the high stability of WE in their three-year follow up study, where standardised stability coefficients of between 0.82 and 0.86 were reported.

The UWES enjoys much attention within research conducted in South Africa, and is considered acceptable to use with different race groups. Storm and Rothmann (2003) conducted a study in the South African Police Force wherein the alpha coefficients were used to measure reliability, reported vigour (0.78), dedication (0.89) and absorption (0.78). Naude and Rothmann (2004) used the UWES to measure the WE of emergency workers, and reported alpha coefficients for vigour at 0.70, dedication at 0.83 and absorption at 0.67. Coetzer and Rothmann (2007) also reported internally-consistent Cronbach alphas ranging between 0,65 to 0,79 for vigour; from 0,77 to 0,85 for dedication; and from 0,65 to 0,73 for absorption.

Creative Personality Scale and Guilford Alternate Uses

The scientific study of creativity has proven a difficult undertaking with researchers employing a diversity of definitions and measurement methods. Amabile (1996) suggested that three types of assessment techniques exist for creativity measurement. These include creativity measures, objective analysis of products and subjective judgements. Creativity measures fall into three broad categories: personality tests, biographical inventories and behavioural assessments. Good psychological practice – when measuring creativity – involves employing a variety of means of assessment. Therefore, two assessments are used in this study. A creativity test is administered using a personality test, and subsequently, a subjective assessment is used to measure divergent thinking.

By using two instruments, a more holistic understanding of creativity may be obtained, one being trait based and the other performance based. Scores from the two measures will be

compared with each other and separately in relation to the other constructs.

The two main types of research challenges generally addressed in creativity problems include an attempt to learn more about creativity, as well as examining the relationship between creativity and other cognitive constructs (Plucker & Renzulli, 1999). In the current study, the psychometric methods is used to learn more about creativity in young adults as well as in relation to two other constructs, namely EI and WE.

The Creative Personality Scale (CPS) of Gough (1979) for the Adjective Check List (Gough & Heilbrun, 1965) is used to measure creativity as a personality trait used to identify the creative individual. In designing the CPS, Gough (1979) derived at the adjectives empirically by studying a large sample of 1701 individuals from an extensive span of occupations and ages at the Institute of Personality Assessment and Research. A criticism of Gough's approach is that he scored all adjectives equally, despite the possibility that some adjectives may be more indicative of creativity than others.

The self-report scale measures latent creative traits and takes on average between 10 and 15 minutes to complete. The CPS consists of 30 trait adjectives of which 18 are indicative of creativity (e.g., individualistic and inventive). The other 12 adjectives are contra-indicative of creative (e.g., cautious and conservative).

The CPS has been selected for this study as it is one of the most widely used scales for measuring creative personality (Oldham & Cummings, 1996). Hocevar (1981) described it as possibly being the valid measure of creative personality. With EI being measured from the trait perspective, it was considered important to also measure creativity from the personality realm. Furthermore, the CPS is freely available and easy to administer.

Gough (1979) computed alpha coefficient reliabilities on the four subgroups defined for the item analysis. The coefficients were .77 for the male composite group, .73 for the male graduate students, .81 for the female composite group, and .73 for the female graduate students. Koestner, Walker and Fichman (1999) reported similar alpha coefficients of .72. Cropley (2000) reported reliability coefficients of 0.80. Gough and Heilbrun (1965) reported an internal consistency coefficient of 0.63, and test-retest reliabilities of about 0.70, depending on gender. Kaduson and Schaefer (1991) administered the CPS to a group of

women who had been identified as being creative. The women's scores suggested that they possessed high levels of creativity, thereby indicating concurrent validity.

The **Guilford's Alternate Uses** (also known as Alternative Uses Task) is used to measure divergent thinking (Guilford, 1967). This instrument is the result of improvements made to the Unusual Uses test developed by Wilson, Guilford, Christensen and Lewis (1954). Guilford (1967) created the Alternate Uses Task as part of his Structure of Intellect (SOI). It is a simple way of evaluating divergent thinking ability or "spontaneous flexibility". The assessment only measures divergent thinking ability and thus should not be used to fully represent general creativity. Validation studies have found divergent tests to have a higher correlation with creative behaviour than convergent tests of intelligence (Torrance, 1988; Plucker, 1999).

In the Alternative Uses Task, the goal is to generate many possible uses, different from the common use, for familiar objects. Participants are instructed to list as many as 6 uses for common items, with each use being different from the others. The assessment consists of two parts. In the first part, participants have 4 minutes to list as many as 6 different uses for the items "Shoe", "Button" and "Key". In the second part, participants have 4 minutes to list as many as 6 different uses for the items "wooden pencil", "automobile tire" and "eyeglasses". Brief descriptions of the everyday purpose of each of the items are provided.

The Alternate Uses Task measures divergent thinking by assessing for:

- Originality (A unique and new plan or solution)
- Fluency (produce many ideas)
- Flexibility (generating different types of ideas)
- Elaboration (finding associations, adding details).

Runco and Acar (2012) described the Alternative Uses Tasks as a reliable indicator of creative potential. Reliability estimates of .75 were reported using the Spearman-Brown formula (Guilford et al., 1973). Adkins and Lyerly (1951) and Drevdahl (1956) confirmed Guilford's factors using factor analysis. Hocevar (1979) computed the coefficient alpha reliabilities of the ideational fluency scores for Alternate Uses as .89 and .92 for originality.

Demographic Questionnaire

Participants are required to complete a biographical questionnaire before commencing with the assessment instruments. This is to facilitate the collection of demographic data to be assessed in the study. Demographic constructs are collected as follows:

- Gender: Male or Female options provided
- Ethnic Group: Sub categories of Black, Indian, White and Coloured provided
- Work Level: Sub categories of Advisor, Team Manager and Manager provided
- Tenure: measured in years
- Length of Total Work Experience
- Age: measured in years.

Step 3: Administration

Entry into the organisation was gained through attaining permission from the HR manager of the organisation as well as from managers of the participating division. All questionnaires were combined into one online survey to be completed electronically in the workplace. All stakeholders and participants were provided with clear, factual and detailed information about the study. The survey was uploaded on Survey Gizmo, as this tool has a timer function that could be used for measurement on the Alternative Uses Task. A covering letter was compiled to explain the purpose of the study as well as to provide instructions for completing the questionnaires. An informed consent form was also included, ethical considerations were explained and the contact details of the researcher were provided.

Managers facilitated the electronic distribution of the survey and participants were invited to respond to the questionnaire voluntarily. Managers ensured that a private, quiet environment at participants' work premises was provided by the organisation for completion of the survey. Participants were granted three weeks within which to complete the survey.

Data collected was stored electronically by the Survey Gizmo administrator and accessed via a code known only to the researcher, thereby ensuring authenticity and security of the data.

The researcher then scored the responses and captured them using an electronic worksheet format.

Step 4: Scoring

The **TEIQue-SF** is scored by first reverse scoring 15 items, and then summing up the scores on all 30 items to provide a score for the Global EI construct. Sub-construct scores are calculated by summing up between 6 and 8 items per construct.

The mean scale scores of the **UWES-17** are computed by adding the scores on particular scales and then dividing the sum by the number of items of the subscales involved. To calculate the total score, the totals of the three sub-dimensions are added and the total score is then divided by 3, yielding a total score that ranges between 0 and 6.

When scoring the **Creative Personality Scale**, all indicative scores are summed up, followed by the summing up of all contra-indicative scores. The total Creative Personality score is obtained by subtracting the contra-indicative total from the indicative total.

Scoring the **Alternative Uses Task** is a subjective process, and one rater is used. Scoring consists of four components:

- **Originality:** Each response is compared to the total amount of responses from all of the participants. Responses that are given by only 5% of the group count as unusual (1 point) and responses given by only 1% of them count as unique (2 points):
- **Fluency:** The total of all responses
- **Flexibility:** The number of different categories used
- **Elaboration:** The amount of detail; e.g., “a doorstep” counts 0, whereas “a door stop to prevent a door slamming shut in a strong wind” counted 2 (1 point for explanation of door slamming and another for further detail about the wind).

Step 5: Statistical Processing of Data

Psychometric data processing and analysis was conducted by means of the SPSS package (Statistical Package for Social Sciences, 2010). The service of a qualified statistician was employed for statistical analysis. The statistician was responsible solely for statistically analysing the data, whilst the researcher was responsible for cleaning data as well as for the interpretation of the results.

Descriptive statistics are used to determine the distribution of the data and the degrees to which the variables exist in the sample. Descriptive statistics are represented through tabulation, and calculated using statistical measures such as average, median, standard deviation, skewness and kurtosis. The Cronbach alpha (Cronbach & Shavelson, 2004) is used to calculate the reliability and validity of all instruments. The statistical significance has been set at 0.05. The cut-off point for practical significance used is 0.10 for a small effect, 0.30 for a medium effect and 0.50 for a large effect (Field, 2009). For the purposes of this research, only correlations of medium and large effect are reported.

Correlations between EI, WE, creativity, tenure, length of total work experience and age are calculated by means of the Spearman's Rank Order correlations (Field, 2009). This non-parametric statistic was chosen due to the low sample size. A coefficient of +1 indicates that two variables are perfectly, positively correlated, so that if one variable increases, the other increases by a proportionate amount (Field, 2009). A correlation coefficient of -1 indicates a perfect negative relationship so that if one variable increases, the other variable decreases by a proportionate amount (Field, 2009). The statistical significance is set at 0.05. The cut-off point for practical significance is set at 0.10 for a small effect, 0.30 for a medium effect and 0.50 for a large effect (Cohen, 1988).

Regression analysis was calculated to test whether EI positively predicts WE and creativity. A stepwise multiple regression was conducted using EI as the independent variable and WE, creative personality and divergent thinking as dependent variables.

A univariate analysis of variance (ANOVA) (Fisher, 1925) was then calculated, which tests whether three or more means are the same, testing a null hypothesis that all means are equal (Field, 2009). This was to test whether people from different gender, ethnic and work level groups differ significantly with regard to their EI, WE and creativity.

Step 6: Reporting and Interpreting Results

The statistical results are presented in tables. The researcher examined and analysed the data to draw conclusions from the results in terms of the research hypotheses.

Step 7: Integration of Research Findings

The findings stemming from the literature review are integrated with the results of the empirical research.

Step 8: Conclusions, limitations and recommendations

In Chapter 4, the research study findings are integrated. Conclusions are discussed in terms of the research aims, limitations are reviewed and recommendations made based on research findings.

1.7. CHAPTER LAYOUT

The chapters are presented in the following manner.

Chapter 2 Literature review of EI, WE, Creativity and Demographic variables

The aim of this chapter is to conceptualise the constructs of EI, WE and creativity. The historical development of each construct is explored and the conceptual foundations are reviewed. The prominent theories and models relating to the constructs are analysed, evaluated and critically discussed. Literature is then further investigated to determine the motivation behind studying each of the constructs as well as the significance of the constructs within the workplace. The impact of demographic differences on the constructs is then explored in existing literature. The chapter concludes with an integration of research on the constructs of EI, WE and creativity.

Chapter 3 Article

Chapter 3 is presented in the format of a research article. The focus of this chapter is on the empirical procedure. The research article comprises the following sections:

- an abstract outlining the scope of the work and the principal findings
- an introduction contextualising the study according to the key focus, a literature review, the background and the objective
- a discussion of the research design outlining and describing the research approach, method, participants, instruments and statistical analysis
- the results, which provide an overview of the descriptive statistics and explain the reliability of the statistics
- a discussion of the study and recommendations for the field of industrial and organisational psychology and further research

- a conclusion, integrating the main findings of the study, limitations and recommendations.

The empirical procedure is explained in terms of the sample, measuring instruments, administration of the questionnaires, data collection and processing, statistical methods and formulation of the hypothesis. The results are discussed against the formulated hypothesis, and presented in tables and figures. Conclusions are drawn, recommendations made and the limitations of the study discussed on the basis of the research findings.

Chapter 4 Conclusions, limitations and recommendations

In the final chapter, conclusions are drawn in terms of the specific aims of the research. Limitations of the study are explained and recommendations are made based on the research findings.

1.8 CHAPTER SUMMARY

In Chapter 1, the scientific orientation to the research is discussed. This contains the background and motivation, the research problem, aims, the paradigm perspective, the research design and method. The chapter ends with the chapter layout.

CHAPTER 2

LITERATURE REVIEW

This chapter briefly examines the history of the development of EI, WE and creativity before conceptualising the concepts in terms of relevant literature. Theories and research relevant to this research are presented and then literature regarding demographic differences on each of the constructs is explored.

2.1 EMOTIONAL INTELLIGENCE

Emotional Intelligence (EI) is a developing field of study that has been the subject of a significant amount of literature, ranging from debate over whether EI is innate or learned, to the categorisation of specific behaviours that define EI (Higgs, 2001). Emotions affect all human acts, and can lead to both adaptive and destructive behaviour (Hayward, 2005). EI is often perceived to be an ability implicated in the cognitive processing of emotional information, whereas other theorists view EI as a dispositional tendency similar to personality (Higgs, 2001).

2.1.1. Historical development of emotional intelligence

The history of the development of EI dates back to the beginning of the 20th century. While most psychologists viewed intelligence as cognitive functioning, some researchers recognised the importance of non-cognitive aspects. One such researcher was Robert Thorndike (1920) who was the first psychologist to explore social intelligence, which over time became known as EI. Thorndike proposed that humans possess a personal or social intelligence above that of general intelligence (Kihlstrom & Cantor, 2000). Thorndike (1921) considered intelligence to be comprised of three facets, including abstract intelligence, social intelligence and mechanical intelligence. Thorndike (1920) reviewed the predictive power of the Intelligence Quotient (IQ), and subsequently developed the concept of social intelligence to explain aspects of success that could not be accounted for by intellectual ability. Thorndike (1920) deemed social intelligence to be of more importance than general intelligence and defined

social intelligence as the ability to perceive your own internal states, motives and behaviour as well as those of others and to use this information to act toward others in an optimal way.

For the next half century, the focus in research was largely on IQ, where the arena of intelligence research introduced its first empirically constructed tests that were developed, explored and understood. In comparison, emotion-related research was less substantial, with a focus on the macro-level question of whether emotions held universal meaning, or whether they were culturally determined and idiosyncratic (Ekman, 1973). Weschler (1958), however, initiated discussion on the non-intellective and intellective factors that he considered to be essential for success. Weschler (1940) defined intelligence as the aggregated capacity of an individual to act with purpose, think rationally and deal effectively with their environment, stating that factors beyond sheer intellectual ability contributed to intelligent behaviour. Wechsler also contended that these temperamental traits or non-intellective abilities were vital in predicting an individual's ability to succeed in life (Wechsler, 1958).

Gardner (1983) laid the foundation for later theories of EI. He introduced a more comprehensive theory of "multiple intelligence", where he proposed that "intrapersonal" and "interpersonal" intelligence are as important as cognitive intelligence. He posited that intelligence is the ability to adapt and solve problems within a large number of contexts and asserted that human intelligence should be defined as a set of abilities rather than as a single construct (Gardner, 1993). He included social intelligence within his theory of multiple intelligences to integrate the cognitive and non-cognitive intelligence factors comprised in everyday functioning.

The majority of EI research and theory commenced in 1990. Salovey and Mayer (1990) were the first theorists to conceptualise EI, which they defined as the ability to monitor the feelings and emotions of oneself and others, discriminate amongst them and use this information to guide one's actions and thinking. These researchers developed a formal theory of EI by drawing on previous research on intelligence and emotions, aesthetics, brain research, clinical psychology and artificial intelligence, launching interest in the topic as being more than merely social intelligence.

Daniel Goleman wrote his first book on EI in 1995, which re-ignited interest in the topic, and several loose definitions and potential benefits were debated. Goleman's theory can also be

distinguished from other models at the time because of its focus on EI in the workplace and in relation to work performance. His theory proposes that social and emotional competencies are crucial in outstanding job performance (Emmerling & Goleman, 2003). EI-related publications increased almost ten-fold between 1990 and 2001 (Matthews et al., 2003). Currently, it is still a much-debated topic with various new measures and models emerging.

2.1.2. Conceptualisation of emotional intelligence

Before defining EI, it is important to understand how the construct is derived at by exploring the definitions of the terms “emotion” and “intelligence”. Emotions are described as an integrated feeling-state that is comprised of physiological changes, motor preparedness, cognitions about action and inner experiences that emerge from an appraisal of the self or the situation (Mayer, Roberts & Barsade, 2008) and result from our perception of changes to our internal or external environments. "An emotion is a complex psychological state that involves three distinct components: a subjective experience, a physiological response, and a behavioural or expressive response" (Hockenbury, 2007, p. 28).

Fox (2008) differentiated emotions from similar constructs such as feeling, moods and affect. Feelings are understood as a subjective representation of emotions, private to the individual experiencing them. Moods are diffuse affective states that generally last for much longer durations than emotions and are also usually less intense than emotions. Affect is an encompassing term, used to describe the topics of emotion, feelings, and moods together, even though it is commonly used interchangeably with emotion.

Most theorists agree that intelligence should be defined as “a very general mental capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience” (Gottfredson, 1997, p. 13). Intelligence is composed of a hierarchy of abilities that are needed to solve abstract reasoning problems and is largely represented by verbal and performance intelligence, as well as academic abilities (Brody, 2000).

The construct of EI emerged as an additional explanatory concept for life success, psychological well-being and human behaviour, beyond that of cognitive intelligence

(Nikolaou & Tsaousis, 2002). Intelligence, such as EI, needs to encompass three criteria to be regarded as true intelligence (Mayer, Salovey & Caruso, 2004):

- conceptual (can be described as a set of abilities)
- correlational (the measures correlate with other measures which reflect similar skills and abilities)
- developmental (it develops with age and experience, but only up to some point).

Salovey and Mayer (1990, p. 189) viewed EI as “ the subset of social intelligence that involves the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions”. Mayer et al. (2004) described EI as the set of abilities that account for how people’s emotional perceptions and understanding vary in their accuracy. Mayer et al. (2008) furthermore interpreted EI as being the ability to understand and to problem-solve challenges such as managing emotional responses, understanding emotions and emotional meanings, appraising emotions from situations, using emotions for reasoning, identifying emotions in faces, voices, postures and other content.

There is, however, a lack of consensus regarding the definition of EI, resulting in a broadening of the definition, which is one of the main criticisms against EI (Mayer et al., 1999). EI is seen by some theorists as overlapping with aspects of personality theories and traits. As an example, Bar-On (1997) excluded the concept of intelligence in his definition of EI as "an array of non-cognitive capabilities, competencies and skills that influence one's ability to succeed in coping with environmental demands and pressures". Goleman (1995) described EI as the ability to manage distressing moods and control impulses, and to make good life decisions with the knowledge of one’s feelings. Daus and Ashkanasy (2003) noted that the broad definitions of Goleman (1995) and Bar-On (1997) did not appear to differ markedly from traditional personality models or competency models.

Trait-based EI is relevant to this study and is understood as “a concentration of EI that includes not only mental abilities related to intelligence and emotion, but also other personality dispositions and traits such as motives, sociability and warmth” (Mayer et al., 1999, p. 399). Trait EI is defined as a constellation of emotional self-perceptions located at

the lower levels of personality hierarchies (Petrides, Pita & Kokkinaki, 2007) and concerns people's self-perceptions of their emotional abilities.

According to Badenhorst and Smith (2007), the diversity in the conceptualisation of EI can be summed up by these questions:

- Is EI in essence, being able to manage ourselves and our relationships with others so that we truly live our interaction?
- Does EI refer to the array of personal-management and social skills that allows one to succeed in the workplace and in life in general?
- Is emotional aptitude a meta-ability, determining how well we can use whatever other skills we have, including raw intellect?
- Is EI more simply involved in the capacity to perceive emotions, assimilate emotion-related feelings, understand the information of those emotions, and manage them?

EI is a construct that is difficult to measure and define because of the variability involved in defining subjective abilities (Pérez, Petrides & Furnham, 2005). Because of the controversy surrounding the nature, meaning, definition and measurement of EI, conflicting findings and low measurements (Tapia, 2001) are found. The reliability and validity of EI as a construct was questioned (Ciarrochi et al., 2000) and many researchers saw EI as media hype and a fad (Matthews et al., 2003). In pursuing concord amongst researchers, Hein (2001, p.4) differentiated between emotional intelligence (EI), a person's innate potential, and EQ, "a relative measure of a person's healthy or unhealthy development of their innate EI".

2.1.3. Relevant theory

There has been a fair amount of debate in literature regarding what constitutes the domain of EI (Dulewicz, Higgs & Slaski, 2003) and as a result, EI can be approached from different theoretical frameworks. All approaches generally represent four areas; emotional perception, regulation, understanding and utilisation (Ciarrochi et al., 2000) along three core domains of theory consisting of ability, trait or mixed method models.

According to ability models, EI can be understood in a similar manner to verbal or numerical intelligence with EI ability models being known as information processing EI (Petrides & Furnham, 2000). Mayer et al. (2000) viewed the ability model as a form of cognitive intelligence which complies with the psychometric criteria that make up intelligence. This type of intelligence should be considered as relatively independent of personality traits (Mayer & Salovey, 1997), supporting its claims regarding the nature of intelligence (Daus & Ashkansay, 2005). The psychometric tradition followed by Mayer et al. (2000), however, has been criticised for its narrow focus (Gardner, 1999; Goleman, 2000) and for focusing on intellectual aptitudes that can be measured by standardised tests, but with performance on such tests not necessarily translating into success in everyday life. Ability EI is defined as “one’s actual ability to recognise, process and utilise emotion-laden information (Petrides et al., 2004b, p. 278).

Mixed models are broader in their definition of EI in comparison with ability models and consider the construct of EI to be a complex interaction of cognition, metacognition, mood, emotions and personality that is applied in interpersonal and intrapersonal context (Matthews et al., 2003). The model does not involve emotion or intelligence (Mayer, Salovey & Caruso, 2002), but rather social behaviours, traits and competencies (Mandell & Pherwani, 2003). Mixed model researchers such as Bar-On and Parker acknowledged that EI is not a new field, but disagreed with traditional ability model researchers who claimed that the mixed-model approach amounts to “little more than haphazard compositions of personality traits” (Mayer, 2001, p. 15). Matthews et al. (2002) indicated that debate such as this is normal and necessary when a concept is new and under-exposed to empirical investigation.

This research is approached from the trait perspective as proposed by Petrides and Furnham (2000). Trait EI can be considered by some researchers to be part of the mixed model group (Mayer, Salovey & Caruso, 2002) since the factors evaluated consist of emotional abilities as well as traits that are considered personality components or EI “products” (Mayer et al., 2002). Petrides and Furnham (2006) took exception to the mixed model label, as they considered EI as a lower order personality trait. Although the overlap with personality measures is one of the greatest sources of criticism of this method (Conte, 2005; McEnrue & Groves, 2006), Petrides and Furnham (2006) maintained that the criticism is irrelevant, as trait EI is a constellation of emotion-related self-perceptions and dispositions.

Petrides (2001) was one of the first researchers to call for a complete differentiation between EI models. This approach views EI in relation to personality traits rather than cognitive abilities (Petrides et al, 2004). Trait EI, also referred to as trait emotional self-efficacy (Petrides, 2001), is comprised of emotion-related dispositions and people’s self-perceived emotional abilities, and is measured through self-report. Petrides and Furnham suggested that it is not the underlying theory that determines the nature of the model, but rather the method of measurement. They distinguished between trait EI (measured by a self-report questionnaire) and ability EI (measured through performance test with correct and incorrect answers). Trait EI is, therefore, seen as combining elements of personality theory such as empathy, impulsivity and assertiveness with elements of Thorndike’s social intelligence and Gardner’s personal intelligences (Petrides et al., 2004b). It is partly-based on the successful traits and dispositions included in earlier EI models (Cherniss, 2010).

The sampling domain of Petrides (2001) is identified through a content analysis of early EI and related models. It aims to organise in a single framework, all affect-related aspects of personality. The sampling domain of trait EI is described in the table below:

Table 2.1
Trait EI sampling domain

Factor	Sub-Facets	High scorers view themselves as...
Well-being	Trait happiness	Cheerful and satisfied with their lives
	Trait optimism	Confident and likely to look on the bright side of life
	Self-esteem	Successful and self-confident
Self-Control	Emotion regulation	Capable of controlling their emotions
	Impulsiveness (low)	Reflective and less likely to give in to their urges
	Stress management	Capable of withstanding pressure and regulating stress
Emotionality	Trait empathy	Capable of taking someone else’s perspective
	Emotion Perception (self and others)	Clear about their own and other people’s feelings
	Emotion expression	Capable of communicating their feelings to others
	Relationships	Capable of maintaining fulfilling personal relationships

Sociability	Emotion Management (others)	Capable of influencing other people's feelings
	Assertiveness	Forthright, frank and willing to stand up for their rights
	Social awareness	Accomplished networkers with superior social skills
Independent Facets	Self-motivation	Driven and unlikely to give up in the face of adversity
	Adaptability	Flexible and willing to adapt to new conditions

The trait EI model is criticised due to the self-reporting bias as well as the close relation between EI and personality (Petrides, 2007). Mayer et al. (2002) stated that if it is to be of value, EQ must measure something unique and distinct from standard personality traits. Maddocks, Cooper and Sparrow (2005) believed that EI is not part of personality, but instead about how we manage our personality (traits) from moment to moment in order to be both personally and interpersonally effective. Maddocks et al. (2005) believed that EI is changeable and developable, is concerned with performance and based on bodily awareness of emotional states. They believed that personality traits, on the other hand, are stable, focused on awareness of behaviour and not concerned with performance.

2.1.4. The rationale for studying emotional intelligence

Emotions motivate an individual to act, they serve to control actions and they play a part in career development (Brown, 2003). Positive emotions help employees to obtain favourable outcomes such as achievement and job enrichment (Staw, Sutton & Pelled, 1994), whereas negative emotions increase the predictability of workplace deviance (Lee & Allen, 2002). Emotions also significantly affect how we make various decisions (Goleman, 1995). Developing EI thus benefits individuals as EI contributes to more positive attitudes, behaviours and outcomes (Carmeli, 2003). Emotionally intelligent people may be more adaptable in terms of their thinking styles in complex problem-solving tasks and in social and interpersonal situations (Austin, Saklofske & Egan, 2005).

Dunn (2003) listed components of EI which are regarded as key to success in life: (1) Self-awareness and self-honesty; (2) Knowledge about causes of emotions; (3) Self-regulation and

modulation of one's emotions; (4) Empathy; (5) Motivation and good decision-making; (6) Ability to analyse and understand relationships; (7) Intuitiveness; (8) Creative and flexible thinking; (9) Integrated self; and (10) Balanced life. EI leads to adaptive behaviour responses and in turn assists individuals in coping better with stressful situations (Dahl & Cilliers, 2012). EI is not considered as a replacement for ability or competence, rather EI is thought to interact with a number of components in determining personal success in life. However, high levels of EI could enhance a person's likelihood of succeeding both occupationally and interpersonally (Caruso, 1999) in a number of environments.

EI is positively related to success in the area of leadership, specifically leadership potential, in a sample of senior managers (Higgs & Aitken, 2003). EI leads to increased adaptive behaviour responses (Muramatsu & Hanoch, 2005), making EI an important characteristic for leaders to possess in turbulent business environments. However, when recruiting non-managerial employees, particularly those with little prior experience or education, EI proves to be a valuable consideration. Employees possessing high EQ will be able to deal with work pressure more effectively (Caruso, 1999). Carson and Carson (1998) found EI to be positively related to important employment experiences and individuals' emotional attachment to their current careers and jobs. Abraham (1999) reported that EI was related to work-group cohesion, harmonious working relationships and, in turn, organisation commitment.

EI may be an important component of the flexible individual, with Murphy and Janeke (2009) having postulated that EQ could be a significant contributor to a person's ability to adapt their goals and thinking styles to the requirements of the environment and useful in productive problem solving. Emotionally intelligent individuals follow their values, believe in continuous learning and focus on instilling vision (Colvin, 1999). EQ is important in organisations as a means of communication, which develops through maturity, as it can stimulate and raise personal renewal of learning and motivation (Harmon, 2000). Emotionally intelligent people are possibly more adaptable in complex social and interpersonal situations (Austin et al., 2005).

A plethora of research advocates the value of EI on performance within the work environment. Goleman (1995) suggested that EI is a better predictor of academic and occupational achievement than general intelligence or cognitive abilities. EI has a direct positive relationship with job performance and possesses predictive validity regarding future

performance (Drucker, 1996; Hooper & Potter, 2000). Research, both worldwide and across different industries, shows that top performers can be identified through consideration of their EI (Bliss 2000; Cavallo, 2000; Strickland, 2000). Ultimately, the greatest return on investment for organisations is effective performance and in this regard Lopes, Grewal, Kadis, Gall and Salovey (2006) found EQ to be significantly associated with job performance indicators such as merit increase and company rank, as well as interpersonal facilitation skills and higher stress tolerance. Van Rooy and Viswesvaran (2004) found EI to have predictive validity in employment and life settings, with EI impacting on 5% of the variance in work performance.

Bar-on (2007) declared that EI should be the focus of any competitive company because of its impact on job performance, subjective well-being and motivation. With EI being found to be so valuable in the workplace, both for individuals and organisations, it is necessary to study the construct further within a call centre environment. If it can be established that EI impacts on WE and/or creativity, and differs according to demographic groups, then this information can be applied within the workplace, particularly as part of selection, placement and development processes.

2.2. WORK ENGAGEMENT

The study of WE has become a popular topic since the turn of the century (Bakker, Rodríguez-Muñoz, & Derks, 2012). The concept of WE entails a focus on the energy, involvement and effectiveness that employees bring to the job. WE is positively associated with job resources (aspects of the job with the capacity to reduce job demands), is functional in achieving work goals and may stimulate personal growth, learning and development (Gilliland, Steiner & Skarlicki, 2007).

2.2.1. Historical development of work engagement

The concept of employee engagement first appeared in an Academy of Management Journal article, “Psychological Conditions of Personal Engagement and Disengagement at Work” (Kahn, 1990). Kahn (1990), whose writing was greatly influenced by the work of Goffman (1961), introduced personal engagement as “the simultaneous employment and expression of

a person's 'preferred self' in task behaviours that promoted connections to work and to others, personal presence, and active full role performances" (p. 700). Kahn (1990) considered personal engagement to include meaningfulness (sense of return on investments of self in role performance), safety (the ability to show one's self without fear or negative consequences to self-image, status or career), and availability (the sense of possessing the physical, emotional and psychological resources necessary) for the completion of work.

Kahn (1990) proposed that people make use of varying degrees of themselves, either physically, cognitively or emotionally while doing their work. His focus was to determine the moments when people apply themselves to work and when they remove themselves from specific task behaviours in the workplace. Kahn (1990) aimed to ascertain fully what it means to be psychologically present in a particular moment or situation in the organisation. Kahn (1990) labelled the terms he used to describe this interaction as personal engagement and personal disengagement. He viewed personal engagement as "the harnessing of organisation members' selves to their work roles"; and engagement as "people employing and expressing themselves physically, cognitively and emotionally during role performances" (Kahn, 1990, p. 694).

Khan's work is the only empirical research conducted on employees until 1997, when Maslach and Leiter (1997) approached WE from the perspective of burnout, and WE being two ends of the same work well-being continuum. They viewed engagement as being characterised by high levels of energy, involvement and self-efficacy (Maslach & Leiter, 1997). Maslach (1998) proposed that WE was the antithesis of burnout with a high score on the Maslach Burnout Inventory being an inverse indication of a low WE score. In 2001, Maslach, Schaufeli and Leiter aimed to determine the reasons for employees developing burnout, which was defined as the "psychological syndrome in response to chronic interpersonal stressors on the job" (Maslach, Schaufeli & Leiter, 2001, p. 399). Researchers also question why some employees respond positively to work stresses.

Schaufeli et al, (2002) first defined engagement as being a separate construct from burnout and posited that the WE dimensional make-up was theoretically dissimilar and exclusive from burnout. Schaufeli et al., (2002) did not consider a high level of self-efficacy to be part of the conceptualisation of WE and that the third variable should be absorption.

More recently, research continues shifting its focus away from the traditional pathogenic paradigm to studying and understanding behaviour through psychological well-being (Coetzee & Cilliers, 2001), health promotion (Antonovsky, 1996) and positive psychology (Seligman & Csikszentmihalyi, 2000). Interest moves from the negative study of burnout, stress, insecurity, etc. to positive constructs such as job satisfaction, organisational commitment, organisational citizenship behaviour and intrinsic motivation (Rothmann, 2003) as well as WE.

Recently, there is an increased focus on employee engagement in research. Although the approaches for measurement are different, the general conceptualisation is similar and thus the terms “employee engagement” and “WE” are often used interchangeably. Macey and Schneider (2008) pioneered conceptual research in the area of employee engagement hypothesising that employee engagement develops from trait engagement, state engagement and behavioural engagement. Furthermore, they defined employee engagement as, “job design attributes that would directly affect trait engagement, the presence of a transformational leader would directly affect state engagement, and the presence of a transformational leader would directly affect trust levels and thus, indirectly affect behavioural engagement” (Macey & Schneider, 2008, p. 25).

The work by Harter et al. (2002) is the first to suggest an employee engagement-profit link and thus prompts widespread interest in the construct. Engagement is a blend of emotional, cognitive and behavioural expressions displayed when an employee is matched within an organisation that provides resources to meet their needs (Gill, 2001). Despite differences in the operational definitions, the antecedents are viewed similarly.

2.2.2. Conceptualisation of work engagement

A number of definitions of WE are available in literature. Kahn (1990, p. 694) was the first researcher to define engagement, which he described as “the harnessing of organisation member’s selves to their work roles ... and express themselves physically, cognitively and emotionally during role performances”. According to Kahn (1990), engaged employees are physically involved in their tasks, be it alone or with others, cognitively attentive and emotionally connected to others when performing their work.

Other definitions of WE include:

- An energetic state in which the employee is dedicated to excellent performance at work and is confident of his or her effectiveness (Schutte et al., 2000)
- A psychological presence that it is composed of two critical components, namely attention and absorption. Attention is a “cognitive availability and the amount of time one spends thinking about a role” and absorption “means being engrossed in a role and refers to the intensity of one’s focus on a role” (Rothbard, 2001)
- “A relatively stable emotional condition”, implying that it is a persistent and pervasive work-related state of mind (Andreassen, Ursin & Eriksen, 2007, p. 619).

WE can be conceptualised along two separate, yet similar roads (Storm, 2002). In line with Antonovsky’s wellness-illness continuum (Antonovsky, 1987), scholars aim at predicting burnout versus WE, rather than focusing research attempts at predicting burnout versus “not being burned out.” Vigour and dedication constitute the core dimensions that are direct opposites of the burnout dimensions of exhaustion and disengagement (Llorens, Schaufeli, Bakker & Salanova, 2007). WE was described by Maslach and Leiter (1997) as being characterised by energy, involvement and efficacy, dimensions which are considered the direct opposites of the three burnout dimensions, namely exhaustion, cynicism and reduced professional efficacy. The concept of WE, therefore, entails a focus on the energy, involvement and effectiveness that employees bring to the job.

Schaufeli (2004) described WE from a different perspective, viewing burnout and WE to be separate concepts that should be measured independently, using different instruments. Schaufeli (2004) defined WE as a positive, fulfilling, work-related state of mind that is characterised by three subdimensions: vigour, dedication and absorption. Coetzee and Roythorne-Jacobs (2007, p. 54) similarly defined WE 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, being happily immersed in one’s work.

Vigour is characterised by high levels of energy, mental toughness, willingness to exert effort, the show of fierce resolve in one’s work and perseverance (Schaufeli, 2004). Vigorous individuals are willing to invest effort in their work and persistence in the face of difficulties

(Schaufeli & Bakker, 2004). These individuals feel motivated, eager and excited about their work, and will persevere even when setbacks, limitations or challenges arise. Vigour represents an affective state that individuals attribute to their job and workplace when asked about it; they do so spontaneously and experience positive affect across situations and times (Perrewe & Ganster, 2004). Vigour cannot occur without a specific purpose or objective, making it similar to motivation (Macey, Schneider, Barbera & Young, 2009). An example of an item on the UWES, used in this study to measure vigour, is “When I get up in the morning, I feel like going to work” (Schaufeli et al, 2002).

Dedication is defined as being strongly or deeply involved in one’s work and experiencing feelings of significance, enthusiasm, inspiration and challenge (Schaufeli, Bakker & Salanova, 2006; Albrecht, 2010). 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 et al., 2002). An example of an item on the UWES measuring dedication is “I am proud of the work that I do” (Schaufeli et al, 2002). The experiences of time passing quickly and forgetting everything around one are evidence of this dimension (Schaufeli & Bakker, 2001).

Absorption refers to being content and completely focused on one’s work, to the extent that time elapses quickly (Schaufeli et al., 2006). Being fully absorbed in one’s work is characterised by focused attention, a clear mind and body, effortless concentration, complete control, loss of self-consciousness, distortion of time and intrinsic enjoyment (Csikszentmihalyi, 1990). Engaged workers are more creative, more productive, and more willing to go the extra mile (Bakker & Demerouti, 2008). An example of an item on the UWES measuring absorption, is “I feel happy when I am engrossed in my work” (Schaufeli et al., 2002).

2.2.3. Relevant Theory

A number of theories of WE have emerged. The Job Characteristics Theory of Hackman and Oldham (1976) claim the presence of five job resources, namely multiple skills, task distinctiveness, task importance, independence and feedback that can enhance WE. Social Exchange Theory (SET) follows a multi-dimensional approach of employee engagement with Saks (2006) separating job and organisational engagement and hypothesising that employee

engagement developed through a social exchange model. This model purports that mutual commitment develops via progressive interactions between entities under conditions of mutual interdependence (Saks, 2006). This theory furthermore suggests that WE results from tenets of exchange and conditions of give-and-take between employees and organisations.

The first model was that of Kahn (1990), who suggested that if the psychological conditions of work were purposeful, secure and accessible, then employees were more likely to be engaged. Elements such as job enrichment and role-fit positively predict purposefulness; rewarding peer workers and supportive superiors positively predict security; and resource availability positively predicts accessibility. Alternatively, succumbing to peer norms and self-centredness negatively predict security; whilst involvement in external activities negatively predicts resource availability and would result in work disengagement.

Another model of WE is that of Maslach et al. (2001) that emerges from the literature on burnout. Burnout is theorised to be the erosion of engagement (Maslach et al., 2001). In this model, each concept is pre-empted by six areas of work-life including:

- Sustainable workload or workload perceived not to 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
- Purposeful work or meaningless work.

Johnson (2003) suggested that this approach to understanding engagement is devoid of the cognitive engagement processes conceptualised by Kahn (1990) and focused only on emotional and physical absences of burnout. Shirom (2003) examined Maslach's model and proposed that engagement was a separate psychological state.

This research is approached from the Job-Demand-Resource (JD-R) model as it alludes to the fact that burnout and WE are not inversely related concepts. Drawing from the JD-R definition, the three factor theory (Schaufeli et al., 2002) measures WE as distinct from WE as a display of vigour, dedication and absorption in one's work. The JD-R model (Demerouti, Bakker, Nachreiner & Schaufeli, 2001) purports that whereas each occupation may have its

own specific risk factors associated with burnout, these factors can be classified in two general categories, namely job demands and job resources.

Job demands are the physical, psychological, social or organisational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills, and are therefore associated with certain physiological and/or psychological costs. Examples include emotional demands, workload and physical demands. Job resources refer to those physical, psychological, social or organisational aspects of the job that are either/or functional in achieving work goals, reduce job demands and the associated physiological and psychological costs or stimulate personal growth, learning and development (Demerouti, et al., 2001:499-512). These include social support from colleagues and supervisors, performance feedback, skill variety and autonomy.

According to Bakker and Demerouti (2008), two assumptions can be drawn from job demands and resources. The first assumption is that job resources start a motivational process that leads to WE and subsequently, to higher performance. In addition, job resources reduce demands and stimulate personal growth and development. The second assumption is that job resources become more noticeable and gain their motivational potential when employees are confronted with high job demands such as emotional demands, workload and physical demands.

2.2.4. Rationale for studying work engagement

Dibley (2009) stated that engaged employees feel their job utilises their skills and abilities, that their work is challenging and stimulating and work provides a sense of personal accomplishment. Schaufeli, Taris, Le Blanc, Peeters, Bakker and De Jonge (2001: 422-428) described eight characteristics of engaged workers, which includes that they:

- Take initiative and actively give direction to their lives
- Generate their own positive feedback as encouragement
- Are also engaged when outside their employment
- Have values and norms that agree with those of their employing organisation
- Become fatigued, but it is a positive fatigue – “tired, but satisfied”

- Have sometimes been burnt out, or could become so, but often get themselves out of it again
- Will occasionally want to do something other than work
- Do not suffer from enslavement to work.

Research has found that WE enhances job performance (Salanova, Agut & Peiro, 2005) and morale (Pannell, 2005), and is linked to employee retention (Schaufeli & Bakker, 2004), lowered absenteeism and staff turnover rates, and enhanced organisational commitment (Welthagen & Els, 2012). In their global study on WE, the Corporate Leadership Council (2004) found that committed employees perform 20% better and are 87% less likely to exit an organisation. Saks (2006) asserted that individuals with high levels of WE are more likely to experience job satisfaction, organisational commitment and organisational citizenship behaviour. Kassing, Piemonte, Goman and Mitchell (2012) similarly found a relationship between low levels of WE and intention to leave the organisation. Soane, Shantz, Alfes, Truss, Rees and Gatenby (2013) also reported that higher levels of engagement were associated with lower levels of absenteeism.

In terms of service organisations, Karatepe and Aga (2012) found that frontline employees possessing higher WE may ensure delivery of service quality and effective complaint handling. They also found that WE fully mediates the impacts of job resourcefulness and customer orientation on job satisfaction, affective organisational commitment, and turnover intentions. A connection exists between employee engagement and profitability increase through higher productivity, increased sales, customer satisfaction and employee retention (Bakker & Leiter, 2010).

Particularly, coping is shown to be associated with WE across different professions such as teachers (Parker & Martin, 2009), college students (Gan, Yang, Zhou, & Zhang, 2007), nurses and police officers (Rothmann, Jorgensen, & Hill, 2011). Positive consequences of WE are also associated with positive work attitudes, individual health, extra-role behaviours and performance (Schaufeli & Salanova, 2007).

WE, therefore, also drives organisational performance. WE is a vital driver of business success and is considered a competitive advantage (Welthagen & Els, 2012) as it is linked to business results (Harter et al., 2002). WE is linked to customer satisfaction, company

reputation, higher profit margins (Echols, 2005) and overall increased stakeholder value (Lockwood, 2007). Ncube and Jerie (2012) concurred by stipulating that organisations that engage and inspire their employees, produce world-class levels of innovation, productivity and enhanced performance, which result in competitive advantage.

Higher levels of WE are thus been linked to a number of positive individual and organisational outcomes. Harter, Schmidt and Hayes (2002) connected employee engagement with outcomes that are directly relevant to most businesses: customer satisfaction, productivity, profit, low employee turnover and safety at work. This study hopes to determine whether WE is related to or influenced by EI and demographic differences as well as whether there is any relationship between WE and creativity. This information may go some way to assist in ensuring that current and potential employees are becoming more engaged with their work.

2.3. CREATIVITY

Creativity is the process of being creative and contains three components: ability, an attitude and a process (Harris, 1998). In the past, intelligence or the ability to learn and use existing knowledge (Dacey & Lennon, 1998) was considered as the most valuable ability. However, in the 21st century, the ability to produce new knowledge (creativity) combined with EI has become a priority. A lot of valuable information about how work contexts relate to creative performance has been generated (Oldham & Cummings, 1996; Shalley, 1991; Woodman, Sawyer, & Griffin, 1993).

2.3.1. Historical Development of creativity

History has seen various perspectives of creativity, with most studies on creativity aiming to discover what makes some individuals more creative than others. Attention to creativity has been evidenced since the 1700s, when creativity was first discussed by the French philosopher Voltaire, who described the creative process as an individual taking two disconnected ideas and combining them to form something new and exciting (Arens, 2002). In 1913, Poincare portrayed creativity to be the appearance of sudden illumination as a manifest sign of long unconscious prior work (Glover, Ronning, & Reynolds, 1989).

Wallas' (1926) early examination of the creative process was ground-breaking and proposed that creative thinking proceeds through four phases, including preparation, incubation, illumination and verification. Wallas (1926) explained that preparation consisted of definition of the issues, observation and study and occurred when preliminary work took place in anticipation of the creative process. This is when the individual thinks freely, brainstorms, collects information from memory and other sources, searches and listens to suggestions and lets the brain wander. Incubation involves laying the issue aside for an amount of time, where the individual's thoughts percolate, and can occur in either moment or over an extended period. The illumination phase is the moment when a new idea finally emerges and the individual, either spontaneously or through a logical sequence, sees a solution to the problem. In the verification phase, the idea will be accepted for critical evaluation by the innovator and involves "checking out" the idea. This model became widely accepted and confirmed (Patrick, 1955), with some researchers further expanding on the four stages (Osborn, 1957; Rossman, 1964; Taylor, 1964).

A further notable historical point in creativity research occurred with the establishment of the Institute of Personality Assessment and Research (IPAR) in 1949 at the University of California Berkley. The goal of IPAR was to apply personality assessment to the study of fundamental theoretical and substantive issues in psychology and human behaviour. As a result of the formation of IPAR, Mackinnon and Barron joined forces. The researchers consequently developed a complex method with which to study individuals who worked as writers, architects and scientists at IPAR. They examined individual differences between more creative and less creative members of these vocations.

The start of the modern study of creativity is said to have occurred as a result of the presidential speech by Guilford to the American Psychological Association in 1950. Guilford noted the lack of research on creativity and challenged psychologists to pay closer attention to creativity. This event is recognised as a milestone in the study of creativity. Guilford highlighted the importance of studying creativity and charged the scientific community with discovering and promoting creativity (Puccio, 1999). Guilford (1950) also outlined a conceptual basis for creativity research with the aim to isolate intellectual and personality traits distinguishing creative individuals from those considered to be less creative.

In 1961, the four P's of creativity were conceptualised as encompassing person (attributes of people that hinder or help idea generation and implementation); process (tools, techniques

and/or methods utilised to work together to optimise your creative and critical thinking); product (creativity around product, service and processes) and press or environment (teams, departments, divisions, organisation climate and pressures on people and their work which help or hinder idea flow) (Rhodes, 1961/1987). A product (idea, procedure, or object) is considered creative if it can be described as (a) new, original or unique, and (b) valuable. A person is creative if they tend to produce such products (Gough, 1979). A process is labelled creative if it produces novel and useful outputs (Amabile, 1988).

Over the years, Barron and MacKinnon also contributed significantly to the understanding of creativity and creative processes. Over time, these endeavours were successful in identifying some characteristics of creative people, including self-confidence, flexibility, aggressiveness, attraction to complexity, risk taking, a desire for recognition, high energy, intuition and creative self-image (Barron & Harrington, 1981). They also found that more creative individuals are seen as ingenious, imaginative, courageous, original, artistic, clear thinking, insightful, possessing wide-ranging interests, versatile, intelligent, individualistic, preoccupied and complicated.

2.3.2. Conceptualisation of creativity

The concept of creativity is one that is complex, with various definitions and means of measurement. There has been a long-standing dialogue regarding the definition of creativity, both in general and in an organisational setting. The root of the word “creativity” and “create” originates from the Latin word “creatus”, which means to “make”, “produce” or “to grow” (Botha, 1999:26; Piirto, 1992:7). With creativity being such a broad concept, no single definition precisely describes the meaning of the word (Hargreaves, 2008:228). Table 2.2 outlines the various definitions available.

Table 2.2
Definitions of creativity

Researcher	Definition of Creativity
Barron (1969)	The ability to bring something new into existence
Torrance (1969)	Described creative thinking as the process of sensing gaps or disturbing missing elements; forming new hypotheses concerning them and testing these hypotheses and communicating the results, while also possibly modifying and retesting the

	hypotheses
Fabun (1971)	Defined creativity as the process by which original patterns were formed and expressed
Worthy (1975)	Viewed creativity as always involving the closing of the gap, which made the unknown known, and the unseen seen
Gardner (1989)	Defined creativity as “The human capacity regularly to solve problems or to fashion products in a domain, in a way that is initially novel, but ultimately acceptable in a culture” (p. 14)
Shalley (1991)	Defined individual creative behaviour in terms of “developing solutions to job-related problems that are judged as novel and appropriate for the situation (p. 179)
Feldman (1994)	Considered creativity to be the achievement of something remarkable and new, something that transformed and changed a field of endeavour in a significant way
Torrance’s (1994, p. 28)	Defined creativity as “a successful step into the unknown ... being open to experience ... and seeing new relationships”
Ford (1995)	Defined creativity as “A context-specific, subjective judgment of the novelty and value of an outcome of an individual’s or a collective’s behaviour” (p. 17)
Woodman (1995)	Defined creativity as “The creation of a valuable, useful new product, service, idea, procedure or process by individuals working within a complex social organisation” (p. 293)
Amabile (1996)	Defined creativity as “The quality of products or responses judged to be creative by appropriate observers, and ... the process by which something so judged is produced” (p. 33)
Oldham & Cummings (1996)	Defined creative performance as “products, ideas or procedures that satisfy two conditions: (1) they are novel or original and (2) they are potentially relevant for, or useful to, an organisation” (p. 608)
Csikszentmihalyi (1996)	Defined creativity as “Any act, idea or product that changes an existing domain or that transforms an existing domain into a new one” (p.28). Domain consists of a set of symbolic rules and procedures
Cohen (2000)	Defined creativity as the energy that allowed one to think a different thought, and to express thoughts in a novel way, while life was viewed as an opportunity for exploration, discovery and an expanding sense of self.

As creativity research advanced, the conceptualisation of creativity moved from being viewed as an isolated human condition, to the inclusion of an outcome. Creativity was thought of as a process and considered to be complex, including an interconnection with the environment. This came to head with Gardner (1993; 25) providing a modern and widely accepted definition of the creative individual “as a person who regularly solved problems, fashioned products, or defined new questions in a domain in a way that was initially considered novel, but that ultimately became accepted in a particular cultural setting”.

Researchers recommend a multidimensional approach when studying creativity (Csikszentmihalyi, 1988; Feldhusen & Goh, 1995; Gardner, 1993b; Guilford, 1977; MacKinnon, 1978; Simonton, 1988; Sternberg & Lubart, 1996; Torrance, 1965, 1979) as there is no single definition or means of measurement for it. Two criteria that are, however, normally included in definitions of creativity are novelty and usefulness (e.g., Woodman et al., 1993). Novel ideas are unique and considered useful if they can contribute value to the organisation (Shalley et al., 2004). It is not enough to be merely original to be considered creative; usefulness is very critical because bizarre ideas may also be novel, but are immoral or highly impractical for implementation in the organisation (Shalley & Perry-Smith, 2001). Essentially, creativity can be considered as useful novelty. Gardner (1993) also contrasted “little C creativity – the sort which all of us evince in our daily lives; and big C creativity – the kind of breakthrough which occurs only very occasionally” (p. 29). Furthermore, creativity is not only about creating new ideas, but is also a skill which helps individuals to deal with new situations or problems that they have never been confronted with before (Sternberg et al., 2009).

Torrance’s (1994) definition of creativity, relevant to this study, is based on divergent thinking and indicates that creativity involves responding constructively within an environment and “awakening unrecognised potential”. Widely accepted indicators of creativity include the concepts of fluency, flexibility, elaboration and originality as defined by Torrance (1994) and Guilford (1967). Fluency is defined as the generation of numerous ideas, whereas flexibility is the freedom to shift from one way of thinking to another. Elaboration is the addition of detail to an idea, and originality is being able to produce remote, unusual or novel ideas (Renzulli et al., 1976). Convergent and divergent thinking has an influence across these variables.

It is also important to distinguish between creativity and innovation. The two concepts are closely related and overlapping, but are not interchangeable (King, 1995). Creativity has been studied in psychology at an individual level and refers to the production of novel and useful ideas in any domain (Amabile et al., 1996). Innovation has been studied in economics and management at the organisational level and is defined as the successful implementation of creative ideas within an organisation (van de Ven & Angle, 1989). Creativity is different from innovation as it is the production of novel and useful ideas at the individual level, whereas innovation refers to the implementation of creative ideas at the organisational or unit level (Amabile et al., 1996; Oldham & Cummings, 1996). Creativity is the seed of innovation (Amabile, 1996) and can be considered as a necessary first step or precondition required for innovation (Scott & Bruce, 1994).

Most approaches to creativity research use the term "creativity" to describe either a personal quality, a process, a behaviour or a characteristic of a product. Puccio (1999), however, viewed these to be interdependent with the basic facets of creativity including, but not limited to, individual qualities, aspects of the process, and characteristics of the products and the nature of the environment. This is also known as the interactionist approach to studying creativity, and this approach suggests that creativity should be studied through different means.

2.3.3. Relevant theory

When discussing creativity, Guilford's (1967) theory of divergent thinking is relevant to this study, as divergent thinking encourages new solutions to problems and leans towards unknown or novel ideas. The two terms are often used synonymously and are inextricably linked. Divergent thinking is defined as the "generation of information from given information, where the emphasis is upon variety and quantity of output from the same source. Likely to involve what has been called transfer (generalisation) (Stein, 1974: 96), divergent thinking can take many forms; diverse sets of units, classes of units, relations between units, types of systems, ways to transform objects and implications (Guilford, 1967).

Divergent thinking is essential in generating numerous ideas as it involves the courage to think in many directions (Dacey & Lennon, 1998). Diverging ideas affect the originality of the problems identified, and the variety of the solutions proposed (Ford, 1995). The opposite is known as convergent thinking, where the focus lies on the "right" or known answer with

little freedom for ambiguity. Convergent thinking is used when rational or ordinary solutions are generated (Dacey & Lennon, 1998).

Divergent thinking is seen as an open and endless way of solving a problem, which seeks a variety of different solutions and is also known as lateral thinking (Mayesky, 2002:4). Isenberg and Jalongo (1993) defined divergent thinking as being:

- Generative: information is valued for its ability to stimulate ideas; answers are inferred
- Explorative: many possible paths; irrelevancies are seen as potential sources of inspiration
- Unpredictable: intuition is relied on as much as logic, necessary for satisfactory answers.

Divergent thinking is comprised of the abilities flexibility, originality, fluency and elaboration. Flexibility focuses on generating different types of ideas (Black, 1995) and is seen as the ability to think in a non-traditional way. Originality is a plan or solution that is unique and does not yet exist and which is new and non-conforming in thought and action (Neethling & Rutherford 2001; Davis, 2004). Fluency is a continuous idea-generating process or the ability to produce many verbal and non-verbal ideas to verbal and non-verbal questions and problems, and strives towards producing many ideas (Black, 1995). Elaboration is the process of finding associations, adding details, building on and implementing ideas (Davis, 2004).

Guilford (1967) championed the factorial approach with his “structure of intellect” model that suggests that intellectual ability is comprised of up to 150 factors organised along three dimensions: operations, content and product. According to Guildford, people can process four different types of information (figural, symbolic, semantic and behavioural) in five different ways (cognition, memory recording, memory retention, divergent production, convergent production and evaluation), which would lead to six different types of outcomes (units, classes, relations, systems, transformations and implications). Out of the five operations, divergent production is most related to creative potential and is often used as an operational definition for creativity. Divergent production also forms the basis of most creativity tests, including Guilford's Alternate Uses and Torrance's Unusual Uses.

Guilford (1975) suggested that the human mental abilities that contribute to potential for creative production, and the mental functions that go with them, were an important part of human intelligence. He posited eight abilities that he believed to be the foundations of creativity, which include: sensitivity to problems, fluency, novel ideas, flexibility, synthesising and analysing abilities, complexity and evaluation. Covey (1989) theorised that the primary human endowments consist of self-awareness; imagination and conscience; volition or will power; an abundance mentality; courage and consideration; and creativity.

The relation between creativity and personality has been studied comprehensively and is also relevant to this study. Woodman and Schoenfeldt (1989) posited that a personality theory that did not account for creativity would seem incomplete. Trait and factor theories suggest that creativity is comprised of a set of traits or factors that are measured quantitatively.

The three main personal characteristics influencing individual creativity, are a creative personality, “big-five” personality traits, and self-efficacy. The Five-Factor Model suggests that personality traits are organised hierarchically into five global factors, namely, conscientiousness, openness to experience, extraversion, neuroticism and agreeableness (Wiggins & Trapnell, 1997). Conscientiousness (individual differences in organisation, determination, impulse control and conformity) and openness to experience (curious, flexible, imaginative and open to change, new ideas, experiences and unconventional perspectives) are considered to be the most conceptually relevant to creative performance (Costa & McCrae, 1992). Patterson, Kerrin and Gatto-Roissard (2009) also discussed personality traits related to individual creativity, using the Five Factor Model of personality. They found that openness to experience and related concepts such as curiosity, imagination, and broad interests; have a significant positive impact on and are possibly the most important factor in predicting individual creativity. In support of this, Williams (2004) found that openness to experience positively affects individuals’ attitudes toward divergent thinking and creative performance.

George and Zhou (2001) found conscientiousness to be related to creative behaviour and to interact negatively with close monitoring with conscientious individuals who were monitored very closely by their supervisors and who had unsupportive co-workers showing lowered levels of creativity. George and Zhou (2001) found that subordinates’ openness to experience interacts with the valence of the feedback they receive from their supervisors and the nature of their work tasks. Creativity turns out to be highest when employees who were high on openness to experience, perform heuristic tasks and receive positive feedback from their

supervisors (George & Zhou, 2001). Individuals high on agreeableness, defined as readiness to comply (Patterson et al. 1999) are found to be less innovative. Conscientiousness, which includes behaviour that is fastidious, ordered, neat, dutiful and methodical; has been found to hinder creativity (Patterson et al., 1999). Extroversion and its impact on creativity is dependent on contextual factors such as the type of work. Neuroticism is an enduring tendency to experience negative emotional states, including anxiety, guilt and anger, has not been studied much in relation to creativity, with the few studies being conducted yielding inconsistent findings (Patterson et al., 1999).

Other researchers noted certain personality traits that most often characterise creative people and are stable across fields (Barron, 1968, 1969; Eysenck, 1993; Gough, 1979; MacKinnon, 1965). These include broad interests, independence of judgment, autonomy, and a firm sense of self as creative, self-confident, attracted to complexity, being aesthetically oriented and risk taking (Shalley & Gibson, 2004). Tropman (1998) distinguished a further twelve traits that possibly characterise innovative individuals: risk taking, independence, internal locus of control, thriving on discomfort, self-starting, self-confident, flexibility, persistence, tolerance of ambiguity, pattern recognition, and a low need for support. Woodman et al. (2003) suggested some personality traits that relate positively to individual creativity and innovation: a high valuation of aesthetic qualities in experience, attraction to complexity, high energy, intuition, self-confidence, a firm sense of self, persistence, and intellectual honesty.

Creative people are thought to be more open to new experiences, less conventional and more independent, introverted, driven, ambitious, dominant, hostile and impulsive (Feist, 1999). Feist (1999) also found that the creative personality tends to be rather stable. Oldham and Cummings (1996) found that creative personalities exhibit higher levels of creativity when they work on complex jobs and are supervised by a supportive and non-controlling leader. Woody and Claridge (1977) found that asocial personality traits such as hostility, domination and independence enable individuals not to be constrained by convention or other people's expectations. Gough (1979) isolated a set of creativity-relevant personality characteristics by using a set of adjectives said to be descriptive of creativity (e.g., individualistic or wide interests) or non-creativity (e.g., cautious or conservative), called the Creative Personality Scale (CPS), which is used in this study.

2.3.4. Rationale for studying Creativity

According to the resource-based view, an organisation develops competitive advantage by acquiring, developing, combining and effectively deploying its physical, human, and organisational resources in ways that add unique value and make it difficult for competitors to imitate (Barney, 1991). The internal resources, capabilities and competencies of the organisation, such as knowledge, learning and dynamic capabilities, have become sources of sustained competitive advantage (Wright, Dunford & Snell, 2001). Turbulent changes in the business environment, fierce competition in the global market and the emergence of the knowledge-based economy, which makes jobs more complex and mobile, have resulted in increased emphasis on creativity research over the last two decades (Zhou & Shalley, 2003). Technological advances and globalisation place pressure on organisations to enhance their efficiency, effectiveness and creativity (Cummings & Oldham, 1997).

Creativity unfolds in the workplace with the production of new and useful ideas about products, services, processes and procedures that are useful to organisations (Amabile et al., 1996). These can include creative solutions to business problems, creative business strategies, or creative changes in job processes, instruments and organising structures, which can vary in terms of the degree to which the idea reflects an incremental or radical departure from the status quo (Mumford & Gustafson, 1988; Shalley et al., 2004). Organisational innovation largely depends on the creative ideas of individual members that contribute to organisational success and effectiveness (Amabile, 1997; Woodman et al., 1993). Creativity should, therefore, be highly valued and recognised in organisations (Gomez-Mejia & Balkin, 1992; Kanter, 1988).

Amabile (1988) illustrated an area of overlap among the elements indicating the area of highest creativity for individuals and highest innovation for organisations. Organisations should thus strive to identify this creativity intersection for every employee, to enable the concurrent development of the skills, processes and motivation central to creative performance. Hirst, van Knippenberg and Zhou (2009) found that individuals working within teams with high levels of team learning behaviour have exhibited more creativity. Research also links workplace cultural diversity and exposure to culture to creative performance (Maddux & Galinsky, 2009).

Cunningham and MacGregor (2008) found that a brief creativity training session positively affects performance on a problem whose solutions require insight. Clapham and Schuster (1992) conducted a study to determine the effectiveness of creativity training among engineering students. They found that the creativity training groups showed a greater increase in creativity scores on the post-tests than did the control group. Shalley (2008) suggested that creativity training can increase the incidence of creative thought and broaden employees' task domain expertise. Learning and development can affect employee creativity as education provides exposure to a variety of knowledge bases, viewpoints and experiences, reinforces the use of experimentation and problem solving skills, and develops individuals cognitively so that they are more likely to use multiple and diverse perspectives and more complicated schemas (Perkins, 1988).

DiLiello and Houghton (2008) posited that management can use training to enhance creative potential (i.e. an individual's creative capacity, skills and abilities) as well as practiced creativity (i.e. the amount of creativity skills and abilities people get to use on the job). Training can provide employees with guidance on how to generate novel ideas as a part of what they do and enhance individual creative thinking skills and problem solving ability (Shalley & Gibson, 2004).

Creativity is something that can be exhibited and performed by individuals as well as by groups or teams (Gilson, Shalley & Ruddy, 2005). Examining individual differences is only a starting point in the study of creativity. A richer understanding of creativity must also consider motivational factors and environmental elements surrounding individuals at work as they relate to creativity. Although this research is concerned with individual creativity, the broader challenge is to understand how to foster creativity amongst employees. It is hoped that by including creativity as a construct in this research, more information can be garnered to enhance productivity, innovation and engagement in the workplace.

2.4. DEMOGRAPHIC VARIABLES

South Africa is one of the most diverse countries in the world (Cilliers & Stone, 2005), and diversity has become an important area of research for Industrial Psychology in South Africa (Rothmann & Cilliers, 2007). Arnold and Randall (2010) highlighted various changes in the world of work that impact on research, including: ageing working populations; increasing market participation and equality for historically disadvantaged groups; slow increases in women's participation in traditionally male-dominated, high status work and the growth of low-skill service sector jobs. It is, therefore, imperative to include the study of demographics in Industrial Psychology research.

2.4.1. Historical development of demographics in South Africa

In examining demographic variables, it is important to review the history of South Africa, which has experienced a number of key events impacting on the workforce of today. According to Claassen (1995), the use of psychological measures in South Africa cannot be viewed separately from the country's political, economic and social history.

Due to its abundance of natural resources, South Africa was colonised in the nineteenth century by the British and the Dutch. Apartheid was conceived in the 1940s by the Afrikaner National Party to ensure control over economic and social systems (Thomas & Bendixen, 2000). These laws institutionalised racial discrimination through prohibiting marriage between non-whites and whites, and sanctioning "white-only" jobs. South Africans were grouped into three racial categories namely White, Black (African) or Coloured (mixed descent) according to the Population Registration Act (1950). Blacks were required to carry pass books that contained their fingerprints, a photo and information on access to non-black areas.

The Bantu Authorities Act (1951) created African reserves known as homelands that operated as independent states. All political rights of Africans could only be exercised within the homelands, thereby excluding them from providing input into the South African parliament. The Public Safety Act and Criminal Law Amendment Acts (1953) allowed government to declare states of emergency as well as institute penalties such as fines, imprisonment and whippings against those protesting against the laws of the country. Gender discrimination

was also evident during apartheid South Africa, with only six white women occupying parliamentary positions during this time (Booyesen, 2007). Table 4 reflects some demographic statistics from this time.

Table 2.3

Selected SA demographic statistics (1970s)

	Africans/Blacks	Whites
Population	19 Million	4.5 million
Land Allocation	14%	86%
Share of National Income	<20%	75%
Ratio of average earnings	1	14
Minimum taxable income	R360	R750
Annual expenditure on education per pupil	\$45	\$696
Teacher/pupil ratio	1/60	1/22

Source of data: Leonard, 1980

The developments of psychological assessment reflected the racially segregated society in which it evolved (Foxcroft & Roodt, 2005). According to Meiring (2007), the period 1920-1960 was characterised by a focus on standardising measures for whites only; a misuse of measures through administration of measures standardised for one group to another without consideration of bias and appropriateness; and a misuse of test results to reach conclusions about differences between groups without consideration of the impact of cultural, socio-economic, environmental and educational factors on test performance. After 1960, the focus of assessment was on the educability and trainability of black people for selection and placement within semi-skilled positions (Bedell, van Eeden & Van Staden, 1999). Between 1980 and 1994, industry and education authorities began to demand tests that were free of discrimination (Claassen, 1995).

Apartheid was abolished in 1994 with the first democratic elections, which saw the black majority gain political power. A new law required a 30% quota of women in parliament and Affirmative Action Measures were introduced to redress unfair discrimination in the

workplace (Perumal, 2008). Other relevant laws include the Labour Relations Act of 1995, the Constitution of South Africa of 1996, The Basic Conditions of Employment Act of 1997, the Employment Equity Act of 1999, the Skills Development Act of 1998 and the Skills Development Levies Act of 1999. These laws forbid discriminatory practices in the workplace and ensured that only measures that were scientifically valid and reliable, fair to all employees and not biased against any employee or group, were used.

In the past, management power resided predominantly with white males. Between 2000 and 2006, however, African top management increased by 5.1%, whilst those in senior management positions increased by 4.7%. Women in top management increased by 9.2%, whilst those in senior management positions increased by 6.4% (Perumal, 2008). Political and societal changes also influenced the era in which individuals were raised (Perumal, 2008), resulting in a more pronounced generation gap (McNally, 2007). South Africa's history has, therefore, had a significant impact on demographics within the workplace in terms of gender, ethnic groups, work level and ages of employees.

2.4.2. Conceptualisation of demographics

Demography or demographic variables were defined by Neale (1996, p. 301) as “varying characteristics that are vital or social statistics of an individual, sample group or population”, for example, age, gender, race or education. The term diversity is also relevant in this regard as diversity was defined by Cilliers and May (2012, p. 3) as “the presence of people in one social system, being similar and different at the same time, with subjective identities based on their unique conscious and unconscious dimensions”. This includes demographic variables such as gender, race, ethnic group, tenure, length of total work experience and age.

In further conceptualising demographics, it is necessary to define the current demographic profile of South Africa. The South African population totals nearly 54 million and has a very complex composition (SSA, 2014). The sector relevant to this study is the *financial intermediation, insurance, real estate and business services industry* that provides employment to 22.2% of individuals employed within the non-agricultural formal sector (SSA, 2014). In this study, six demographic dimensions, including gender, ethnic group, work level, tenure, length of total work experience and age will be included.

In terms of gender, just over 51% (27.64 million) of the South African population is female (StatsSA, 2014). Gender discrimination has been reported to exist in South African

workplaces (Bowen, Cattell, Distiller & Michell, 2007). The South African government has passed various policies and legislation to promote gender equity (Mafunisa, 2006).

With regard to ethnic groups, the South African population comprises four racial groups, each with sub-groups. No part of the country is racially homogenous and each region varies with regard to racial composition (Perumal, 2008). The racial mix in South Africa continues to exert a major influence on all aspects of life, business, social and political spheres (Abedian, 2002). Black Africans, at 80% of the population, constitute the majority (43.33 million). The Coloured population is estimated at 4,77 million, followed by the White population at 4, 55 million and the Indian population at 1,34 million.

The quarterly labour force survey (StatSA, 2014) shows that in the first quarter of 2014, 25% of South African workers occupy skilled occupations (i.e. managers, professionals and technicians), which is an increase from 21% in 1994. A higher percentage (46%) are still employed in semi-skilled occupations (e.g., clerks, craft and related trades) in 2014; which is a slight decrease from 47% in 1994. The proportion of skilled workers within all race groups has increased since 1994, particularly amongst white and Indian/Asian populations where the proportion of skilled workers increased from 42% in 1994 to 61% in 2014 among the White workforce and an increase from 25% to 51% among the Indian/Asian workforce. Black African workers occupying skilled jobs only increased from 15% to 18%. The proportion of semi-skilled workers within the white workforce decreased from 55% in 1994 to 36% in 2014. Black workers in semi-skilled occupations increased from 42% to 48%.

According to Statistics South Africa (2014), 39.6% of the population are aged 19 years and under. A total of 18.9% are between the ages of 20 and 29; 14.1% between the ages of 30 and 39; 10.9% are between the ages of 40 and 49; 8.1% are between the ages of 50 and 59 with a further 8.1% of the population being aged 60 and older. Participants in this study range between the ages of 19 and 38. The age demographic in this study can be categorised as:

- Generation X (1965-1980) consisting of individuals between 35 and 49 years old. Generation X lived through the end of apartheid and according to Codrington (2004), they are the generation that is known to remember apartheid and to be judged to be part of it, but not old enough to have fought against it. Yu et al. (2005) considered this generation to be more independent, self-motivated and self-sufficient with a high need for autonomy and flexibility in their jobs.

- Generation Y (1981-1999) consisting of individuals aged between 15 and 33 years old (McNally, 2007). This generation was born into the technology age and are thought of as the “born frees” in South Africa (Perumal, 2008). They value a challenging environment, see greater responsibility as a highly attractive option for reward and are motivated by corporate social responsibility shown by their employers (Perumal, 2008).

2.4.3. Relevant Theory

Social identity theory (Tajfel, 1979) is relevant to this research and states that social identity is an individual’s sense of who they are, based on their group membership. Tajfel (1979) suggested that we divide the world according to the labels of “them” and “us”, based on a process of social categorisation. Individuals strive towards maintaining a positive social identity through self-categorisation. The groups that individuals belong to influences their pride and self-esteem (Tajfel & Turner, 1986).

Demographic variables are an important constituent of social identity as social identity leads to the development of gender, racial and cultural identity through socialisation and internalisation (Korostelina, 2007). Social identity represents the “location of a person in social space” (Gecas, Thomas & Weigart, 1973, p. 253), with identity consisting of personal components, i.e. personality and intellectual factors, and social components, which consists of demographic variables such as age, race, gender and education. Finn and Chattopadhyay (2000) used social identity to examine whether demographic dissimilarity influences the self-esteem, interpersonal dynamics and behaviours and employee emotions and behaviours of group members.

Turner and Giles (1981) stated that social identity consists of both an individual’s knowledge of belonging to a social group, as well as the emotional significance of that knowledge. Individuals seek to ensure that their social identity is both positive and beneficial to them (Abdul, 2006). Social identity theory refers to the way that individuals categorise their world and that individuals choose to associate themselves with something or someone (Jenkins, 2003). The sense of ‘identity’ of Black and minority groups in South Africa strongly influences their attitudes and behaviours (Soudien, 2002). This theory is, therefore, concerned with the way in which individuals attach value to the cognitive categories they have established and how these affect their behaviour socially and professionally.

2.4.4. Rationale for studying demographics

Demographic characteristics are examined in this study to gain understanding of what contributes to higher levels of EI in employees, better WE and greater creativity. No clear conclusions can be drawn in available research regarding the relationship between differences in demographic variables and the other variables.

Previous research regarding the relationship between gender and EI have been limited (Pillay, Viviers & Mayer, 2013). However, men seem to have higher WE than women (Schaufeli & Bakker, 2003). This cannot be assumed automatically to be linked to gender, as it could also be linked the lower resource availability to women, lower pay levels and lower levels of jobs. Mixed results are reported in terms of gender and creativity (Baer & Kaufman, 2008). Conflicting results are also found in terms of ethnic differences and EI (Roberts, Zeidner & Matthews, 2001), with distinct cultural differences being found on WE (Mostert & Rothmann, 2006) and creativity (Rudowicz, 2003).

EI has been found to be increasingly relevant for success as individuals ascend the organisational hierarchy (Pillay, Viviers & Mayer, 2013), with WE increasing as job level increased (Schaufeli & Bakker, 2003). No research was, however, found on the relationship between job level and creativity. A slight, but significant increase in EI is linked with age (Van Rooy, Alonso & Viswesvaran, 2005). Studies measuring the relationship between age and WE (Barkhuizen & Rothmann, 2006; Mostert & Rothmann, 2006; Schaufeli, Bakker & Salanova, 2006) as well as age and creativity show conflicting findings (Charyton, Hutchison, Snow, Rahman & Elliott, 2009; Pamiero, Di Giacomo & Passafiume, 2014).

Investigating the relationship between demographic variables and other variables is especially relevant in South Africa because of its socio-economic and political history. Employment equity and affirmative action mechanisms have ensured equal opportunities for women and Black people in the workplace. The effects of segregation and intolerance are, however, still evident (Dixon & Durrheim, 2003). A large number of South Africans have had restricted access to education (Dias & Posel, 2007) and workplace opportunities. This may have affected how individuals perform and experience the workplace.

Mostert and Oldfield (2009) found significant differences in the work-home interaction amongst different demographic groups according to age, gender, ethnicity and language. In

line with social identity theory, individuals who belong to certain social groups are viewed as possessing certain traits (Abdul, 2008). By including demographics in this study, it will be easier to determine whether certain traits that may be associated with demographic groups are in fact true, particularly in relation to EI, WE and creativity. Awareness of demographic differences and the resulting diversity dynamics improves workplace performance and relationships (Cañas & Sondak, 2010). Demographic shifts in the working population in South Africa have made it imperative to study how workforce composition affects employee behaviour/outcomes. Demographic variables have a strong explanatory power in explaining workplace behaviour.

2.5. INTEGRATION

This section examines the relationship in literature between EI and WE, EI and creativity, EI and demographic variables. It then continues to examine the relationship between WE and creativity, WE and demographics and lastly creativity and demographics.

2.5.1. Emotional intelligence and work engagement

Research has found that EI is related to concepts similar to engagement such as personal satisfaction (Abraham, 2000; Martinez-Pons, 2000), work attitudes, behaviour and outcomes (Carmeli, 2003), self-esteem (Schutte, Malouff, Simunek, Hollander & McKenley, 2002) and job satisfaction (Sy et al., 2006). Jonker and Joubert (2009) suggested that due to the strong relationship between EI and several psychological well-being components, there is potential with regard to EI predicting engagement in the workplace.

EI involves an awareness and regulation component, which is important in maintaining positive emotional states (Herman, 2012). Carson and Carson (1998) found EI to be related positively to important employment experiences and individuals' emotional attachment to their current careers and jobs. Moreover, Inceoglu and Warr (2011) found that engaged individuals were more likely to be emotionally stable, socially proactive and achievement oriented. Lamberti's (2010) research identified engagement and EI as two of six drivers of organisational energy.

In the past, the majority of WE research has focused on external factors, including antecedents to WE, and minimal research has been conducted on internal factors, such as EI

and WE. Bakker, Hakanen, Demerouti and Xanthopoulou (2007) found that job resources reduced the effects of job demands on WE. Bakker, Schaufeli, Leiter, and Taris (2008) posed that engagement not only stems from job resources, but from personal resources as well. Engaged employees often experience positive emotions (Bakker & Demerouti, 2008). This indicates that having personal resources such as EI protects levels of WE from diminishing.

According to the broaden-and-build theory of positive emotions (Fredrickson, 2001) positive emotions, including joy, interest and contentment, all share the capacity to broaden people's momentary thought-action repertoires and build their personal resources (ranging from physical and intellectual resources to social and psychological ones). Employees need to manage their emotional state to maintain a high level of WE (Frederickson, 2001). According to the COR theory of Hobfoll (2001), personality traits such as trait EI can be used as personal resources to improve job related outcomes. Gibbons (2006) defined employee engagement as a heightened emotional and intellectual connection that an employee has for their job, organisation, manager or co-workers, which influences the employees to apply additional discretionary effort to their work. May et al. (2004) argued that emotional experiences are related to engagement.

Kahn (1990) suggested psychological differences among individuals may influence their ability to engage in their work. Kahn (1990) also highlighted the importance of creating an environment where interpersonal relationships and managerial style create a supportive atmosphere to establish WE. Interpersonal relationships are a key component of EI. Sociability in particular is one of the characteristics of trait EI. Khuong and Yen (2014) reported that employees with higher sociability were also more engaged with their jobs. In addition, they found sociability predicted employee job engagement. As EI provides the basis for interactions with the environment, it is safe to assume that EI will affect how individuals engage with their work.

Research conducted by consulting firm Towers Perrin (2003, 2007) suggested that emotions and rationality are key elements of engagement that influence an individual's level of satisfaction, accomplishment and inspiration to do good work. Ravichandran, Arasu and Kumar (2011) found a significant linear relationship between overall EI and overall WE behaviour. They did, however, find that EI alone would not predict WE.

In his study, Herman (2012) correlated total EI with the sub-dimensions and found no stable consistent associations. Thor (2012) found a moderate relationship between EI and WE, with EI predicting WE. Emotional self-management had the strongest relationship with WE.

De Clercq, Bouckenooghe, Raja and Matsyborska (2013) reported that positive emotions such as optimism, happiness and joy are associated with high levels of WE and are more frequently experienced by emotionally intelligent individuals. Jackson (2014) reported that WE significantly predicts trait EI, with trait EI acting as a partial mediator of the relationship between WE and performance.

2.5.2. Emotional intelligence and creativity

Among the many variables that have been shown to predict creativity, emotion has been most extensively researched (De Dreu, Baas & Nijstad, 2008; Isen & Baron, 1991; Mumford, 2003). Averill (1999) conducted research connecting emotions to creativity and coined the term “emotional creativity”, which is “expressing oneself (authenticity) in new and unique ways (novelty), such that one’s personal horizons are expanded and interpersonal relationships enhanced (effectiveness). Emotions can be considered as working in two directions with regard to creativity, whereby they move a person either toward or away from creativity (Averill, 2000). Akinboye (2003) was of the opinion that creativity is tied to emotions, with emotions providing power and making it challenging.

Fredrickson’s (2001) broaden-and-build theory suggested that positive emotions serve to broaden an individual’s thought-action repertoires, widen the array of thoughts and actions available to an individual, and strengthen psychological resilience. Emotions occur as a response to survival issues (Forgas, 2013). Therefore, emotions should influence creativity through effects on cognitive flexibility or persistence (George & Zhou, 2002; Isen & Baron, 1991). How we manage those emotions should then impact on our creative outputs. Goleman (1998) postulated that people possessing EI skills were able to remain calm, thus clearing their minds quickly, which would allow for insight, intuitive and creative ideas. Salovey and Mayer (1990) believed that EI allows an individual to use emotion properly to enhance thinking, problem-solving and adaptability to life, supporting, creative thinking, focus transfer and motivation.

Lubart and Getz (1997) asserted that creativity depends on individual perception as well as a combination of personal traits. Motivation, social environment, awareness, emotion, and affection are potentially critical variables (Lubart & Getz, 1997). Trait EI includes factors such as self-control (regulating your emotions), emotion regulation (controlling your internal states) and happiness (pleasant emotional states). Trait EI, therefore, is related greatly to mood.

Individuals in a good mood seem to perform better on creative problem solving with more original word associations (Isen et al.; 1987) than people in a negative or neutral mood state. Positive moods increase awareness and enhance breadth and flexibility of thinking (Ivcevic, Brackett & Mayer, 2007). Positive moods promote cognitive flexibility and thus ideation and creative performance (Isen & Baron, 1991). However, despite the notion that positive affect enhances creative performance, a recent critical review demonstrated that negative affect may also be beneficial to cognition, judgements, motivation and social behaviour (Forgas, 2013). Creative accomplishment in the arts has been found to be related to affective disorders (mood disorders). A total of 38% to 43% of artists have been found to present with affective disorders, compared to only 2 – 8% of the general population (Andreasen, 1987; Jamison, 1989).

Guastello, Guastello and Hanson (2004) studied the relationship between creativity, mood disorders and EI and reported that individuals who are more emotionally intelligent, produce greater quantities of creative work. They also reported that EI acts as a counterweight for the possible debilitating effect of mood disorders on creativity, with EI facilitating the channelling of emotional state into a cognitive process and resulting in productive ideas. Olatoye, Akintunde and Yakasai (2010) found a direct positive relationship between EI and creativity.

Through recognising the importance of emotion in buyer-seller interaction, Lassk and Shepherd (2013) reported a positive relationship between creativity and EI in the sales position. Tsai and Lee (2014) reported significant relationships between EI and creativity for travel agents. They maintained that employees who are able to understand and control their emotional state as well as recognise others' emotions, can more easily enhance their creativity. Akhtar, Boustani, Tsivrikos and Chamorro-Premuzic (2015) found that trait EI in

workers working within education, technology and health, predicts engagement even after they control for the variance of personality factors and age.

2.5.3. Emotional intelligence and demographic variables

Research on gender differences in EI finds that in terms of overall EI, men and women do not really differ (Pugh, 2002). Mandell and Pherwani (2003) supported this finding, stating that gender differences in EQ are limited and inconclusive. There is, however, evidence that women and men may differ on specific competencies (Singh, 2004). Women seem to score significantly higher than men on empathy, interpersonal relationships and social responsibility, while men score higher than women on self-actualisation, assertiveness, stress tolerance, impulse control and adaptability (Singh & Singh, 2004). Mandell and Pherwani (2003), however, found a significant difference between male and female managers, where the mean score of females is higher than that of males.

Van Rooy et al. (2005) suggested that a significant relationship exists between ethnicity and EI, as minority groups score higher on general EI scores. In terms of culture, Triandis (1994) found that collectivist cultures (cultures with greater emotional dependence on one another) are more likely than individualist cultures (cultures where autonomy over action is afforded to the individual) to empathise with others and are more likely to restrain their emotional display so as not to impose on others within the group. Hewitt (2002) maintained that racial culture provides alternative goals and vocabularies for experiencing mood and emotion. Russell (1994) found a significant difference in emotional expression among respondents of a cross-cultural study.

Besides professional competence, EI is of crucial importance on higher levels of management. EI in organisational leaders has been studied extensively to identify and enhance leadership traits. Managers in organisations need to deal with various complexities, threats, stress and high competition (Singh & Srivastava, 2012). Nikić, Travica and Mitrović (2014) studied the difference in EI between individuals at different work levels. They reported that owners, top managers and middle-range managers have higher EI scores in relation to employees, with top managers and owners displaying EI characteristics more intensively than middle-level managers.

Tenure, length of total work experience and age are assumed to be correlated, as one's experience and often tenure generally increases with age. Roy and Chaturvedi (2011) found that people with more maturity and more experience in a job can perceive and understand their own and the emotions of others more effectively. Singh (2001) suggested that maturity and experience describe the process of becoming more intelligent about one's emotions and relationships. Sen and Bhattacharya (2001) also found individuals with more experience to be more capable of coping with change, more likely to encourage innovation and creativity and more able to understand the emotional impact of change on themselves and others.

Research has demonstrated that there is a slight, but significant increase of EI with age (Van Rooy, Alonso & Viswesvaran, 2005). Fariselli, Massimiliano and Freedman (2008) theorised that as people grow older, they have more opportunity to learn about emotions and the gradations of emotions, increase emotional vocabulary, and experience more varied life situations. Individual differences in emotional experience and regulation may change over time as a function of maturation, changing goals and experiences (Eisenberg, Fabes, Guthrie & Reiser, 2000). Research suggests that while frequency and intensity of emotions may decrease (Diener, Sandvik & Larsen, 1985), emotion regulation and control increases with age (Lawton, Kleban, Rajagopal & Dean, 1992). Magai, Condesine, Krivoshekova, Kudadje-Gyamfi and McPherson (2006) conducted a study in which they found that older adults were better able to control sad and angry emotions than younger adults.

Older adults are also better than younger people at regulating their reactions during interpersonal interactions (Birditt & Fingerman, 2005; Birditt, Fingerman, & Almeida, 2005). Older adults seem to be better at using effective emotion-based problem-solving strategies (Blanchard-Fields, Stein, & Watson, 2004; Watson & Blanchard-Fields, 1998) and when older adults experience negative emotions, they are able to recover at a faster rate (Carstensen, Pasupathi, Mayr, & Nesselrode, 2000). Singh and Srivastava (2012) found in their study that individuals up to 30 years of age and between the ages of 50 and 60 years score highest in EI, particularly on self-awareness, self-regulation and social competence while those above 60 years score lowest in EI. Furthermore, individuals within the 40-50 year age group score also higher than those in the 30 to 40 age group.

2.5.4. Work engagement and creativity

Carmeli and Schaubroeck (2007) maintained that despite the outcomes of the creative process being studied often (Amabile, 1988; Oldham & Cummings, 1996; Tierney, Farmer & Graen; 1999), one of the key questions in creativity research relates to individuals' motivation to become and remain creatively engaged at work. Amabile (1997) maintained that all people are capable of creative performance, providing three conditions are met: expertise, creative thinking and intrinsic task motivation. To be intrinsically motivated, a person would need to be engaged, thus using their skills and expertise in order to perform creatively. Engaged employees are open to new experiences and are motivated to invest all the effort needed to realise excellent performance (Demerouti & Cropanzano, 2010).

WE has been shown in research to be an important antecedent to innovativeness (Huhtala & Parzefall, 2007; Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009). Engaged workers are described to be more creative, more productive and more willing to go the extra mile (Bhatnagar, 2012). The term creative work involvement may be relevant to this study. Creative work involvement is an employee's engagement in creative processes associated with work (Carmeli & Schaubroeck, 2007). Individuals, who spend time and effort on creative processes associated with work, are more likely to behave in a creative manner (Kark & Carmeli, 2009).

Literature suggests that both constructs are necessary for work performance. Not much research is available on the relationship between WE and creativity, highlighting the importance of further investigating the empirical relationship between the constructs. The following evidence of a relationship exists:

- Bakker and Xanthopoulou (2013) made use of the JD-R model (Bakker & Demerouti, 2008) to investigate the role of resources and WE on creativity and charisma. They found job resources to be related positively to creative performance and quality leadership through personal resources and WE. They also reported a positive relationship between WE and creative task performance, which they ascribed to both ability and motivation to excel.

- Chang, Hsu, Liou & Tsai (2013) found that WE fully mediated the negative relationship between transactional contracts and innovative behaviour as well as the positive relationship between relational contracts and innovative behaviour.

2.5.5. Work engagement and demographic variables

Researchers have explored the influence of certain demographic variables on the process of WE, and in particular, the variables of age and gender have often been linked to WE (Bezuidenhout & Cilliers, 2011; Burke & El-Kot, 2010; Schaufeli & Bakker, 2003). The Age and Generations Study conducted at Boston College, provided a list of the overall drivers of employee engagement; that is, characteristics of employees associated with higher levels of engagement. The first and most important driver was identified as age (being older) and the second as gender (being female) (Pitt-Catsouphes & Matz-Costa, 2009), which is in contrast with findings of Schaufeli and Bakker (2003).

Schaufeli, Bakker and Salanova (2006) suggested that WE tends to be slightly higher among older workers, but these differences are small. However, no statistically significant differences are found in the WE of academics of different age groups (Barkhuizen & Rothmann, 2006). In a study by Mostert and Rothmann (2006), significant differences were found between age groups relating to WE. Younger police members experienced lower levels of engagement than older individuals. Pitt-Catsouphes and Matz-Costa (2008) found that employees 45 and older are more engaged with their work, provided they have the flexibility they need in their jobs.

In terms of gender, men seem to be more engaged in their work than women (Schaufeli & Bakker, 2003) as they score significantly higher than women on all the dimensions of engagement: vigour, dedication and absorption. Mostert and Rothmann (2006) found that gender differences also impact on WE, with women having less access to resources to protect themselves from the effects of stress. Burke and El-Kot (2010) conducted a study among managers and professionals in Egypt and found that men and single employees report higher levels of WE. Karlsson and Archer (2007), however, found higher levels of vigour among females than males.

Jones and Harter (2005) found that at low levels of WE, members of different racial groups report a lower tendency to remain with the organisation than members of the same racial

group. Mostert and Rothmann (2006) found that ethnic group also seems to impact on the effect of WE, with Black people reporting lower levels of well-being and engagement than White people. This may be due to individuals from different cultures being motivated at different levels (Bakker, 2011), with some preferring skills variety and autonomy and others preferring social support.

In examining the impact of work levels on WE, Schaufeli and Bakker (2003) found the highest scores amongst managers, farmers and white collar workers. The lower scores were found amongst homecare staff, physicians and blue collar workers. Halbesleben and Wheeler (2008) found that employees with more years of service have had more time to accumulate the necessary resources, such as energy and dedication to their jobs, in order to remain engaged. De Lange, De Witte and Notelaers (2008), however, reported that employees with longer tenure would – at some point – show decreased levels of WE.

2.5.6. Creativity and demographic variables

Some studies have found divergent thinking to decline in middle age or thereafter (Guilford, 1967; Reese, Lee, Cohen, & Puckett, 2001). Jaquish and Ripple (1984) also found age-related declines of divergent thinking in terms of flexibility and fluency, but not in terms of the quality of responses (originality). Foos and Boone (2008) found, however, that older adults can think as divergently as younger adults, although at a slower rate. Palmiero, Di Giacomo and Passafiume (2014) used the Torrance Test of Creative Thinking (TTCT) to compare younger and older participants. They found no difference in terms of verbal divergent thinking, with younger participants only producing more ideas than older participants in the visual form. Charyton, Hutchison, Snow, Rahman and Elliott (2009) found that age predicted creative personality, with younger individuals displaying more creative personality characteristics.

In terms of gender, Baer and Kaufman (2008) reviewed divergent thinking research and found 21 studies reporting no significant gender differences. They found 3 studies where males score higher than females, and 6 in which females score higher than males. Charyton et al. (2009) found males to display higher creative personality characteristics. Gough (1992), however, only found minor differences. One repeated finding was to find females scoring

higher on verbal and males scoring higher on figural creativity, using the Torrance tests (DeMoss, Milich, & DeMers, 1993; Fichnova, 2002).

The socio-cultural environment has an effect on creative expression, which stems from the fact that culture not only influences what is expressed, by whom it is expressed and how it is expressed, but also determines what function this expression serves and what its consequences are for an individual and society (Ludwig, 1992). Cultural and socio-historical contexts influence both the conceptualisation of creativity and people's attitudes towards the value and utility of creative endeavours (Rudowicz, 2003). Torrance (1971, 1973) found that African American individuals score higher on the TTCT than European American children on the figural tests in fluency, flexibility and originality; European Americans score higher on figural elaboration and all verbal subtests. American college students score higher on the TTCT than Japanese college students in one study (Saeki, Fan, & Van Dusen, 2001).

No research was found regarding the relationship between work level and creativity. However, having depth and breadth of knowledge has been linked to individual creativity with research widely accepting that one must have a sufficient understanding of the current situation before one can improve it (Amabile, 1987; Amabile, 1988; Patterson et al., 2009; Simonton, 2000; Woodman et al., 1993). It is assumed that knowledge increases with tenure and length of total work experience. In-depth knowledge of the domain or problem space enables the expert to identify and frame new problems or old problems in new ways. It also enables individuals to focus their attention on novelty, as opposed to working to comprehend the existing knowledge in the domain (Weisberg, 1999).

Expertise can also lead to the development of heuristics, which allow the individual to represent complex information or ideas in a short form, thereby allowing for one's attention to be focused towards the goal of novelty (Weisberg, 1999). Domain-specific knowledge reflects an individual's level of education, training, experience and knowledge within a particular context (Gardner, 1993). Amabile stated that expertise is required, but not sufficient to perform creatively, as some individuals may have deep expertise, but fail to perform creatively. Expertise has a positive effect on creativity only up to a point, after which it can result in habitual behaviour, which hinders creativity (Ford, 1996; Muñoz-Doyague et al., 2008).

2.5.7. The relationship between emotional intelligence, work engagement and creativity and demographic variables

No research was found investigating the relationship between EI, WE, creativity and demographic variables. Carmeli, McKay and Kaufman (2013) did, however, report a sequential mediation model where EI is positively related to generosity and vigour, which are in turn positively associated with creativity. As mentioned in previous sections, all three constructs impact on work and organisational performance.

In positioning the four constructs, it is important again to review the JD-R model as a predictor of WE. Xanthopoulou, Bakker, Demerouti and Schaufeli (2007) further extended the JD-R model to include personal resources. Personal resources are found partly to mediate the relationship between job resources and WE, suggesting that job resources foster the development of personal resources. According to Hobfoll (2001), personality traits can be considered as personal resources to improve job related outcomes. Both EI personality traits and creative personality traits can be considered to be personal resources, thus sustaining WE. In addition, demographic variables can also be considered as personal resources.

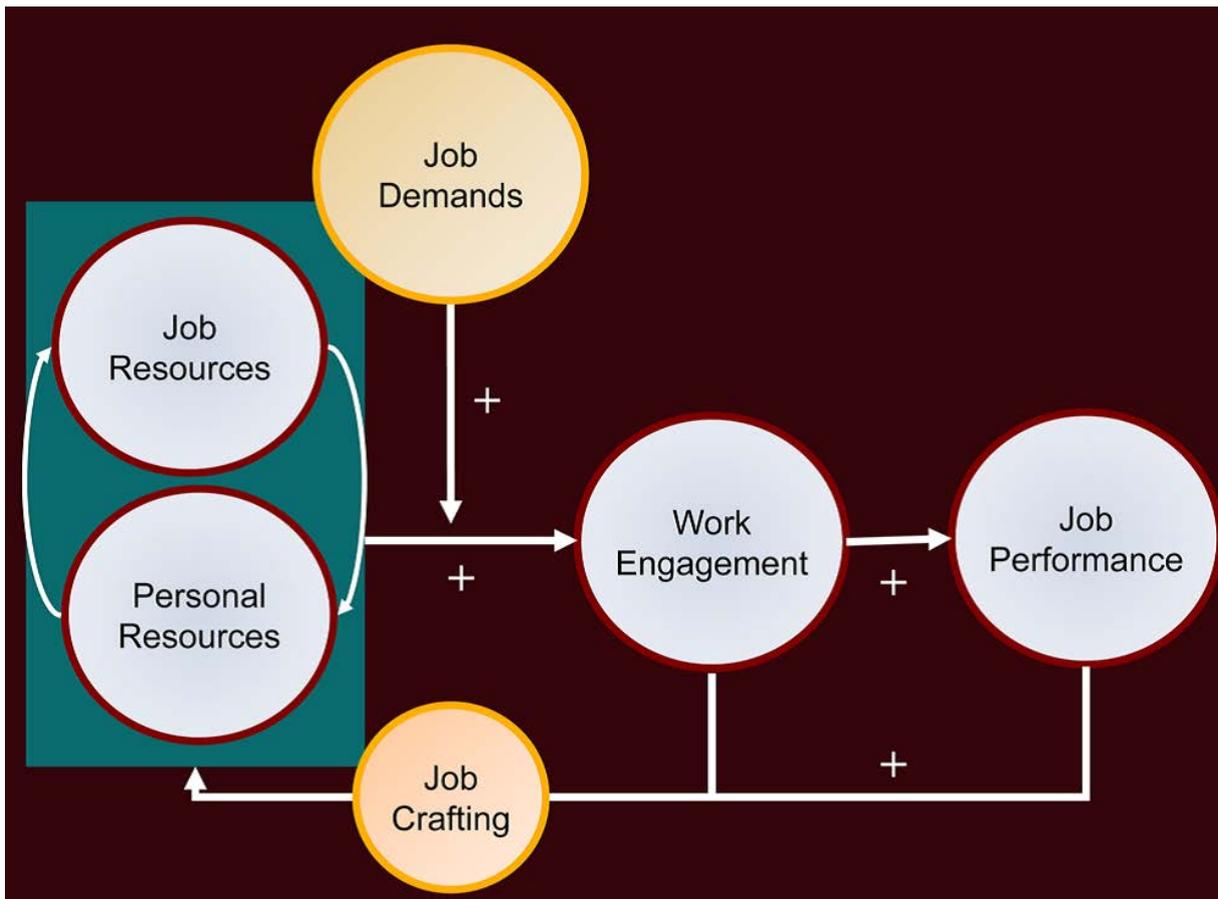


Figure 2: JD-R Model. This figure illustrates the evidence-based model of WE as presented by Bakker (2011).

Furthermore, according to the broaden-and-build theory of positive emotions (Fredrickson, 2001), positive emotions share the capacity to broaden people's momentary thought-action repertoires and build their personal resources (ranging from physical and intellectual resources to social and psychological). Emotions should, therefore, influence creativity through effects on cognitive flexibility or persistence (George & Zhou, 2002; Isen & Baron, 1991) as well as WE, as employees need to manage their emotional state (Frederickson, 2001).

The manner in which individuals respond to and interact with the environment is guided by EI. Hence, it would be viable to determine the extent to which EQ could influence how creativity is exhibited and WE is experienced while at the same time considering demographic variables.

2.6. CHAPTER SUMMARY

Chapter 2 was comprised of a literature review of the constructs of EI, WE, creativity and demographics. This included historical development, conceptualisation, relevant theory and the rationale for studying each of the constructs. This was then followed by examining the relationships between constructs in literature.

CHAPTER 3

RESEARCH ARTICLE

THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE, WORK ENGAGEMENT, CREATIVITY AND DEMOGRAPHIC VARIABLES

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ABSTRACT

Orientation: Organisations are constantly pursuing means of enhancing their competitive advantage through enhancement of its human capital. Some of the most important constructs in this scenario are employees' EI, levels of WE and creative personality traits and how this relates to their demographic characteristics.

Research Purpose: The purpose of this study was to investigate the relationship between EI, WE, creativity and demographic variables.

Motivation for the study: Although the above four variables have been linked individually to employee and organisational performance, the relationship between all four have not been researched amongst call centre employees.

Research design, approach and method: A non-experimental and cross-sectional survey design was used, on a population of 180 employees. Descriptive and inferential statistics were calculated.

Main Findings: EI showed a significant relationship with WE, but not with creativity. WE showed a weak relationship with creativity. Related to the three behavioural constructs, significant differences in gender, ethnic group, work level, tenure, length of total work experience and age were found.

Practical/managerial implications: During the recruitment and development of employees, managers and industrial psychologists need to take note of how their EI, WE and creativity are related to their demographical characteristics.

Contributions/value-added: The findings add new knowledge to the existing literature on the important relationships between the three behavioural constructs as well as how that manifests in demographic characteristics. Future deductions about the relationship with work performance can be hypothesised.

Keywords: EI, WE, creative personality, demographics

INTRODUCTION

Coetzee (2013) stated that the modern global knowledge economy demands employees to illustrate new combinations of competencies. These include high levels of technical and social skills, as well as innovative ways to solve complex problems. South African organisations also face skills shortages and costly staff turnover, making it imperative to focus intensely on human capability (Appleby & Mavin, 2000). Especially service organisations face the dual imperative of cost minimisation and customer-focused service quality (Korczynski, 2002). This research focuses on call centres where employees are required additionally to adapt to fast-changing circumstances, to anticipate and deal effectively with customer complaints (De Waal, 2004).

Call centres have shown tremendous growth in South Africa, from 50 000 employees in 2005 to 180 000 in 2010 (Thomas, 2010), with a further 18% year-on-year growth between 2010 and 2012 (Vermeulen, 2015). The workforce is mostly young, in their early career stages and with limited years of work experience (Latif, 2010). Call centres are under pressure to recruit employees with competencies such as micro-self-management (Wray-Bliss, 2001), a desire to stay relevant (Doherty, 2010) and to use their competitive advantage to provide superior value or low costs, thus enhancing their dominant position in market share (Voola, Carlson & West, 2004).

This research focuses on call centre employees. Some organisational psychology behavioural constructs have been studied in call centres, especially within positive psychology (see Latif, 2010; Townsend, 2007; Vermeulen, 2015; Workman & Bommer, 2001). From a task analysis in the present organisation, the constructs of EI, engagement and creativity are seen as crucial in the effective performance of its call centre employees, linked to their demographical characteristics. The outcomes are planned to be used for future employee self-development.

Research objective

The objective of this study is to investigate the relationship between EI, WE, creativity and demographic variables in a call centre environment.

Emotional Intelligence

Goleman (1995) launched interest in the subject of EI in the workplace and in relation to work performance. EI can be perceived as either an ability, which involves the cognitive processing of emotional information or as a dispositional tendency similar to personality. Consequently, a lack of consensus exists regarding the definition of EI (Mayer, Caruso & Salovey; 1999). Yet, EI is generally defined as behaviour related to emotional self-awareness and awareness of one's emotional impact on others, as it manifests in emotional perception, regulation, understanding and utilisation (Ciarrochi, Chan & Caputi; 2000).

Trait EI is considered by researchers as part of a mixed model group (Caruso, Mayer, & Salovey, 2002) since the factors evaluated consist of emotional abilities as well as traits that are considered personality components or EI products (Caruso et al., 2002). Although the overlap with personality measures is one of the greatest sources of criticism of this view, it is maintained that the criticism is irrelevant as trait EI is a constellation of emotion-related self-perceptions and dispositions (Conte, 2005, McEnrue & Groves, 2006, Petrides & Furnham, 2006). Trait EI, also referred to as trait emotional self-efficacy, is comprised of emotion-related dispositions and the individual's self-perceived emotional abilities and is measured through self-report. Trait EI combines elements of personality theory such as empathy, impulsivity and assertiveness together with elements of Thorndike's concept of social intelligence and Gardner's concept of personal intelligence (Petrides, Furnham & Frederickson; 2004b).

Townsend (2007) established that call centre employee training focuses largely on technical skills development and product knowledge, but ignores training on the emotional development inherent in this job. This scenario is linked to increased staff turnover. Research shows that developing EI stimulates positive attitudes, behaviours and outcomes (Carmeli, 2003). EI relates with coping styles, life satisfaction, personality disorders, perceived job control and job satisfaction (Petrides et al., 2003). Therefore, employees with high levels of EI will be able to deal with work pressure effectively (Caruso, 1999). They are able to adapt their goals and thinking styles to the requirements of the environment, solve problems

productively (Murphy & Janeke, 2009), and can focus on and address costly organisational problems (Herkenhoff, 2004). They illustrate adaptability in complex social and interpersonal situations (Austin, Saklofske & Egan, 2005) and show a high level of understanding between individuals (Herkenhoff, 2004; Vitello-Cicciu, 2002).

EI increases with age (Van Rooy, Alonso & Viswesvaran, 2005). Women score significantly higher than men on empathy, interpersonal relationships and social responsibility, while men score higher than women on self-actualisation, assertiveness, stress tolerance, impulse control and adaptability (Singh & Singh, 2004). EI relates to ethnicity, with minority groups scoring higher on general EI measures (Van Rooy et al., 2005). Employees on higher job levels display higher EI levels than those on lower levels (Nikić, Travica & Mitrović, 2014). Employees with work experience show higher levels of coping, innovation, creativity, adaptability to change and understand of the emotional impact of change better than those with less experience (Sen & Bhattacharya, 2001).

Work Engagement

Schaufeli, Salanova, Gonzalez-Roma and Bakker (2002) were the first to define engagement as being a separate construct from burnout and posited that the WE dimensional make-up is theoretically dissimilar from and exclusive of burnout. Schaufeli (2004, p. 4) defined WE as a positive, fulfilling, work-related state of mind that is characterised by three dimensions of vigour, dedication and absorption.

Vigour represents an affective state that individuals attribute to their job and workplace when asked about it; they do so spontaneously and experience positive affect across situations and times (Perrewe & Ganster, 2004). Vigorous individuals are willing to invest effort in their work and persistence in the face of difficulties (Schaufeli & Bakker, 2004). Dedication is defined as being deeply involved in one's work and experiencing feelings of significance, enthusiasm, inspiration and challenge (Schaufeli, Baker & Salanova, 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 (Schaufeli et al., 2002). Absorption refers to being content and completely focused on one's work, to the extent that time elapses quickly (Schaufeli et al., 2006). Being fully absorbed is characterised by focused attention, a clear mind and body, effortless

concentration, complete control, loss of self-consciousness, distortion of time and intrinsic enjoyment (Csikszentmihalyi, 1990).

Research has found that WE enhances job performance (Salanova, Agut & Peiro, 2005) and morale (Pannell, 2005), and is linked to employee retention (Schaufeli & Bakker, 2004), lowered absenteeism, turnover and enhanced organisational commitment (Welthagen & Els, 2012). In terms of service organisations, frontline employees with high levels of WE exhibit high levels of quality service delivery and effective complaint handling (Karatepe & Aga, 2012). Employee engagement relates to profitability increase through higher productivity, increased sales, customer satisfaction and employee retention (Bakker & Leiter, 2010).

WE relates positively to the demographic variables of age and gender (Bezuidenhout & Cilliers, 2011; Burke & El-Kot, 2010; Schaufeli & Bakker, 2003). Mostert and Rothmann (2006) found that ethnicity impacts WE, with Black people reporting lower levels of well-being and engagement than White people. In examining the impact of work levels on WE, Schaufeli and Bakker (2003) found the highest scores amongst managers, farmers and white collar workers. The lower scores are found amongst homecare staff, physicians and blue collar workers. Employees with long years of service show a higher level of necessary resources, such as energy and dedication to their jobs than those with less service (Halbesleben & Wheeler, 2008). Workman and Bommer (2004) reported that negative attitudes due to damaging experiences in the call centre environment result in reduced productivity, poor customer service, higher staff turnover and absenteeism and ultimately, an adverse financial impact. An engaged workforce is likely to present with lower withdrawal behaviours such as staff turnover and absence (Borda & Norman, 1997). Engaged employees will display high levels of energy and mental resilience at work, willingness to invest effort, not becoming fatigued easily and persistence in the face of difficulties (Schaufeli & Bakker, 2004).

Creativity

Research on creativity has been published over many years, both in general and organisational settings. Amidst the many varied definitions, Gardner (1993, p. 25) provided a general and widely accepted definition of the creative individual “as a person who regularly solves problems, fashions products or defines new questions in a domain initially in a way that is considered novel, but that ultimately becomes accepted in a particular cultural setting”.

De Waal (2004) found that in a call centre, employees face constant technological changes, shift work and opposition from clients. Creativity in the workplace is defined as the production of new and useful ideas about products, services, processes and procedures that are useful to the organisation (Amabile, Conti, Coon, Lazenby & Herron, 1996). Call centre employees may be equipped better to handle some of the workplace demands if their creativity is enhanced. Creative outputs could include creative solutions to business problems, creative business strategies or creative changes in job processes, instruments and organising structures (Mumford & Gustafson, 1988; Shalley, Zhou & Oldham, 2004).

Three different assessment techniques are available, namely, creativity measures (personality tests, biographical inventories, behavioural assessments), objective analysis of products and subjective judgements. For operational purposes, researchers recommend a multidimensional approach to creativity (Csikszentmihalyi & Getzel, 1988; Feldhusen & Goh, 1995; Gardner, 1993b; Guilford, 1977; MacKinnon, 1978; Simonton, 1988; Sternberg & Lubart, 1996; Torrance, 1965, 1979). Therefore, two approaches have been followed in this study to conceptualise and operationalise creativity – a creative personality scale and a subjective assessment of creative outputs by means of a divergent thinking test. Both measures have been analysed statistically in isolation to determine their correlation with the other constructs and subsequently to determine their correlation with each other.

The creativity measurement stance believes that creative individuals exhibit specific stable personality traits (Barron, 1968, 1969; Eysenck, 1993; Gough, 1979; MacKinnon, 1965) when they work on complex tasks and are supervised by a supportive and non-controlling leader (Oldham & Cummings, 1996).

Divergent thinking is defined as the generation of information from given data, where the emphasis is on unknown, new and novel solutions to problems leading to a variety and large quantity of outputs from the same source (Guilford, 1967). Thus, the individual develops the courage to think in many directions (Dacey & Lennon, 1998). Divergent thinking comprises the abilities of (1) flexibility (generating different types of ideas and the ability to think in a non-traditional way) (Black, 1995); (2) originality (a unique, non-existing and non-conforming thought, plan, solution or action) (Neethling & Rutherford 2001; Davis, 2004); (3) fluency (a continuous idea generating ability and process to produce many verbal and non-verbal ideas,

questions and problems) (Black, 1995); and (4) elaboration (the process of finding associations, adding details, building on and implementing ideas) (Davis, 2004).

Theoretical integration

Research evidence of a relationship between either emotions or EI and WE is evident (De Clercq, Bouckennooghe, Raja & Matsyborska, 2013; Ravichandran, Arasu & Kumar; 2011; Towers Perrin, 2003, 2007). Jackson (2014) found that WE significantly predicted trait EI. A relationship has also been established between EI and creativity (Akhtar, Boustani, Tsvirikos & Chamorro-Premuzic, 2015; Tsai & Lee, 2014). Despite literature suggesting a relationship between WE and creativity, no research was found showing such a relationship.

In terms of demographics, little research exists regarding the relationship between EI and gender. Men, however, seem to be more engaged with their work than women (Schaufeli & Bakker, 2003). Research on gender differences with regard to divergent thinking shows varied results (Baer & Kaufman, 2008). Charyton, Hutchison, Snow, Rahman and Elliott (2009) found males to display higher creative personality characteristics. Conflicting results were found in terms of ethnic differences and EI (Roberts, Zeidner & Matthews, 2001). Cultural differences, reported in terms of WE (Mostert & Rothmann, 2006) and cultural and socio-historical contexts are found to influence both the conceptualisation of creativity as well as people's attitudes towards the value and utility of creative endeavours (Rudowicz, 2003).

In terms of work level, EI seems to be increasingly relevant for success as individuals ascend the organisational hierarchy (Pillay, Viviers & Mayer, 2013). WE increases as job level increased (Schaufeli & Bakker, 2003). No research was found regarding the relationship between work level and creativity. A mild but significant increase in EI occurs with age (Van Rooy, Alonso & Viswesvaran, 2005). Studies measuring the relationship between age and WE (Barkhuizen & Rothmann, 2006; Mostert & Rothmann, 2006; & Schaufeli, Bakker & Salanova, 2006) as well as age and creativity show conflicting results (Charyton, Hutchison, Snow, Rahman & Elliott, 2009; Pamiero, Di Giacomo & Passafiume, 2014). Foos and Boone (2008) found that older adults could think as divergently as younger adults, although at a slower rate. Charyton, Hutchison, Snow, Rahman and Elliott (2009) found that age predicts creative personality, with younger individuals displaying more creative personality characteristics. However, having depth and breadth of knowledge is linked to individual

creativity, with research widely accepting that one must have a sufficient understanding of the current situation before one can improve it (Amabile, 1988; Patterson, Kerrin, & Gatto-Roissard, 2009; Simonton, 2000; Woodman, Sawyer & Griffin; 1993).

The potential value-add of the study

This research is a first to investigate the constructs of EI, WE, creativity and demographic variables in relation to each other in a call centre context. The findings of this study may contribute to the body of knowledge on these constructs and provide towards future employee development.

In the next section, the research design, the research approach and method will be described. The results will then be presented and discussed. The article concludes with a brief synopsis of the most important conclusions, the limitation of the research design, and recommendations for possible future research.

RESEARCH DESIGN

Research approach

The research was conducted by following a quantitative approach (Terre Blanche & Durrheim, 1999). A non-experimental and cross-sectional survey design (Terre Blanche & Durrheim, 1999) was used with one sample being drawn from a specified population. Primary data is used in this study through a self-report online survey compiled from existing instruments. Constructs are measured once at a specific point in time with the primary aim of establishing relationships between variables (Shaughnessy & Zechmeister, 1997).

Research method

Research participants

The population for this study consists of 180 employees working within a call centre division of an insurance organisation in South Africa. A purposive convenience sampling method is used (Terre Blanche & Durrheim, 1999) resulting in a sample of 85, indicating a response rate of 47.2%. This is well above the sample size of 10% as recommended by Curry and Gary (1987), allowing for the generalisation of results to this population.

Table 3.1 describes the sample which consists mostly of males (58.8%), Africans (41.2%), employed as sales advisors (85.9%).

Table 3.1

Gender, Ethnic group and Work Level

Variable	Categories	N	%
Gender	Male	50	58.8%
	Female	35	41.2%
Ethnic group	White	23	27.1%
	African	35	41.1%
	Indian	14	16.5%
	Coloured	13	15.3%
Work level	Advisor	73	85.9%
	Team Manager	8	9.4%
	Manager	4	4.7%

Table 3.2 describes the sample's average tenure within the organisation as 2 years, their length of total work experience as 7 years and age as 28 years.

Table 3.2

Tenure, length of total work experience and age

	N	Mean	Std. Deviation	Minimum	Maximum	Skewness		Kurtosis	
Tenure	85	2.39	2.826	0	11	1.675	.261	1.824	.517
Length of total work experience	85	6.92	4.449	0	17	.519	.261	-.532	.517
Age	85	27.753	4.4692	19.0	38.0	.282	.261	-.636	.517

Measuring Instruments

The Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF) (Petrides & Furnham, 2003) is used to measure EI. The scale includes 30 short statements and responds to a seven-point Likert scale varying from 1 (“Completely Disagree”) to 7 (“Completely Agree”). The questionnaire can be completed in under 10 minutes (Bryman & Bell, 2007). The questionnaire measures the following dimensions: well-being (6): e.g., ‘on the whole,

I'm pleased with my life'; self-control (6): e.g., 'others admire me for being relaxed'; emotionality (8): e.g., 'I often pause and think about my feelings'; and sociability (6): e.g., 'I can deal effectively with people'.

The TEIQue-SFs show construct validity (Cooper & Petrides, 2010) and high test-retest reliability over a three-month period (Macran, Weatherly & Kind, 2003). Cronbach's alpha scores of 0.77 and 0.87 for the total TEIQue-SF score (Wilks, Neto & Mavroveli, 2014) and 0.88 are reported for the global trait EI (Petrides, 2009). The reliability value of 0.822 for the global trait EI found in this study is consistent with those of similar studies (Petrides, 2009).

The Utrecht WE Scale (UWES) (Schaufeli et al., 2002) is used to measure WE and consists of 17 statements, scored on a seven-point frequency rating scale, varying from 0 ("never") to 6 ("always"). The questionnaire takes approximately 10 minutes to complete. The questionnaire measures the following dimensions: vigour (6): e.g., 'I am bursting with energy in my work'; dedication (5): e.g., 'I find my work full of meaning and purpose'; and absorption (6): e.g., 'When I am working, I forget everything else around me'.

The measure shows high levels of internal consistency (Schaufeli et al., 2002) and reliability with Cronbach alpha coefficients of 0.78 for vigour, 0.89 for dedication and 0.78 for absorption (Storm & Rothman, 2003). In this study, Cronbach alpha coefficients of .924 are found for WE, .824 for vigour, .845 for dedication and .758 for absorption.

Gough's creative personality scale (CPS; Gough, 1979) for the Adjective Check List (Gough & Heilbrun, 1965) is administered to measure creativity as a personality trait. This scale consists of 30 adjectives with 18 being indicative of creative individuals, e.g., 'individualistic' and 12 being contraindicative of creative individuals, e.g., 'conventional'. This questionnaire takes approximately 10 minutes to complete.

Encouraging evidence exists regarding the utility and validity of the CPS scale (e.g., Amabile, Hill, Hennessey & Tighe; Batey & Furnham, 2006; Carson, Peterson & Higgins, 2005; Oldham & Cummings, 1996), but no work has explicitly examined whether all 30 adjectives measure in fact the same latent trait. As the creative personality scale consists of one item, a reliability analysis cannot be calculated for this scale in this study.

The Alternative Uses Task (Guilford, 1967) is used to measure divergent thinking. The Alternative Uses Task (Guilford, 1967) consists of three parts, each of which contains three common household items (e.g., a shoe) and space for up to six alternative uses per item. Each part is timed at 4 minutes. Scoring is done by one rater and is comprised of four components: originality, fluency, flexibility and elaboration. This study finds Cronbach alpha coefficients of .915 for overall creative thinking, 0.650 for originality, 0.886 for fluency, 0.855 for flexibility and 0.843 for elaboration.

A demographic questionnaire is used for the measurement of gender, ethnic group (Black, Indian, White, Coloured), work level (advisor, team manager, manager), tenure, length of total work experience and age.

Research Procedure

Permission to perform the research and ethical clearance was obtained from the Human Resources Manager of the organisation and the University's Ethical Research Committee. The survey was uploaded online (Survey gizmo, 2005) to be completed electronically in the workplace. It consists of the following: (1) a covering letter explaining the purpose of the study, providing instructions for completion of the survey and asking for the participants' informed consent before continuing with the survey, information about the ethical considerations and the contact details of the researcher; (2) the four instruments combined into one with a timer function that allows a certain amount of time per question according to the requirements for the Alternative Uses Task as measurement for creativity.

The collected data was stored electronically by the Survey Gizmo administrator and accessed via a code known only to the researcher thereby ensuring authenticity and security of the data. Responses have been scored by the researcher and captured on an electronic worksheet format. Scientific rigour is ensured by focusing on validity and reliability (Terre Blanche, Durrheim & Painter, 2006) through the planning and executing of the research project from the planning, data gathering and analysis. No harm has been brought to the participants and their privacy was not invaded (Terre Blanche, Durrheim & Painter, 2006).

Data analysis

Psychometric data analysis was conducted by means of the SPSS package (Statistical Package for Social Sciences, 2010). A qualified statistician computerised the data and the

researcher cleaned and interpreted the data.

Descriptive statistics was computed to determine the distribution of the data and the degrees to which the variables exist in the sample. Cronbach alpha coefficients were computed to determine the reliability of the measuring instruments (Field, 2009).

Correlations were computed by means of the Spearman's Rank-Order correlation coefficient (Field, 2009). Statistical significance was set at 0.05 and the cut-off point for practical significance 0.10 for a small, 0.30 for a medium and 0.50 for a large effect (Field, 2009). Correlations of medium and large effect were reported. Hypothesis 1 was formulated as follows: A relationship exists between EI, WE, creativity and their dimensions as well as the continuous demographic variables of tenure, length of total work experience and age.

Stepwise multiple regression (Field, 2009) was computed using EI as the independent variable and WE, creative personality and divergent thinking as dependent variables. Hypothesis 2 was formulated as follows: EI predicts WE and creativity.

A univariate analysis of variance (ANOVA) was computed on the categorical variables of gender, ethnic group and work level to test whether three or more means are the same, testing a null hypothesis that all means are equal (Field, 2009). This was to ascertain whether there was a difference between these demographic variables and their scores on all instruments. Hypothesis 3 was formulated as follows: gender, ethnic group and work level groups differ significantly with regard to EI, WE and creativity.

RESULTS

This section reports the results of the study.

Descriptive statistics

Table 3 reports the means and standard deviations for the TEIQue-SF (M=168.41; SD=20.81)

and the dimensions of well-being (M=36.14; SD=4.36), self-control (M=31.08; SD=5.82), emotionality (M=44.02; SD=7.70) and sociability (M= 31.81; SD=32.81); for the UWES-17 (M=4.91; SD=0.86) and the dimensions of vigour (M=5.01; SD=0.88), dedication (M=5.09; SD=0.96) and absorption (M=4.65; SD=0.94); for the CPS (M=4.96; SD=3.10) and the AUT (M=38.94; SD=18.81) and the dimensions of originality (M=5.25; SD=4.96), fluency (M=17.84; SD=8.07), flexibility (M=13.76; SD=6.67) and elaboration (M=2.09; SD=2.79). Because the statistical ranges of $-2 > 2$ for skewness and $-7 > 7$ for kurtosis are acceptable (Field, 2009), the data set has acceptable normality and therefore lends itself to further analysis.

The alpha coefficient for the TEIQue-SF is 0.82 and for the dimensions of well-being, self-control, emotionality and sociability, 0.33, 0.46, 0.61 and 0.54, respectively. The alpha coefficient for the UWES is 0.92 and for the dimensions of vigour, dedication and absorption, 0.82, 0.85 and 0.76, respectively. The Creative Personality Scale consists of one item and a reliability analysis can, therefore, not be calculated for this scale. The alpha coefficient for the Alternative Uses Task is 0.92 and for the dimensions originality, fluency, flexibility and elaboration, 0.65, 0.89, 0.86 and 0.84, respectively.

Acceptable Cronbach's alpha coefficients are reported for the UWES, the AUT (< 0.9) and the TEIQue-SF (< 0.7) indicating reliability. All the dimensions of the TEIQue-SF measures unacceptably low Cronbach's alphas and can, therefore, not be used to identify whether a relationship exists with other factors.

TABLE 3.3

Descriptive statistics and alpha coefficients

Item	N	Mean	SD	Skewness	Kurtosis	α
TEIQue-SF						
Global TEIQue score	85	168.41	20.81	-.23	-.37	.82
Well-being	85	36.14	4.36	-.84	.64	.33
Self-Control	85	31.08	5.82	-.35	-.15	.46
Emotionality	85	44.02	7.70	-.27	-.70	.61
Sociability	85	32.81	5.87	-.52	.23	.54
UWES Total						
Work engagement	85	4.9199	.86	-1.49	2.96	.92
Vigour	85	5.0118	.88	-1.25	1.58	.82
Dedication	85	5.099	.96	-1.88	4.52	.85

Absorption	85	4.6490	.94	-.91	1.10	.76
CREATIVE PERSONALITY SCALE						
Creative Personality	85	4.96	3.10	.34	-.34	
ALTERNATIVE USES TASK						
Overall divergent thinking	85	38.94	18.81	.62	.60	.92
Originality	85	5.25	4.96	1.27	1.35	.65
Fluency	85	17.84	8.07	.19	-.47	.89
Flexibility	85	13.76	6.67	.58	.03	.86
Elaboration	85	2.09	2.79	1.51	1.61	.84

Spearman Rank correlation coefficients

Table 3.4 reports the correlations between the constructs of EI, WE, creativity and the continuous demographic variables of tenure, length of total work experience and age.

The relationship between emotional intelligence, work engagement and creativity

A significant positive correlation is evident between EI and WE ($r_s=.50$, large effect, $p \leq .001$). An insignificant negative correlation is found between EI and divergent thinking ($r_s=-.07$, no effect, $p \geq .05$). A significant correlation is observed between creative personality and EI ($r_s=.18$, small effect, $p \geq .05$). A significant correlation is also found between creative personality and WE ($r_s=.12$, small effect, $p \geq .05$). A positive correlation is found between creative personality and creative thinking ($r_s=.26$, small effect, $p \leq .001$).

The relationship between the emotional intelligence and work engagement dimensions

Significant correlations are observed between EI and WE dimensions: vigour ($r_s=.59$, large effect, $p \leq .001$), dedication ($r_s=.41$, medium effect, $p \leq .001$) and absorption ($r_s=.37$, medium effect, $p \leq .001$). Significant correlations are evident between WE and EI dimensions: well-being ($r_s=.31$, medium effect, $p \leq .001$), self-control ($r_s=.39$, medium effect, $p \leq .01$), emotionality ($r_s=.43$, medium effect, $p \leq .001$) and sociability ($r_s=.43$, medium effect, $p \leq .01$). Significant correlations are found between well-being and WE dimension of vigour ($r_s=.33$, medium effect, $p \leq .001$). Significant correlations are observed between self control and the dimensions of WE: vigour ($r_s=.42$, medium effect, $p \leq .001$), dedication ($r_s=.35$, medium effect, $p \leq .05$) and absorption ($r_s=.32$, medium effect, $p \leq .01$). Significant correlations are evident between emotionality and the dimensions of WE: vigour ($r_s=.48$, medium effect,

$p \leq .001$), dedication ($r_s = .42$, medium effect, $p \leq .001$) and absorption ($r_s = .30$, medium effect, $p \leq .05$). Significant correlations are found between sociability and the dimensions of WE: vigour ($r_s = .54$, large effect, $p \leq .001$), dedication ($r_s = .33$, medium effect, $p \leq .05$) and absorption ($r_s = .32$, medium effect, $p \leq .05$).

The relationship between emotional intelligence dimensions and creative personality

Significant correlations are found between creative personality and EI dimensions: well-being ($r_s = .17$, small effect, $p \geq .05$), self-control ($r_s = .11$, small effect, $p \geq .05$), and sociability ($r_s = .28$, small effect, $p \leq .05$).

The relationship between emotional intelligence and divergent thinking dimensions

Significant negative correlations are found between global EI and the dimension of creative thinking: fluency ($r_s = -.11$, small negative effect, $p \geq .05$). A negative correlation is found between creative thinking and ei dimensions: well-being ($r_s = -.11$, small effect, $p \geq .05$), and emotionality ($r_s = -.13$, small negative effect, $p \geq .05$). Negative correlations are found between the EI and creative thinking dimensions of: originality and emotionality ($r_s = -.10$, small negative effect, $p \geq .05$), fluency and well-being ($r_s = -.18$, small negative effect, $p \geq .05$), fluency and emotionality ($r_s = -.16$, small negative effect, $p \geq .05$), flexibility and emotionality ($r_s = -.12$, small negative effect, $p \geq .05$), elaboration and sociability ($r_s = -.14$, small negative effect, $p \geq .05$).

The relationship between work engagement dimensions and creative personality

Significant correlations are found between creative personality and WE dimension of absorption ($r_s = .19$, small effect, $p \geq .05$). No significant correlation is found between creative personality and vigour ($r_s = .09$, no effect, $p \geq .05$) or dedication ($r_s = .05$, no effect, $p \geq .05$).

The relationship between creative personality and divergent thinking dimensions

Positive correlations are found between creative personality and the creative thinking dimensions of originality ($r_s = .20$, small effect, $p \geq .05$), fluency ($r_s = .15$, small effect, $p \geq .05$) and flexibility ($r_s = .29$, small effect, $p \leq .01$).

The relationship between tenure and emotional intelligence, work engagement and creativity

A positive statistically and practically significant relationship is found between tenure and global EI ($r_s=.14$, small effect, $p \geq .05$), self-control ($r_s=.12$, small effect, $p \geq .05$), sociability ($r_s=.22$, small effect, $p \leq .05$), WE ($r_s=.16$, small effect, $p \geq .05$), vigour ($r_s=.19$, small effect, $p \geq .05$) and absorption ($r_s=.15$, small effect, $p \geq .05$). A significant correlation is evident between tenure and creative thinking ($r_s= .13$, small effect, $p \geq .05$), originality ($r_s= 0.12$, small effect, $p \geq .05$), fluency ($r_s= .16$, small effect, $p \geq .05$) and flexibility ($r_s=.13$, small effect, $p \geq .05$). A significant negative correlation was found between tenure and elaboration ($r_s= -.10$, small negative effect, $p \geq .05$).

The relationship between length of total work experience and emotional intelligence, work engagement and creativity

A significant correlation is found between length of total work experience and global EI ($r_s=.14$, small effect, $p \geq .05$), well-being ($r_s=.10$, small effect, $p \geq .05$), sociability ($r_s= .31$, medium effect, $p \leq .05$), WE ($r_s=.18$, small effect, $p \geq .05$), vigour ($r_s=.24$, small effect, $p \leq .05$), dedication ($r_s= .14$, small effect, $p \geq .05$) and absorption ($r_s=.11$, small effect, $p \geq .05$). A significant negative correlation exists also between length of total work experience and elaboration ($r_s= -.30$, medium negative effect, $p \leq 0.05$).

The relationship between age and emotional intelligence, work engagement and creativity

A significant correlation is evident between age and EI ($r_s=.19$, small effect, $p \geq .05$), well-being ($r_s=.11$, small effect, $p \geq .05$), emotionality ($r_s=.14$, small effect, $p \geq .05$), sociability ($r_s= .20$, small effect, $p \geq .05$), WE ($r_s=.23$, medium effect, $p \geq .05$), vigour ($r_s=.25$, medium effect, $p \geq .05$), dedication ($r_s=.20$, small effect, $p \geq .05$) and absorption ($r_s=.17$, small effect, $p \geq .05$). A significant negative correlation is found between age and creative thinking ($r_s= -.24$, small negative effect, $p \leq 0.05$), originality ($r_s= -.22$, small negative effect, $p \leq 0.05$), fluency ($r_s= -.18$, small negative effect, $p \geq .05$), flexibility ($r_s=-.27$, small negative effect, $p \leq 0.05$) and elaboration ($r_s=-.26$, small negative effect, $p \leq 0.05$).

Hypothesis 1

In view of the above results, Hypothesis 1 is accepted in terms of the strong positive relationship found between EI, WE as well as the WE dimensions; the weak positive

relationship between creative personality and absorption and the weak positive relationship between creative personality and divergent thinking. Hypothesis 1 is not accepted in terms of the lack of a relationship between EI and creativity, as well as between WE and creativity.

TABLE 3.4:*Correlations*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Tenure	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Length of total work experience	.51***	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3. Age	.51***	.61***	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4. Global EI	.14*	.14*	.19*	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5. Well-being	.03	.08	.11*	.75***	1	-	-	-	-	-	-	-	-	-	-	-	-	-
6. Self-Control	.12*	-.04	.08	.63***	.41**	1	-	-	-	-	-	-	-	-	-	-	-	-
7. Emotionality	-0.04	.06	.14*	.85***	.57***	.48**	1	-	-	-	-	-	-	-	-	-	-	-
8. Sociability	.22*	.30**	.20*	.74***	.50***	.28*	.47**	1	-	-	-	-	-	-	-	-	-	-
9. Work Engagement	.16*	.18*	.23**	.49**	.31**	.39**	.43**	.43**	1	-	-	-	-	-	-	-	-	-
10. Vigour	.19*	.24*	.25*	.59***	.33**	.42**	.33**	.88***	.78***	1	-	-	-	-	-	-	-	-
11. Dedication	.04	.14*	.20*	.41**	.24*	.33**	.42**	.24*	.92***	.80***	1	-	-	-	-	-	-	-
12. Absorption	.15*	.11*	.17*	.37**	.29*	.32**	.30**	.32**	.91***	.75***	.69***	1	-	-	-	-	-	-
13. Creative Personality	.18	-.07	-.06	.18*	.17*	.11*	.04	.28*	.12*	.04	.05	.20*	1	-	-	-	-	-

14. Divergent Thinking	.13*	-.10	-.24	-.07	-.11	-.00	-.13	.01	-.1	-.07	-.17	-.03	.26*	1	-	-	-	-
15. Originality	.12*	-.08	-.22*	-.00	.04	-.0	-.1	.07	-.11	-.10	.11	.10	.25*	.72***	1	-	-	-
16. Fluency	.16*	.00	-.18	-.11	-.18	-.04	-.16	-.03	-.03	.01	-.14	.06	.15*	.87***	.37*	1	-	-
17. Flexibility	.13*	-.06	-.27	-.04	-.08	-.02	-.12	-.11	-.11	-.08	-.18	-.04	.30**	.96***	.69***	.83***	1	-
18. Elaboration	-.10	-.30**	-.26*	-.47	-.05	.02	-.06	-.13	-.13	-.07	-.12	-.12	.21*	.43**	.55***	.13*	.36**	1

* 0.10 – 0.29 (small effect) ** 0.30 – 0.49 (medium effect) *** 0.50 and greater (large effect)

Regression analysis

With EI as the independent and the other two constructs as dependent variables, the following results are found.

Emotional intelligence predicting WE

Table 3.5 shows the regression analysis between EI and WE. In the model, EI (B=.50; P=.00) acts as a significant predictor of WE, contributing in explaining 25% of the variance in WE.

TABLE 3.5:

Model Summary: EI (IV) and WE (DV)

Variables	Unstandardised Coefficients		Standardised Coefficients	T	P	F	Adjusted R Square	R
	B	SEB	Beta					
Constant	1.406	.665	.504	2.114	.000 ^b	28.303	.245	.504 ^a
Global EI score	.021	.004		5.320				

***p ≤ .001 ** p ≤ .01 *p ≤ .05

Emotional intelligence predicting creative personality

Table 3.6 shows the regression analysis between EI and creative personality. In this model EI (B=.197; P=0.7) does not act as a significant predictor of creative personality.

TABLE 3.6:

Model Summary: EI (IV) and Creative Personality (DV)

Variables	Unstandardised Coefficients		Standardised Coefficients	T	P	F	Adjusted R Square	R
	B	SEB	Beta					
Constant	.019	2.719	.197	.007	.070 ^b	3.358	.027	.197 ^a
Global EI score	.029	.016		1.832				

***p ≤ .001 ** p ≤ .01 *p ≤ .05

Emotional intelligence predicting divergent thinking

Table 3.7 shows the regression analysis between EI and creative thinking. In this model, EI (B=-.09; P=0.44) does not act as a significant predictor of divergent thinking.

TABLE 3.7:

Model Summary: EI (IV) and Divergent Thinking (DV)

Variables	Unstandardised Coefficients		Standardised Coefficients	T	P	F	Adjusted R Square	R
	B	SEB	Beta					
Constant	51.993	16.773	-.086	3.100	.435 ^b	.615	-.005	.086 ^a
Global EI score	-.077	.099		-.784				

***p ≤ .001 ** p ≤ .01 *p ≤ .05

Hypothesis 2

In view of the above results, Hypothesis 2 is accepted in terms of the evidence that EI predicts WE and creative personality. Hypothesis 2 is not accepted in terms of the lack of evidence that EI predicts divergent thinking.

Analysis of Variance

An analysis of variance (ANOVA) was calculated on the categorical variables of gender, ethnic group and work level.

Ethnic Group differences

Table 3.8 shows that ethnic groups' differ in terms of the TEIQue on the overall global EI score (p = 0.05). A significant difference between ethnic group and sociability (p=.01) is observed. Ethnic groups differ on the Guildford Alternate Uses task in terms of overall creative thinking (p=0.2), originality (p =0.00) and flexibility (p =0.02).

Work level differences

A significant difference is also observed between work level and global EI ($p=.02$), sociability ($p=.00$) and vigour ($p=.02$).

TABLE 3.8:

ANOVA results for gender, ethnic group and work level

Gender	F	P-value	Ethnic Group	F	P-value	Work Level	F	P-value
TEIQue-SF			TEIQue-SF			TEIQue-SF		
Global EI score	0.026	.87	Global EI score	2.754	.05	Global EI score	3.893	.02
Well-being	.568	.45	Well-being	.474	.70	Well-being	1.995	.14
Self-Control	1.374	.24	Self-Control	1.628	.19	Self-Control	1.020	.37
Emotionality	.476	.49	Emotionality	1.456	.23	Emotionality	1.692	.19
Sociability	0.043	.84	Sociability	4.490	.01	Sociability	6.124	.00
UWES			UWES			UWES		
Work engagement	0.003	.96	Work engagement	1.855	.14	Work engagement	2.145	.12
Vigour	0.035	.85	Vigour	1.834	.15	Vigour	4.063	.02
Dedication	.269	.61	Dedication	1.134	.34	Dedication	.808	.45
Absorption	.714	.40	Absorption	2.104	.11	Absorption	1.653	.20
Gough Creative Personality Scale			Gough Creative Personality Scale			Gough Creative Personality Scale		
Creative personality	.428	.515	Creative personality	1.526	.214	Creative personality	.708	.495
Guilford Alternate Uses			Guilford Alternate Uses			Guilford Alternate Uses		

Overall Creative Thinking	1.935	.17	Overall Creative Thinking	3.516	.02	Overall Creative Thinking	.629	.54
Originality	0.011	.92	Originality	6.550	.00	Originality	.165	.85
Fluency	3.635	.06	Fluency	1.336	.27	Fluency	.757	.47
Flexibility	1.877	.17	Flexibility	3.328	.02	Flexibility	.844	.43
Elaboration	.201	.66	Elaboration	1.813	.15	Elaboration	.172	.84

* $p \leq 0.05$ (Significant) ** $p \geq .05$ (no significance)

Hypothesis 3

In view of the above results, Hypothesis 3 is accepted in terms of the evidence that ethnic groups differ in terms of the EI dimension of sociability as well as creative thinking and the dimensions of originality and flexibility. Work level groups differ in terms of EI as well as the WE dimension of vigour. Hypothesis 2 is not accepted in terms of the lack of evidence that gender groups differ with regard to the constructs of EI, WE and creativity and dimensions. Ethnic groups do not differ with regard to WE or creative personality; and work level groups do not differ in terms of either creative personality or creative thinking.

3.4. DISCUSSION

The objective of this study was to investigate the relationship between EI, WE, creativity and demographic variables in a call centre environment.

The relationship between emotional intelligence, work engagement, creativity and continuous demographic variables

In line with the theoretical expectations, the results reveal that individuals' levels of EI relate significantly to their WE. This finding corresponds with that of Ravichandran, Arasu and Kumar (2011), who found a positive relationship between overall EI and overall WE. With WE being a relatively stable emotional condition (Andreassen, Ursin & Eriksen, 2007), it is palpable that a significant relationship would exist between the two constructs. A strong positive relationship is also found between global EI and the WE dimensions. This can be ascribed to invigorated employees reporting a greater sense of vitality, well-being and being more helpful in shaping a better working atmosphere (Shirom, 2007).

EI and creativity are both typically considered to be character strengths and virtues (Peterson & Seligman, 2004). Sanchez-Ruiz et al. (2011) reported positive correlations between trait EI and creative personality and no relationship between trait EI and divergent thinking. This research reports no significant relationship being found between EI and creative personality or divergent thinking. A possible explanation could be that although emotional traits are more important for individual creativity, overly high levels of arousal result in fewer positive and pleasant ideas (Zenasni, Besançon & Lubart, 2008).

It is thought that people with high levels of vigour are more likely to engage in the creative process and exhibit creative behaviours (Carmeli, McKay & Kaufman; 2013) and Bakker, Gierveld, and Van Rijswijk (2006) were able to find a relationship between these constructs. This research, however, contradicts this view with no significant relationship found between WE and creative personality or creative thinking. Some evidence exists, however, to indicate that creative personality is related to respondents' levels of absorption. Runco and Pritzker (1999) state that absorption, defined as sense of attention to feelings, mental images or ideas and state, is related to creativity.

Roy and Chaturvedi (2011) found that individuals with more experience in a job can perceive and understand their own and others' emotions more effectively. In this study, tenure is significantly correlated with EI. In a call centre environment, where employees often face opposition from clients (De Waal, 2004), it is plausible that employees who have worked longer for the organisation are likely to be more capable of controlling their emotions, be able to withstand pressure, regulate stress and view themselves as more capable of influencing other people's feelings.

Halbesleben and Wheeler (2008) found that employees with more years of service have had more time to accumulate the necessary resources to remain engaged. In this study, a small positive correlation is reported between tenure and WE as well as the dimensions of vigour and absorption. This indicates that respondents with higher tenure, are likely to experience work as being stimulating while displaying more energy and devotion while becoming more engrossed in their work. De Lange, De Witte and Notelaers (2008), however, reported that employees with longer tenure would – at some point – show decreased levels of WE. A possible explanation for the positive relationship found in this study may be that the mean tenure of respondents, at only 28 months, is much lower than the mean job tenure of South Africans which was reported in 2014 as 47 months (StatsSA, 2014).

Whilst increased tenure are related to EI and WE, no significant relationships are found between tenure and creativity. A small correlation is found with fluency and flexibility. These findings extend to the work of Amabile (1998) who stated that expertise is required, but not sufficient to perform creatively as some individuals may have deep expertise, but fail to perform creatively.

Length of total work experience is also positively related to EI and WE. It can, therefore, be assumed that respondents who have more workplace exposure are more likely to be confident, optimistic and cheerful, with greater resilience, while displaying higher levels of energy, mental toughness and perseverance. Negative attitudes in call centres result in reduced productivity and customer service (Workman & Bommer, 2004), which highlights the importance of recruiting more experienced individuals. Length of total work experience is not, however, significantly correlated with creativity except for a small negative correlation

with elaboration. Recruiting more experienced employees may therefore not be the solution when seeking more creative outputs from employees.

Fariselli et al. (2008) hypothesised that as people grow older, they have more opportunity to learn about emotions and the gradations of emotions, increase their emotional vocabulary, experience more, and work through a wider range of life situations. A significant correlation is evident between age and EI, indicating that older participants are more likely to view themselves as being happy, optimistic and confident as well as having greater empathy, being clearer about their own feelings and those of others, and more capable of maintaining fulfilling relationships. Other studies show conflicting results with some researchers discovering that age has an effect on EI (young and middle aged) (Burns, Bastian, & Nettelbeck, 2007), while others indicate that no difference exists (Blickle, Momm, Liu, Witzki, & Steinmayr, 2011). The mean age of sample groups could explain why previous findings are inconsistent as the study by Burns, Bastian and Nettlebeck (2007) sampled both young and middle aged respondents, whereas the study by Blickle, Momm, Liu, Witzki, and Steinmayr (2011) consisted of a much younger sample with a mean age of 23.

A small but significant correlation exists between age and WE and its dimensions, which is in line with research such as that of Schaufeli, Bakker and Salanova (2006), who suggest that WE tends to be slightly higher among older workers, although these differences are relatively small. Most interesting, however, is that age is negatively correlated with creative thinking and its dimensions. This could possibly indicate that creative thinking decreases with age. An explanation could be habitual ossification, which occurs when humans become comfortable with certain methods of doing things. As a result, humans tend to fall into a pattern of habit, and no longer seek to change, thus producing less creative outputs.

Emotional intelligence predicts work engagement and creativity

Jonker and Joubert (2009) found that emotion expression/recognition as well as emotion used to facilitate thinking is a strong predictor of WE. Thor (2012) also found a moderate relationship between EI and WE, with EI predicting WE. These findings assist in adding weight to the findings of the current study by establishing a pre-existing relationship between

the two constructs. This study finds EI to act as a significant predictor of WE, indicating that respondents with higher EI are more likely to be involved in their tasks, display higher levels of energy and mental resilience at work, and are more willing to invest effort.

Chan (2005) found that respondents with higher EI are related to increased creative behaviours and activities. This finding is, however, not replicated in the current study.

Differences on instruments according to demographics

No significant differences are found between the mean scores of males and females in terms of EI. This is supported by previous research (Saklofske, Austin, & Minski, 2003; Schutte et al., 2001; Wing, Schutte, & Byrne, 2006). No significant gender differences exist in terms of WE, which contradicts research that found gender to be the second most important driver of WE (Pitt-Catsouphes & Matz-Costa 2009). Furthermore, no gender differences are reported in terms of creative personality or divergent thinking. Contrary to this, Charyton et al. (2009) found males to display higher creative personality characteristics, whereas Baer and Kaufman (2008) found mixed results regarding divergent thinking and gender.

In terms of ethnic groups, societal norms determine the meaning of emotions and how they are controlled as well as which emotions are publically displayed and how they are communicated (Eid & Diener, 2001). Meta-analytic evidence does, however, suggest that cultural beliefs and values impact emotions and perceptions (Taras, Kirkman & Steel, 2010), implying that ethnic group may be an antecedent of EI. Although ethnic groups in this study are not representative of the South African population, according to the latest census statistics, the results of this study indicate that Indian participants on average score higher on global EI than participants from other ethnic groups.

Mostert and Rothmann (2006) found that ethnic group also seems to impact on the effect of WE, with Black people reporting lower levels of well-being and engagement than White people. This may be due to individuals from different cultures being motivated at different levels (Bakker, 2011), with some preferring skills variety and autonomy and others preferring social support. In the current study, Indian respondents display the highest level of WE, followed by African respondents, then White respondents and lastly Coloured respondents.

There are no significant differences in terms of ethnic group and creative personality, except for Coloured individuals scoring significantly lower than other groups. Indian participants score highest on creative thinking, followed by White participants, then Black participants and lastly Coloured participants.

Managers and team leaders also report higher scores on all constructs. These respondents may occupy higher occupational levels than other respondents because they display some of the characteristics associated with being more emotionally intelligent, engaged and creative. Alternatively, it is possible that occupying a higher occupation level exerts pressure on individuals to be more emotionally intelligent, more engaged with their work and to produce more creative outputs.

3.5 CONCLUSIONS

This research has several implications for call centre agents within the sample organisation that are tasked with dealing with clients daily. In terms of the findings of the present study, it can be concluded that a significant relationship exists between EI and WE. This highlights the importance of recruiting call centre agents with higher EI. Age and length of total work experience are naturally considered to be related. Both are found to be related to WE and creativity. The author, therefore, concludes that older employees are more likely to have greater EI and to be more engaged with their work. Age and creativity are, however, negatively correlated, leading to the conclusion that as respondents grow older, their ability to produce creative outputs decreases.

EI is a likely predictor of WE, indicating that employees within the sample with higher levels of EI are more likely to be engaged with their work. EI is not a significant predictor of either creative personality or divergent thinking. The author thus concludes that having high EI is not essential to be considered a creative individual, or to produce creative outputs.

Research findings regarding gender differences in terms of the constructs measured are varied and contradictory. This study, however, does not highlight any significant gender differences in terms of any of the constructs. Ethnic group differences are found and should be explored

in greater depth in future research. Significant differences are found in terms of work level with managers having higher levels of EI, WE and creativity.

3.6. LIMITATIONS AND RECOMMENDATIONS

The present study is limited to participants within a call centre division of an insurance company. Therefore, the results cannot be generalised to other occupational or industry contexts. Future research efforts should focus on obtaining a larger and more representative sample of employees in a call centre environment. Furthermore, given the exploratory nature of the research design, this study can yield no statements about causation. The observed associations between the variables are therefore interpreted rather than established.

Only one rater has been used for measurement of the creative thinking construct. This may have had an impact on scores. Future studies should ensure that a multi-rater approach is followed so as to limit the impact of potential rater-bias.

Differences in terms of ethnic groups and impact on EI and WE levels are found in this study. Ethnic groups are not, however, representative of the SA population and therefore no recommendations can be made. Future research should strive to obtain representative samples in order to draw conclusions that can be generalised.

The study highlights that the older the respondents the higher their levels of EI and WE. Both tenure and length of total work experience are also positively correlated with EI and WE. These three factors are thought to be connected, as older employees generally have more work experience and have been with organisations for longer. It may be beneficial to consider this in the recruitment and selection of employees. Age is, however, negatively correlated with creative thinking. Creativity training may be of benefit to all employees. Additionally, it may be of benefit to conduct training for current staff on improving their EI.

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CHAPTER 4

CONCLUSIONS, LIMITATION AND RECOMMENDATIONS

This chapter deals with the conclusions of the study, discusses its limitations and makes recommendations for future research studies.

4.1. INTRODUCTION

The next section clarifies both the general and specific aims of this research.

The general aim of this research is to determine the relationship between emotional intelligence, WE, creativity and demographic variables.

The specific aims relating to the literature review are:

- To review the construct of emotional intelligence in literature
- To review the construct of WE in literature
- To review the construct of creativity in literature
- To review the construct of demographics within the South African workforce in literature
- To explore the extent to which individuals from different demographic groups differ in literature with regard to EI, WE and creativity
- To explore the theoretical relationship between EI, WE, creativity and demographic variables (including gender, ethnic group, work level, tenure, length of total work experience and age).

The specific aims relating to the empirical study are:

- To investigate the relationship between EI, WE, creativity and demographic variables (tenure, length of total work experience and age) as manifested in a sample of respondents in a call centre environment in the South African context
- To determine whether EI predicts WE and creativity
- To determine how individuals of different demographic groups (gender, ethnic groups and work level) differ with regard to EI, WE and creativity

- To make recommendations for the practice of industrial and organisational psychology, research and for call centre organisations in relation to the management of EI, WE, creativity within separate demographic conditions.

This research reports a relationship between EI and WE, with EI predicting WE. No relationship is found between either EI or WE and creativity. Respondents with higher tenure, length of total work experience and older age are found to have higher EI and be more engaged with their work. No significant gender differences are found on any of the constructs. In terms of ethnic groups, Indian respondents score higher on all constructs. Higher level employees also score higher on all constructs.

4.2. CONCLUSIONS

The sections below focus on the formulation of conclusions based on the literature review and the empirical study.

4.1.1. Conclusions relating to the literature review

Chapter 2 reviews literature and research conducted on this topic. Chapter 3 provides the statistical analysis of the data collected which provides a representation of the statistical relationship between EI, WE, creativity and continuous demographic variables (years of service, tenure and age). The analysis also highlights correlations between subscales, the extent to which EI predicts WE and creativity and differences between categorical demographic groups (gender, ethnic group and work level). Through this analysis, the researcher is able to gain a better understanding of the relationship between the constructs.

The specific literature aims are achieved in Chapter 2 where the historical development of the constructs, the conceptualisation of the constructs and relevant theories are reviewed. Furthermore, the rationale for studying each of the constructs is presented. The theoretical relationship between the constructs is reviewed.

4.1.1.1 The first aim: to review the construct of emotional intelligence in literature

The construct of EI is defined as a set of both self-perceptions and behavioural dispositions about an individual's ability to recognise, process and utilise emotional information. Trait EI is seen as combining elements of personality theory such as empathy, impulsivity and assertiveness together with elements of Thorndike's social intelligence and Gardner's personal intelligences (Petrides et al., 2004b). EI is important in the workplace as it affects individuals' decisions (Goleman, 1995), enables them to deal more effectively with work pressure (Caruso, 1999) and ensures that they are more adaptable to different situations (Austin et al., 2005).

4.1.1.2 The second aim: to review the construct of WE in literature

WE is a positive, fulfilling, work-related state of mind that is characterised by three subdimensions: vigour, dedication and absorption (Schaufeli, 2004). The Job-Demand-Resources Model (JD-R) model (Demerouti, Bakker, Nachreiner & Schaufeli, 2001) is relevant in this research and purports that whereas each occupation may have its own specific risk factors associated with burnout, these factors can be classified in two general categories, namely job demands and job resources. WE is comprised of vigour, dedication and absorption (Schaufeli and Baker, 2003). WE is important within the workplace as higher levels reduce absenteeism (Soane et al., 2013), increase staff retention (Bakker & Leiter, 2010) and improve profit margins (Echols, 2005).

4.1.1.3 The third aim: to review the construct of creativity in literature

No universally agreed upon definition or approach to studying creativity is available and a multi-dimensional approach is recommended. The first approach relevant to this study is to view creativity as a set of personality characteristics (Gough, 1979). The second approach is to study divergent thinking (Guilford, 1967), which includes abilities such as flexibility, originality, fluency and elaboration. The study of creativity is relevant to the workplace as it contributes to organisational success such as problem solving and effectiveness (Amabile, 1997).

4.1.1.4 The fourth aim: to review the construct of demographics within the South African in literature

Demographic variables are those characteristics that are a vital statistic defining an individual or group. The study of demographic variables in research is imperative, particularly against the backdrop of the numerous critical changes that have occurred in South Africa's history. Social identity theory is relevant to this study as it considers demographic variables and the assumed traits that individuals may possess.

4.1.1.5 The fifth aim: to explore the theoretical relationship between emotional intelligence, WE, creativity and demographic variables (including gender, ethnic group, work level, tenure, length of total work experience and age)

The conclusion to Chapter 2 comprises of linking the four constructs theoretically. Literature links EI and WE as well as EI and creativity. Some theories link WE and creativity. Literature also highlights the relationships between demographic variables and the constructs. All the constructs are theoretically linked by means of the Job-Demands Resources model (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007) as well as the broaden-and-build theory of positive emotions (Fredrickson, 2001).

4.1.2. Conclusions relating to the empirical study

The objective of this research study is to determine the relationship between EI, WE, creativity and demographic variables. A call centre division within an insurance company was chosen as the context in which to address the objective of this study.

The specific aims related to the empirical study are answered in Chapter 3 of this dissertation.

4.1.2.1 The first aim: to investigate the relationship between EI, WE, creativity and continuous demographic variables (tenure, length of total work experience and age) as

manifested in a sample of respondents in a call centre environment in the South African context.

This is partially confirmed with a strong relationship being found between EI and WE as well as their sub facets. No relationship is, however, present between EI and creativity, or WE and creativity. Differences occur in terms of length of total work experience, tenure and age regarding EI, WE and creativity.

4.1.2.2. The second aim: to determine whether EI predicts WE and creativity.

EI predicts WE, but not creativity.

4.1.2.3 The third aim: to determine how individuals of different demographic groups (gender, ethnic groups and work level) differ with regard to EI, WE and creativity.

No significant differences are present in terms of gender on any of the instruments. Cultural and work level differences are found with regard to EI and WE.

4.1.2.4 The fourth aim: to formulate recommendations for the practice of industrial and organisational psychology, research and for call centre organisations in relation to the management of EI, WE, creativity within separate demographic conditions.

This is achieved and presented in Chapter 3 and Chapter 4.

The intention of conducting this research is to examine how an internal factor, namely EI, may influence WE and creativity. This research offers a partial answer to the question of what drives WE. WE links to enhanced job performance (Salanova, Agut & Peiro; 2005); employee retention (Schaufeli & Bakker, 2004), lowered absenteeism (Welthagen & Els), higher profit margins (Echols, 2005) and overall enhanced stakeholder value (Lockwood, 2007). In this study, it is clear that there are positive correlations between the constructs EI and WE. Therefore, EI is important in determining how engaged respondents are with their work.

4.3 LIMITATIONS

The limitations of the literature study and empirical investigation are outlined below.

4.2.1. Limitations of the literature review

Although substantial literature is available on EI, WE, creativity and demographic variables, the availability of literature exploring the relationship between these constructs in a call centre organisation, specifically related to the South African environment is limited. This impacts on the study as no theoretic base is available.

4.2.2. Limitations of the empirical study

The sub-scales in the trait EI questionnaire proved problematic. The subscales including well-being, self-control, emotionality and sociability appear to be unacceptably low (0.33, 0.46, 0.61, 0.54 respectively) in the trait EI questionnaire and consequently, could not be used in identifying whether or not a relationship exists with other factors.

In terms of design limitations, the study uses a cross-sectional design, conducted at a single point in time. The consistency and validity of the results may, therefore, have been compromised.

Only one rater was used for measurement of the creative thinking construct. This may have had an impact on scores due to subjectivity and rater bias.

The sample size is too small and therefore findings cannot be generalised to the entire organisation or to other call centre organisations.

4.4 RECOMMENDATIONS

Based on the findings, conclusions and limitations of this study, recommendations for industrial and organisation psychology and further research in the field are outlined next.

This research examined how one internal factor may drive WE. However, a large percentage of the variability in WE does not seem to be predicted by participant's EI. Future research could focus on understanding which other factors are also possible antecedents to WE.

Examining demographic variables with regard to the constructs could also be a focus of future research. Questions remain as to why older respondents and those who have been working for longer tend to have higher levels of WE and tend to be more engaged with their work. One could hypothesise that those who did not have a high level of WE left the organisation early on in their time at the company and those who still work there are the "stayers". Conversely, it is important to understand why creativity is negatively correlated with age. Similarly, it is necessary to investigate cultural differences with regard to the constructs. This study includes disproportionate numbers of participants in terms of cultural background, primarily due to convenience sampling. Future research can focus on seeking a pre-determined sample with a wider range of individuals. This will ensure a more representative sample of the population to establish greater external validity.

Much debate exists regarding the various instruments used to measure EI (Zeidner et al., 2009). In this research, the TEIQue has been used, but other instruments such as the MSCEIT, the EI Scale and EQ-I could also be used. Future research should consider using one of these instruments.

Future studies should ensure that a multi-rater approach is followed to limit the impact of rater-bias. A longitudinal study may have provided a more valid result, as the consistency of the results could be viewed over time and irregularities in the results could be addressed.

A final recommendation for future research that may replicate this study, would be to include a larger sample size and sample population within different organisations. The author also

recommends conducting research with participants outside of the call centre environment. Participants working within a call centre may not represent those who work in other professions.

4.4 CHAPTER SUMMARY

By focusing on both the literature review and the empirical study, this chapter discusses the conclusions drawn from this study. The possible limitations of the study are also investigated. Recommendations are offered for future research as well as for the organisation. The study has been integrated by highlighting the value of the constructs and its implication for talent management strategies.

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