Emotional Intelligence amongst Undergraduate Students at a

Higher Education Institution.

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DECLARATION

I hereby declare that "**Emotional Intelligence amongst Undergraduate Students at a Higher Education Institution",** is my own work. It has not been submitted for any other degree or examination at any other institution of higher learning, all the sources I have used or quoted have been indicated and acknowledges by complete references. It is being submitted for the degree of Master in Commerce at the University of the Western Cape.

Full Name: Nasheeta Adams

Date: 31 May 2011

Signed: _____

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I wish to express my sincere gratitude and appreciation...

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Love and Light

Nasheeta Adams

ABSTRACT

Emotional Intelligence amongst undergraduate university students at a Higher Education Institution in the Western Cape

Globalisation has brought increased complexity to employers. In these firms service and value for money are mostly delivered through decentralised organisational models. Midlevel managers and frontline staff have become more empowered. Therefore, employers increasingly judge graduate quality by conceptual, operational and especially emotional competencies. Gardner (1983; 1991) reported that business-related graduate programmes focused primarily on indicators of individual competence such as logical and linguistic intelligence, with less attention being given to spatial, interpersonal and naturalist forms of intelligence. Later research reported increased calls from industry to make curricula more relevant to `today's global workplace' through improved instruction in communication, leadership, as well as intrapersonal and interpersonal skills (Cherniss 1999; Doria, Rozanski and Cohen, 2003; Jaeger 2003; Myers and Tucker 2005). Lately, Daniel Goleman's research on emotional intelligence as a predictor of work performance has emerged (Goleman 1998, 2000; Weisinger, 1998) and continues to be highly influential.

The traditional approach by educationists, however, has been to focus on logical and linguistic intelligence. This view have been challenged by many studies recently where researchers are beginning to argue that interpersonal and intrapersonal competencies and Emotional Intelligence (EQ) may be more important for success. Educational institutions have traditionally focussed primarily on logical and linguistic intelligence, with less attention given to other types of intelligence. Yet many researchers are beginning to argue that intrapersonal and interpersonal

competencies, or emotional intelligence, may be more important for success in life than logical or linguistic intelligence (Tucker, Sojka, Barone & McCarthy, 2000). Though the concept of emotional intelligence was first introduced in organizations, its relevance made the concept an inevitable concept of consideration in the educational sector too. Teaching emotional intelligence skills in schools is very important because it can positively affect academic achievement not only during the session they are taught, but in subsequent years as well (Elias, Brune, Butler, Blum & Schumler, 1997).

According to Caruso, Mayer and Salovey (2002), emotional intelligence skills and knowledge can be developed and learned and it matters most in times of change. Emotional intelligence is an ability to recognize one's own feeling and those of others, for motivating self as well as one's relationship with others. Laabs' (1999) study of the climate of individual teacher's classroom concluded that teachers who are more aware of how students feel in the classroom are better able to design a learning environment that suits students and better able to guide them towards success. Studies (e.g. Ediger, 1997; Parker, Summerfeldt, Hogan & Majeski 2004)) have shown that the acquisition of emotional intelligence skills can significantly contribute to positive thinking in students and increase their ability to concentrate for a long time. Gender differences in psychological well-being are important because of the many efforts being made in contemporary society to empower all individuals to achieve self-actualisation and utilise their full potential. In a post-feminist context this incorporates the idea of an "equal opportunities" society; yet social stereotypes still remain (Connors, 1990; Eagly, 1987; Turner & Sterk, 1994). Regarding race differences, Salovey, Mayer and Caruso (2002) indicated that it still has to be investigated whether EQ is culture bound.

One hundred and fifty senior students (comprising of second and third year undergraduate students) completed a biographical questionnaire and the BarOn Emotional Quotient-Inventory questionnaire. The results indicate that there are statistically significant differences in total EQ based on gender and age, although there were no statistically significant differences based on race. Conclusions are drawn about the importance of emotional intelligence in students and recommendations for future research are provided.

Key Words

Emotional Intelligence, Performance, Leadership, Self-actualisation, Academic retention, Tertiary environment, Academic success, Personality, Social Relationship, Emotional competency.

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CHAPTER 1

INTRODUCTION AND OVERVIEW

1.1 INTRODUCTION

Without fuel, a car is motionless, without self belief how can an individual be the driver to tertiary educational success? Emotional Intelligence is essential for any student, as they are the leaders in their own life and drive either their success or failure of obtaining a degree. As any student would know, the motivation to success has to lie within themselves as the demands and stress levels are all part of the pursuit of educational success. The university and their staff complement act as a medium to obtain this degree, therefore, they are the management of the organization. Together with the leaders (students); who should be emotionally equipped to identify their own emotions and the emotions of other subjects; and the management (university) they play an ideal role in the performance and success of the student.

Higher education institutions in South Africa are increasingly being driven by the challenges of supply and demand. Hence, these institutions are continuously expected to seek strategic innovations aimed at differentiating their core products and services (van Lill, 2010). The university at which the current research was undertaken, has recently embarked on a strategic initiative to determine best practice with respect to Teaching and Learning, and is developing graduate attributes aimed to address some of the needs of industry and society at large. While students have been expected to critically engage with theory and apply their minds to resolve broader societal problems, they are expected to be able to possess skills in perceiving and understanding their own emotions, others' emotions, effectively expressing these emotions, incorporating emotional information in reasoning, planning and decision-making, effectively

controlling emotions, and being able to emotionally read situations in order to ensure that they become aware of the impact of their emotions on attitudes, behaviour and performance.

Educational institutions have traditionally focussed primarily on logical and linguistic intelligence, with less attention given to other types of intelligence. Yet many researchers are beginning to argue that intrapersonal and interpersonal competencies, or emotional intelligence, may be more important for success in life than logical or linguistic intelligence (Tucker, Sojka, Barone & McCarthy, 2000). In addition, studies of managerial derailment indicate a lack of emotional intelligence. Derailment is frequently attributed to personality characteristics (such as a lack of self-awareness), an inability to change, poor treatment of others and problems with interpersonal relationships (Tucker et al., 2000).

The aim of this research is to examine Emotional Intelligence amongst undergraduate university students and ascertain if there are differences in EQ based on gender, race and age.

1.2 MOTIVATION FOR THE RESEARCH

The theory of emotional intelligence and applications in education (Gardner (1983; 1991) reported that business-related graduate programmes focused primarily on indicators of individual competence such as logical and linguistic intelligence, with less attention being given to spatial, interpersonal and naturalist forms of intelligence. Later research reported increased calls from industry to make curricula more relevant to `today's global workplace' through improved instruction in communication, leadership, as well as intrapersonal and interpersonal skills (Cherniss 1999; Doria, Rozanski and Cohen, 2003; Jaeger 2003; Myers and Tucker 2005).

The applicability and advancement of emotional intelligence in higher education has been well researched. Boyatzi et al. (2002) concluded that cognitive and emotional intelligence competencies can be developed in Master of Business Administration (MBA) students, but not with a typical MBA curriculum. Emotional intelligence can be incorporated into the business curriculum through the use of assessment tools and experiential exercises (Tucker, Sojka, Barone and McCarthy 2000; Myers and Tucker 2005). Evidence that emotional intelligence can be improved through instruction in a classroom setting, as well as its positive impact on academic success and teamwork, was presented by Jaeger (2003) and Ashkanasy and Dasborough (2003).

Entrepreneurship educators used emotional competencies to teach students to deal with anxiety over failure and entrepreneurial intentions (Shepherd 2004). Scott and Yates (2002) examined the competencies that were seen as most important for successful engineers during the first few years after graduation and evaluated whether universities were actually developing these competencies. These results reaffirmed that technical competence is required for successful practice, but it is certainly not sufficient, as graduates and their supervisors alike rated emotional intelligence competencies as being significant success factors. Horak, Steyn and De Boer (2001) applied the whole-brain approach to first-year engineering students in order to advance group work and performance based on an understanding of different thinking styles.

1.3 PROBLEM STATEMENT

Individuals with a higher level of Emotional Intelligence are postulated to be better equipped to motivate themselves and other individuals to reach and achieve even better achievements than

what they set out. Research further denotes that individuals with a higher level of Emotional Intelligence build stronger interpersonal relationships, are better equipped to lead individuals more effectively, they tend to be more successful in their respective careers and experience better health prospects as opposed to individuals with a lower Emotional Intelligence levels.

1.4 RESEARCH OBJECTIVES

A research objective is the overall goal of the research, also referred to as the primary objectives / primary problems or aim. This objective or aim describes the scope of the research process (Wisker, 2001). The primary objective of this study is to investigate if there is a difference between Emotional Intelligence based on gender, race and age amongst undergraduate students.

1.5 RATIONALE FOR THE STUDY

Goleman (1995) has described EQ in terms of knowing what you are feeling and being able to manage these feelings without being swamped. In addition, it is about being able to motivate yourself to get the job done and being creative. Hence, it is essential for the students to possess these qualities, in order to meet deadlines and to maintain a balance between their personal life and the stressful demand of university life.

The purpose of this study is to explore the difference between Emotional Intelligence based on gender, race and age amongst the undergraduate university students. That is, to analyse if there is a common difference in the Emotional Intelligence of the males and females, race and age of undergraduate university students.

1.6 OBJECTIVES OF THE STUDY

This is the overall goal of the research, also referred to as the primary objectives / primary problems or aim. This objective or aim describes the scope of the research process (Wisker, 2001).

The primary objectives of this study are to investigate if there does indeed exist differences between Emotional Intelligence based on gender, race and age amongst the university students.

1.7 HYPOTHESES

The *Research hypotheses* involve a prediction that may or may not be borne out of the data, hence an assumption.

H1- There is a statistically significant difference in EQ amongst undergraduate university students based on gender.

H2- There is a statistically significant difference in EQ amongst undergraduate university students based on race.

H3- There is a statistically significant difference in EQ amongst undergraduate university students based on age.

1.8 CHAPTER'S OUTLINE

Chapter one aims at outlaying the objectives and rationale that the research study may present. And the manner in which the purport research study aims to achieve whether there indeed is a correlation between Emotional Intelligence, race, gender and age or not.

Chapter two is the literature review, which is a background analysis and involves reviewing relevant sources of literature all of which provide and stimulate conceptual insights and provides ideas of possible approaches or techniques which could be used or applied later in the research process (Struwig & Stead, 2004). In this instance the focal point of the literature will be on Emotional Intelligence and surrounding themes.

Chapter three discusses the research methodology that will be utilised in the research study. It addresses the research design issues, sampling design, provides a description of the data collection instrument and procedure employed as well as the statistical techniques and ethical issues which needed to be borne in mind.

Chapter four provides an overview of the most salient results which emanated from the research. It allows the researcher with an opportunity to gain a feel for the data and presents descriptive and inferential findings.

In closing, chapter five provides a discussion of the results based on the hypotheses which were generated and offers conclusions and recommendations for future studies, juxtaposed against previous research within the field of research.

1.9 CONCLUSION

Emotional Intelligence is gaining fast momentum and the importance and awareness around this arena is steadily growing. Each individual possess emotions which either drives them to their success or failure. Having said this, if an academic student can utilize, manage and filter their emotions in positive ways to deal with the best or adverse situations, it is likely that this could influence their adaptation and successful completion of academic courses.
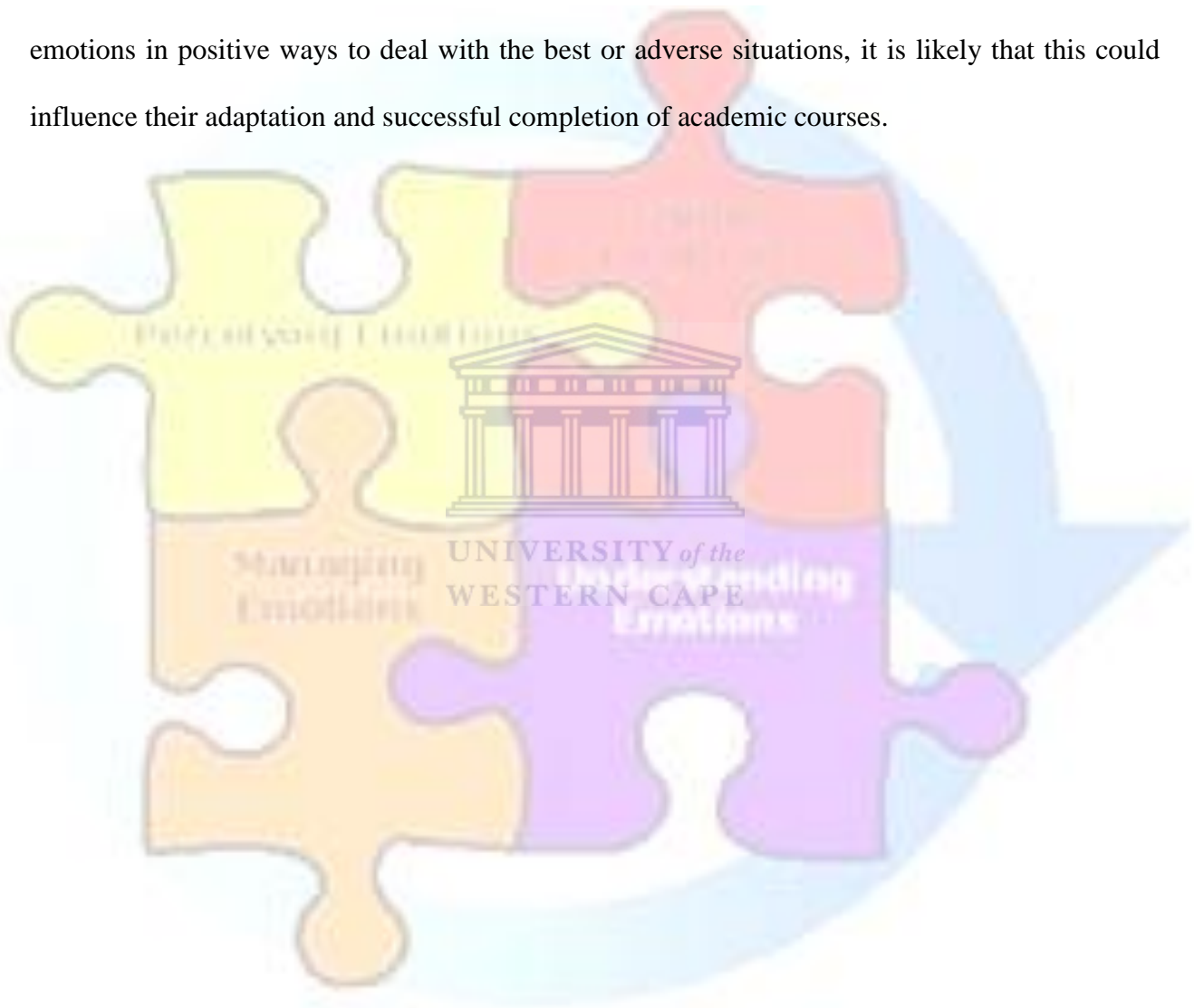
CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

According to Cooper and Sawaf (1997, p. 23), "Emotions are inherently neither positive nor negative; rather, they serve as the single most powerful source of human energy, authenticity, drive and can offer us a wellspring of intuitive creative wisdom. In fact, each feeling provides us with vital and potentially profitable information every minute of the day. This feedback – from the heart, not the head ,is what ignites creative genius, keeps you honest with yourself, shapes trusting relationships, provides an inner compass for your life and career, guides you to unexpected possibilities, and may even save you or your organisation from disaster". Mayer, Salovey and Caruso (2004) suggest that individuals with high levels of EQ are better able to manage their emotions and to interact with others. The ability to solve emotional related problems requires less cognitive effort for people with high levels of EQ. Individuals with high levels of EQ tend to be less destructive and avoid negative behaviours. Such individuals can also be more family oriented and more focused on achieving goals and aims in life.

Due to widespread lack of understanding of EQ in higher education by the university and people in general, students get caught up in emotional turmoil and multiple factors impacting directly on performance and emotional stability (Meany, 2000). The focal point of this literature is on reviewing Emotional Intelligence and the impacts it has on undergraduate university students.

2.2 UNPACKING EMOTIONAL INTELLIGENCE

2.2.1 DEFINITION OF EMOTIONS

Emotion is derived from the word "emover" which means to move or excite. More recently, the term relates to any subjective experience. Emotions can relate to expression of love, hate, attraction, aggression and disappointment (Girdhalwal, 2007). "Emotions are internal events that coordinate many psychological subsystems including physiological responses, cognitions and conscious awareness. Emotions arise in response to a person's changing relationships. When a person's relationship to memory, to his family, and to humanity changes, this person's emotions will change" (Tucker, Sojka, Barone & McCarthy , 2000).

2.2.2 DEFINITION OF INTELLIGENCE

According to David Wechsler, intelligence can be defined as the aggregate of an individual to act with purpose and to deal effectively with the environment. Wechsler also postulated in 1943 that non-intellective abilities were important predictors for success in one's life (Cherniss, 2000).

2.2.3 DEFINING EMOTIONAL INTELLIGENCE

Emotional Intelligence (EI/EQ) represents a specific subset group of tasks to social intelligence. It does not only encompass reasoning about emotions in social relationships, but also reasoning about internal emotions that are important for personal growth. EI is also more focused than social intelligence in that it pertains to emotional problems embedded in personal and social problems (Tucker et al., 2000). Emotional Intelligence (EI) is used interchangeably with Emotional Quotient (EQ) in many ways, where these terms are representative of emotional

awareness and emotional skills. It is pointed out that an emotionally skilled person is skilled in four areas: identifying, using, understanding and regulating emotions (Salovey & Mayer, 1990).

Salovey and Mayer (1990) defined the term Emotional Intelligence (EQ) as the ability to perceive emotions, to access and generate emotions in order to assist and understand emotions and emotional meanings. Bar-On (1996) defines EI as an array of personal, emotional and social abilities and skills that influence one's ability to succeed in coping with the environment .It addresses the emotional, personal, social and survival dimensions of intelligence that are more important for daily functioning than traditional aspects of intelligence. This encompasses emphasises on the understanding of oneself and others and adapting to changing demands. Salovery and Mayer (1997) defines EI as involving the ability to perceive accurately, express emotion, access feelings, understand emotions and promote emotional and intellectual growth. Webster's New World Dictionary defines intelligence as the ability to learn or understand from experience or to respond successfully to new experiences, the ability to acquire and retain knowledge (Elder, 1997).

However, EI is distinct from other intelligences and it is the intelligence applied to emotions. It is an individual difference where not all people are endowed with the same EI. EI develops over a person's life span and can be developed during training. Thus, involves particular abilities to reason intelligently about emotions and the ability to understand and to manage emotions (Palmer, 2001).

Goleman (1998) explains 'emotional intelligence' as the capacity for recognising one's own and others feelings for motivating and managing emotions within relationships and within ourselves. In an organisational context if emotions are properly managed it can lead to trust, loyalty and commitment. Vrba (2007) defines EI as an individual's ability to use awareness of emotions to manage behaviour and relationships with others. Hughes, Patterson and Terrell (2005) defined emotional intelligence as feelings individuals have in relationships. They stated that emotional intelligence can be defined as the capacity to reason with emotions and emotional signals and the capacity to enhance thought.

Hayward et al., (1997) define emotional intelligence as an array of cognitive skills, capabilities and competencies that influences a person's ability to cope with environmental demands. However, the literature brings forth no consensus on the exact nature of emotional intelligence. Goleman (1998) suggested five pillars or competencies of emotional intelligence viz. self-awareness, self regulation, social awareness and social skills. BarOn (2000) define emotional intelligence as an array of non-cognitive capabilities, competencies and skills (intrapersonal, interpersonal, stress management) that can influence an individual's ability to cope with environmental demands.

2.3 THE ORIGIN OF EMOTIONAL INTELLIGENCE

The seeds of EQ has been in bedded in what is known as Social intelligence (SI) which was first proposed by Thorndike in 1920 (cited in Kobe, Reiter-Palman & Rickers , 2001) and is defined

as the 'ability to understand and manage men and women, boys and girls. As a result of ongoing research and expansion of the knowledge of social intelligence, researchers have concurred that social intelligence contains two components (Kobe et al., 2001):

- Being aware of or noticing others' needs and problems;
- Adapting to different social situations.

Evidently EI and social intelligence overlap and the dilemma appears to be whether EI is a component of SI as it appears that SI has subsumed EI. Furthermore, it appears that SI has a much broader scope than EI and therefore could explain more of the variance associated with leadership (Kobe et al., 2001).

Robert Thorndike also noted the importance of non cognitive aspects of intelligence for success. The work of these two researchers was not highly regarded as meaningful until 1983 when Howard Gardner started to write about 'multiple intelligence'. He argued that intrapersonal and interpersonal intelligences were as important as other measures of IQ (Cherniss, 2000).

Goleman et al. have suggested that EI as a construct on its own, is not a strong predictor of job performance but provides the competencies that are. Goleman attempted to prove this by distinguishing between EI and emotional competence. He argued that emotional competences are linked to EI (Cherniss, 2000).

2.4 THE DIFFERENT THEORISTS AND MODELS ON EMOTIONAL INTELLIGENCE

Mayer and Salovey's ability model defines EI as a set of mental abilities that has to do with emotions and the processing of emotional information as well as contribute to logical thought and intelligence. In terms of this model, abilities are arranged from basic psychological processes to complex psychological processes and develop with age and experience. Mayer and Salovey further postulates that these abilities are independent of traits and talents and preferred ways of behaving (Gardner & Stough, 2001).

The model proposed by Wolmarans (1998) is a mixed approach to EI where the EI assessment tool as depicted by the 360-degree assessment instrument, as it is applicable to the South African organisational context. Wolmarans (2002) developed a statistically validated emotional intelligence tool taking into account seven competencies: self-motivation, self-esteem, self-management, change resilience, interpersonal relations, integration of 'head and heart' and emotional literacy. This instrument is designed to provide accurate feedback, information on critical behaviours for success and direction for individual development. This instrument therefore collects performance assessments from supervisors, peers, clients and subordinates. These assessments are then collated and a comprehensive feedback report is provided on an individual's performance and competence. According to Wolmarans (2002) the purpose of the Emotional Competency Profiler (ECP) is to give the individual an opportunity to reflect on their emotional skills through their own eyes as indicated by the ratings of others.

A number of researchers and authors have emphasised the importance of understanding and managing the impact of emotions and related behaviours in an organisational context. There appears to be a strong interest from the corporate sector as they seek to gain competitive advantage over competitors. EI arose from the assumption that it can contribute to the success and achievement of personal goals more so than IQ (Bar-On, 1988).

Bar-On developed a non-cognitive model and defines EI as an array of non-cognitive capabilities, competencies and skills that influence's an individual's ability to cope with environmental demands and pressures. Bar-on states that the component of the model relates to develops over time and can be improved through training and development programs (Gardner et al., 2001).

One of the more prominent researchers in this area argued that social intelligence is distinct from academic abilities and plays a very important role in determining how well individual deals with practicalities in later life (Thorndike, 1920) cited in Merwe, Coetzee & Beer (2005). Wechsler (1943) cited in Merwe et al., (2005) recognised the importance of EI and confirms that non-intellectual aspects should be included in any complete measurement. Sternberg (1985) cited in Merwe et al., (2005) recognised the multi-dimensionality of intelligence and the existence of personal and emotional intelligence.

Goleman (1995) adapted a model of Salovey and Mayer (1990) to explore how EI relates to working life. According to his model, EI was split into two elements known as: personal and social competence. In terms of the competence model, emotional competencies must be learnt. Emotional competence is defined as a learnt capability based on EI that can result in outstanding performance at work (Cherniss & Goleman, 2001).

Goleman (1998) has suggested an EI framework that consists of four clusters:

1. *Self awareness* – being aware of emotions and its significance; having realistic knowledge of strengths and weaknesses; having self confidence.
2. *Self management* – control over emotions; being honest and trustworthy; being flexible and dedicated.
3. *Social awareness* – being empathetic and perceiving another's thoughts and points of view.
4. *Relationship* – helping others to develop themselves; effective leadership; influencing skills and excellent interpersonal communication skills.

1. *Self awareness*- consists of emotional self-awareness, accurate self-assessment and self-confidence (Cherniss, 2001). Emotional self-awareness is the ability to recognise one's own feelings and its relation to performance (Cherniss & Goleman, 2001). Triggering of emotions are very important and in interpersonal relationships.

Accurate self assessment is the ability to accurately assess one's own abilities, seek feedback, learn from mistakes and know which areas to improve upon (Cherniss & Goleman, 2001). It is important to know oneself in terms of strengths and weaknesses and capabilities when working on projects. During project close-out meetings it is important for project managers to accurately assess themselves in terms of various competencies and the lack of this quality will prevent an individual from learning and where to improve in the future.

Self confidence is defined as confidence in oneself and in one's abilities (Cherniss and Goleman, 2001). A student must have confidence in his or her abilities throughout the various phases of their tertiary education.

2. *Self-management*- consist of emotional self control, trustworthiness, conscientiousness, adaptability, achievement drive and initiative (Cherniss & Goleman, 2001).

Emotional self control is the ability to remain calm and unperturbed in stressful situations and to be able to deal with hostile persons without exerting violence (Cherniss & Goleman, 2001). The nature studying is stressful. This trait ensures that an individual can remain calm and collected and look at the holistic picture of a situation.

Trustworthiness is the ability to let others know one's values and principles, intentions and feelings and acting in consistent ways with them (Cherniss & Goleman, 2001). Trust issues are very critical for the cohesion within a project team and will impact on the successful execution of the projects and assignments. Conscientiousness is being careful, scrupulous and self-disciplined in attending responsibilities (Cherniss & Goleman, 2001). The student must be able to lead by

example in order to facilitate what is expected of the individual as he or she holds the key to their success.

3. *Social awareness-* of EI consists of empathy, service orientation and organisational awareness (Cherniss & Goleman, 2001).

Empathy is an astute awareness of emotions and where the individual shows concern and needs of others. The sensitivity to others is critical for superior job performance particularly where interactions with people are concerned. Organisational awareness is the ability to read the currents of emotions and political realities in organisations (Cherniss & Goleman, 2001). The political climate and organisational dynamics are vital factors that the student need's to take into account when working on projects.

4. *Relationship management-* of EI consists of develop others, influence, communication, conflict management, visionary leadership, change and teamwork (Cherniss & Goleman, 2001).

Developing others involves sensing people's developmental needs and bolstering their abilities (Cherniss & Goleman, 2001). It is imperative that individuals have an interest to develop and grow in terms of technical and interpersonal skills.

Influence is the ability to manage emotions effectively in other people and to be persuasive at times (Cherniss & Goleman, 2001). This is a practical form of power.

Communication is the ability to be effective in the give and take of emotional information, to listen and to foster open communication and to stay receptive as well (Cherniss & Goleman, 2001).

Conflict management is the ability to spot trouble as it happens and to take steps to resolve the situation (Cherniss & Goleman, 2001). Students are often described as conflict managers where one of the critical success factors is conflict resolution. Verma (1996) cited in Barry & Plessis (2007) confirms that conflict resolution is one of the most important skills an individual must possess.

Figure 1: Competence Model of EQ by Goleman (a) (Cherniss and Goleman, 2001)
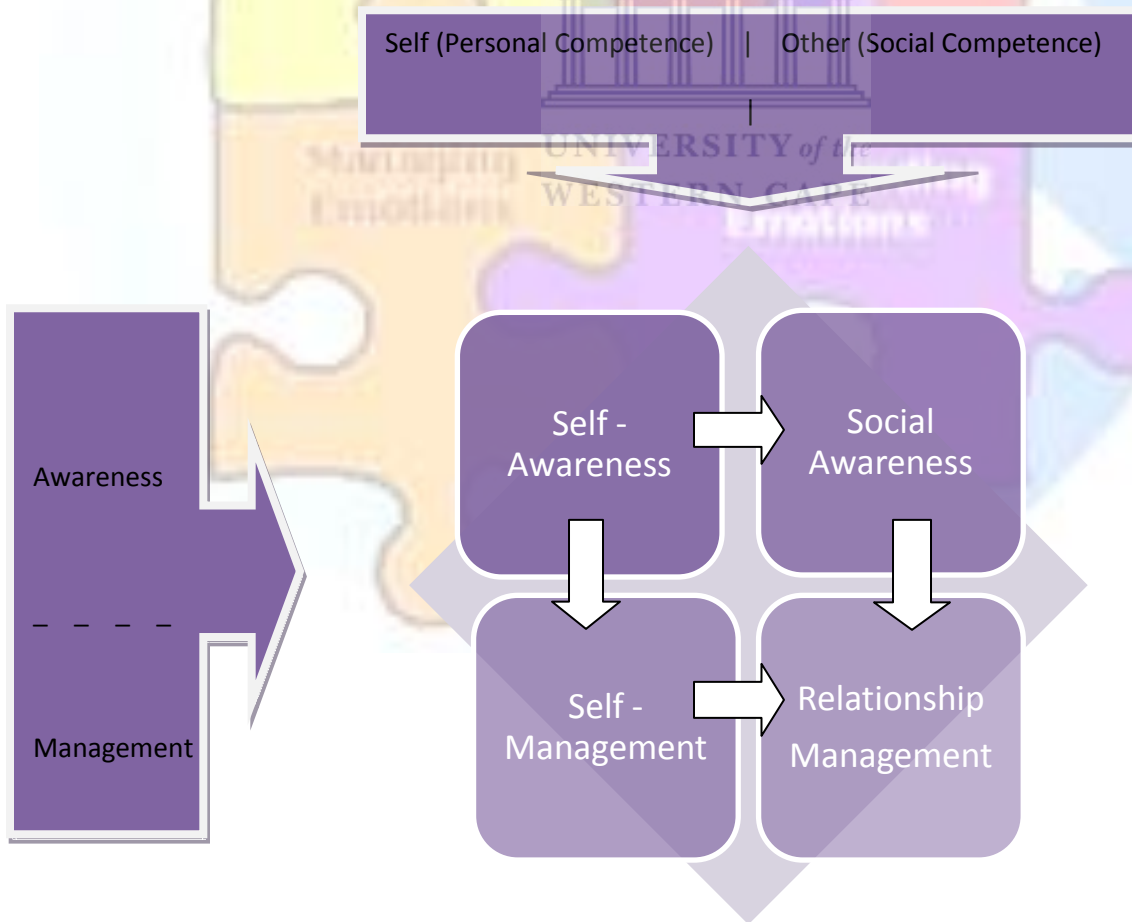
Figure 2: **Competence Model of EQ by Goldman (b) (Cherniss and Goleman, 2001)**

Self (Personal Competence)	Other (Social Competence)

	Self – Awareness	*Social Awareness*
Awareness	❖ *Emotionally self – aware*	❖ *Empathy*
	❖ *Accurate self – assessment*	❖ *Service – orientation*
	❖ *Self - Confidence*	❖ *Organisational awareness*
– – – –	*Self – Management*	*Relationship Management*
Management	❖ *Emotional self – control*	❖ *Developing others*
	❖ *Trustworthiness*	❖ *Influencing*
	❖ *Conscientiousness*	❖ *Communicating*
	❖ *Achievement drive*	❖ *Managing conflict*
	❖ *Initiative*	❖ *Visionary leadership*
	❖ *Adaptability*	❖ *Catalysing change*
		❖ *Building bonds*
		❖ *Teamwork & collaboration*

Based on the models above, it is possible for leaders to be able to improve decision-making through their knowledge and management of emotions as well as accurately recognise emotions

thereby being able to link emotions to opportunities and problems (Gardner et al., 2001). Caruso (cited in Gardner et al., 2001) has suggested that greater self awareness influences performance and the ability to identify emotion enables the leader to be aware of their emotions and that of the subordinates. He further argues that leaders that are able to use emotions to guide decision making are better able to motivate employees by engaging them in activities that involve emotions. These researchers are of the opinion that the ability to successfully manage emotions allows the leader to handle stress of the job more effectively and efficiently.

With the increase usage of EI in research and applications in the workplace, managers, scholars, researchers and practitioners have proposed many definitions of EI (Gardner et al., 2001). However, there is one approach that considers both emotions and cognition equally, namely Mayer and Salovey (1997) cited in Gardner et al., (2001) that state that EI does not reflect a single trait or ability but a composite of distinct emotional reasoning abilities.

2.5 DIFFERENT STUDIES CONDUCTED IN THE EMOTIONAL INTELLIGENCE SPHERE

Development in neuroscience has distinguished between emotional intelligence competencies and cognitive abilities such as IQ. Emotional intelligence is a set of characteristics that is not included in intelligence tests (Mancusi, 1999). A measure of a person's IQ could be used to predict what technical expertise such a person would require to master a task. This represents the initial indication as to whether the person could work for a certain organisation. However, such a measure does not present an indication as to whether an individual can rise to a leadership

position within the organisation. Today researchers emphasise the use EQ as a better measure of an individual's ability compared to IQ (Matthews, 1996).

Scientists also believe that EQ is a learnable intelligence unlike IQ which is something more stable. It is believed that EQ is the single most personal quality that each individual must develop in order to experience a breakthrough in life. Emotionally competent persons are better able to cope with demanding situations and pressure (Hamachek, 2000). Emotions are necessary energy for things like ethics, trust and stable relationships (Gibbs & Epperson, 1995).

Emmerling and Goleman (2003) suggests that longitudinal studies exist proving that people who have improved their EQ levels lead to an improvement in performance (Boyatzis, Cowan & Kolb, 1995). These studies were conducted through assessing individuals' competencies at the beginning of a competence building program, upon graduation and again years later in the workplace.

A number of findings in the literature suggest that EQ plays an important role in understanding the dynamics of emotions in relation to performance, particularly within a leadership context. Salovey & Caruso (2004) point out that individuals with high levels of EQ are more adept at managing their emotions and understanding people. They also point out that individuals avoid self destructive and other negative behaviour and reveal more positive social interaction.

Adversity presents additional challenges to people and their ability to see it as a positive experience that could enhance their potential in the future. Several negative emotions exist that could influence human thinking and behaviour and influence their self-esteem. By building someone's emotional intelligence it is possible to put the individual in a better position to see the proper perspective (Miller, 1997).

It has been scientifically demonstrated that emotions are an integral part of the body's cells and atoms and affect thoughts and actions. Being in contact with emotions could assist an individual in being more aware of internal feelings as well as that of others. Emotionally intelligent individuals tend to focus their attention on conflict resolutions and turbulent times. Being emotionally intelligent could allow the individual to appropriate emotion at times (Caudron, 1999).

Benefits of acquiring and grooming emotional intelligence are (De Klerk and Le Roux, 2001):

- Enable recognition of own feelings

- Finding the balance between expressing and controlling feelings

- Understanding that he or she is responsible for their own feelings

- Provide a balance between a person's thoughts and feelings

- Have empathy and understanding people better

- Healthier relationships with others

- Fulfilling own needs

- Being more assertive, a person can set effective goals

- Getting rid of emotional baggage

2.6 DIFFERENT INSTRUMENTS ON EMOTIONAL INTELLIGENCE

Bar-On (1988) was the first to adopt EQ in his studies and work. He posed the question as to whether EQ could enhance or increase the ability to be effective in life. He identified a series of factors that could impact on success and developed a tool that measured strengths or deficits on
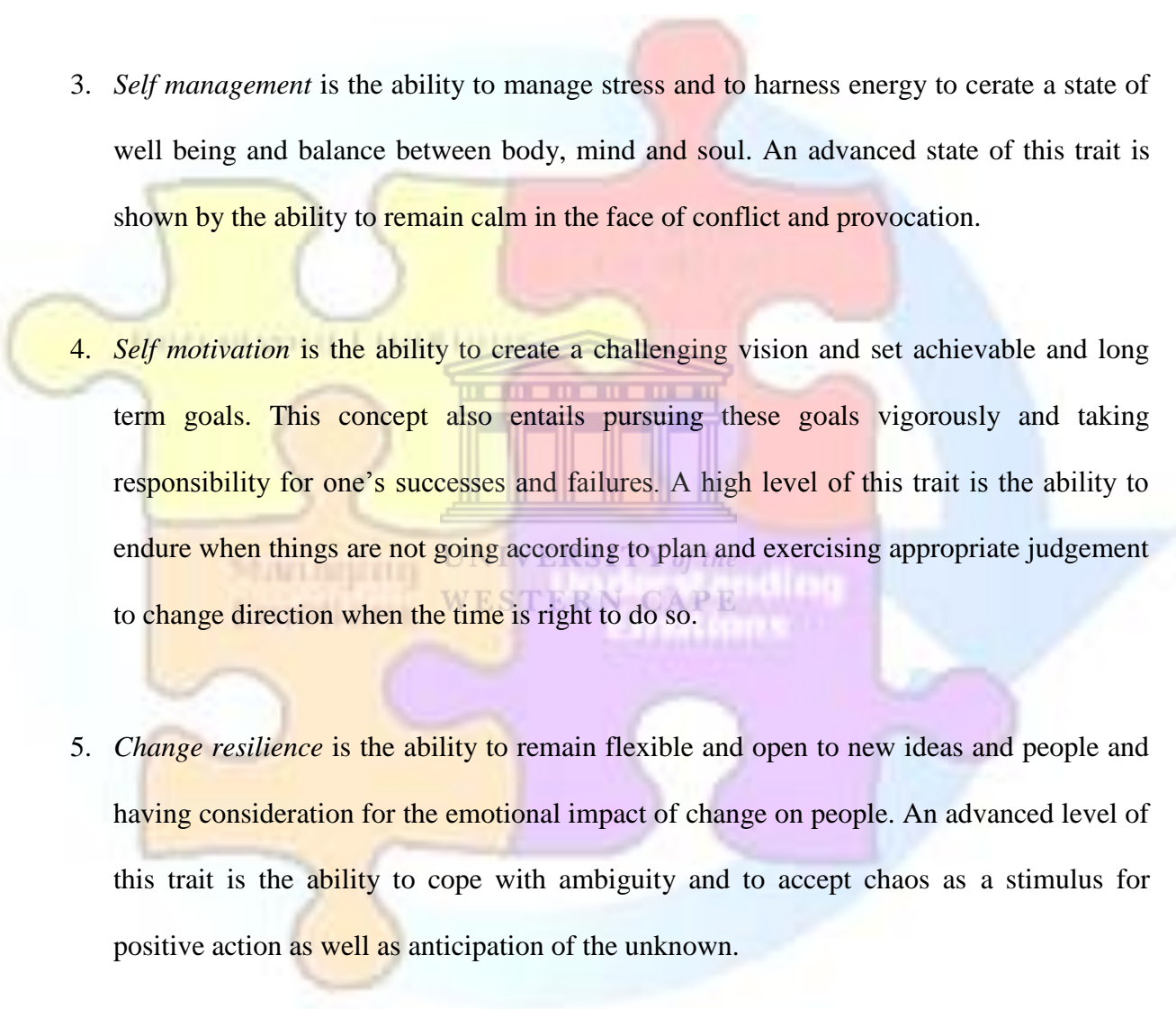
such factors (Caudron, 1999). Bar-on (1988) defined the importance of EQ as one's ability to cope with the daily demands of changing situations and to get along with others. He also emphasised the use of EQ as a measure to improve performance by understanding strengths and limitations within teams and individuals. Bar- On formulated the EQ-I which has been constructed to measure emotional and social competent behaviour as opposed to traditional personality traits or cognitive capacity. This instrument serves as a 360-degree measure and has proved to be a valid and reliable estimate of an individual's ability to cope with pressures and the daily demands in life (Emmerling et al, 2003).

The EQ Map is another way of measuring various components of human intelligence through a self reporting questionnaire. This enables one to identify a person's interpersonal patterns of success (Grossman, 2000). This tool is widely used by organisations to measure EQ of individuals.

Another tool arising from EQ in the workplace is the 360-degree survey instrument that is designed to measure emotional intelligence in the workplace. The use of this tool is able to enhance an individual's self knowledge and could improve managerial behaviour (Sala, 2001).

The Emotional Competency Profiler (ECP) divides EI into seven clusters of emotional competencies ranging from emotional literacy, self esteem, self management, self motivation, change resilience, interpersonal relations and integration of head and heart.

1. *Emotional literacy* represents an awareness of the ebb and flow of one's own and others emotions and gaining a deeper understanding of these emotions within a particular context.

2. *Self esteem* refers to an honest, objective and realistic assessment of one's own worth as an equal human being. A high level of self esteem is denoted by the courage to act in accordance with personal values and convictions and the ability to admit one's mistakes when appropriate.

3. *Self management* is the ability to manage stress and to harness energy to cerate a state of well being and balance between body, mind and soul. An advanced state of this trait is shown by the ability to remain calm in the face of conflict and provocation.

4. *Self motivation* is the ability to create a challenging vision and set achievable and long term goals. This concept also entails pursuing these goals vigorously and taking responsibility for one's successes and failures. A high level of this trait is the ability to endure when things are not going according to plan and exercising appropriate judgement to change direction when the time is right to do so.

5. *Change resilience* is the ability to remain flexible and open to new ideas and people and having consideration for the emotional impact of change on people. An advanced level of this trait is the ability to cope with ambiguity and to accept chaos as a stimulus for positive action as well as anticipation of the unknown.

6. *Interpersonal relations* are underpinned by an intuitive understanding of deep caring and compassion for people. An advanced level of this trait is shown by the ability to make

emotional contact with people and to build trust and loyalty toward long term relationships.

7. *Head and Heart* are reaching a balance between the head (IQ) and the heart (EQ) (Wolmarans, 2001).

2.7 EMOTIONAL INTELLIGENCE AND LEADERSHIP

2.7.1 LEADERSHIP DEFINED

According to Hogan, Curphy and Hogan (1994) leadership is persuasion, not domination where they can acquire others to carry out their instructions in terms of the leader's vision. Leadership is also about building cohesive and goal-oriented teams. Vrba (2007) states that leadership is the art of persuading people to work towards a common goal. However, this seems to be easier said than done due to the complexities and dynamics in managing people.

There is a growing body of evidence that supports the view that EI plays an instrumental role in effective leadership. The question arises as to whether research can determine how leadership affects organisational effectiveness and assist organisations in choosing better leaders (Hogan et al., 1994).

Research findings have indicated that between 48% and 82% of the variance in leadership is explained by personality. Ellis et al. (1988) cited in Hogan et al., (1994) have indicated that the ability to control one's expressive behaviours is linked to leadership emergence. Research has confirmed that there is a consistent association between high scores on dimensions of surgency,

agreeableness, and emotional stability as being perceived as leader like in a group with no appointed leader (Hogan et al., 1994).

Leaders fail due to a number of reasons – some of these can be explained by economic and business factors such as market decline, restructuring of companies and the like. However, it is maintained that leaders fail due to personal rather than economic reasons. They don't fail due to their expertise but due to reasons associated with their inability to build a team and group cohesiveness (Hogan et al., 1994).

2.7.2 THE IMPORTANCE OF EMOTIONAL INTELLIGENCE AND LEADERSHIP

According to Childs (cited in Singh, Manser & Mestry, 2004) emotional intelligence has become part of how leaders meet significant challenges. Fullan cited in Singh et al., (2001) further points out that within the context of a changing culture and the challenges facing leaders, it comes as no surprise that the most effective leaders don't have the highest ratings in an IQ sense, but are those that have a combination of intellectual brilliance and emotional intelligence. Bar-On (1988) investigated qualities that led to success and discovered that there was more to success than the traditional intelligence (IQ) as a predictor. Having said this; Goleman, Boyatzis & McKee (2002) tabulated the concepts of leadership into the traditional concepts of leadership as appose to the modern approach to leadership.

Figure 3: Concepts of leadership: Traditional vs Modern

Traditional	Modern
• Leader crafts vision	• Group crafts vision that leader articulates
• Leader demands performance	• Leader inspires performance
• Paternalistic model	• Partnership model
• Emphasis on leader's intellect	• Emphasis on leader's emotional intelligence
• Leader seeks to control others	• Leader seeks to motivate and emphasise with others
• Team focuses on work arena	• Team seeks balance between work and home

According to Vrba (2007) leadership is the art of persuading people to work towards a common goal. However, this seems to be easier said than done due to the complexities and dynamics in managing people. According to Vrba (2007) transactional leaders motivate people by appealing to their self interest. Corporate leaders tend to adopt an approach where pay and status is exchanged for work. Burns (1978) cited in Vrba (2007) describes transformational leaders on the other hand as a process whereby leaders and followers raise one another in a participatory manner to higher levels of motivation and morality. According to Vrba and Burns,

transformational leadership is more emotion-based than transactional leadership and involves heightened emotional levels.

The common thinking is that transformational leadership is desirable because it promulgates loyalty, trust and commitment. Research is currently aimed at identifying individuals with the potential to become transformational leaders. This is of particular relevance to South Africa because of the unique socio economic context and the rapid transformation of organisations and previously disadvantaged people (Vrba, 2007).

In addition to the unique post apartheid transformational forces that are prevalent in the South African environment, significant changes have also been taking place on a global level that have resulted in the opening of new markets and global competition. Breakthroughs in information technology have also contributed to the way in which organisations are operating and competing. South African organisations are in dire need to develop transformational leaders that will be able to shape organisations and people in such a way that organisations will be able to remain competitive and profitable (Vrba, 2007).

A paper done by Hayward, Amos and Baxter (2008) with the purpose to explore the relationship between performance, leadership style and emotional intelligence looked at the empirical research relating to the type of leadership associated with employee performance. The focus is on leadership constructs of transactional and transformational leadership as well as emotional intelligence as a requirement of effective leadership (Hayward et al., 2008).

Besides transformational leadership, leaders with greater emotional intelligence will be more effective leaders (Goleman, 1995). He further suggests that emotional intelligence plays an important role in leadership effectiveness and proposes that the ability to understand emotions in

individuals contributes to the effectiveness of leaders. Goleman (1995) further emphasises that emotions can drive trust, loyalty and commitment. According to Cooper (1997) managers with high emotional intelligence can achieve results from employees that are beyond expectations.

Goleman (1995) further points out that emotional intelligence is a requirement for successful leadership. This view is supported by George (2000) who suggests that leaders with high emotional intelligence will be able to use positive emotions to envision major improvements to the functioning of the organisation. These types of leaders are able to obtain greater cooperation from employees and tend to create mutually agreed set of values in terms of developing employee potential in an organisation. In this way it is also apparent that such leaders can elevate employees to reach new levels to deliver superior performance.

Emotional intelligence can assist leaders in difficult leadership roles and especially in the highest levels within organisations where emotional intelligence can provide leaders with a competitive edge. Merkowitz and Earnest (2006) argue that individuals have improved their leadership capacities and skills that consequently enhanced and improved their personal lives. In a tertiary environment it has been found that educators reach higher levels of job satisfaction that produces high levels efficiency and effectiveness when demonstrating very specific emotionally intelligent behaviours and leadership skills.

Leadership at tertiary institutions is critical to educators, particularly since they have to transfer leadership skills and knowledge to students that can be regarded as the future leaders of society. The ability of leaders to understand the emotions of other people in the workplace and to be able to effectively manage and control emotions is integral to producing and creating good leadership and appropriate levels of job satisfaction (Singh et al., 2004).

Goleman (1998) suggests that the level of EI determines the potential for learning practical skills that create emotional competencies. Singh et al., (2007) suggest that if there is a link between emotionally intelligent behaviour of a school principal and an educator's sense of job satisfaction, and then it stands to reason that Emotional Intelligent Behaviours (EIB) and leadership qualities could influence an educator's attainment of job satisfaction.

EIB's are actions that can be observed and measured (Manser, 2005 cited in Singh et al., 2007). They are made up of a number of identifiable characteristics and are important measures of a leader's ability to handle others and themselves that can be regarded as appropriate. These characteristics are observed in the interpersonal domain (appropriateness of a leader's responses and subsequent actions to emotional signals from others) and in intrapersonal domain (appropriateness of a leader's reaction and corresponding behaviour as a result of internal emotions being experienced).

According to Yuki (1998) cited in Singh et al., (2007) shared leadership not only involves leadership behaviours to build loyalty amongst followers but it also empowers followers to accomplish objectives by becoming leaders in their own fields of expertise. Thus it is important to empower educators and can be regarded as an important aspect in establishing emotionally intelligent collaboration toward establishing a collegial environment with loyalty and a participatory framework. Goleman (2004) further points out that research in leadership over the past two decades strongly suggest that EI of leaders matters twice as much as that of IQ or technical expertise. Sternberg (1996) cited in Singh et al., (2007) supports this view where social and EI are four times more important than IQ in determining success.

The above view is of particular importance to schools and universities where leadership of senior management is challenged by complexities and diverse challenges of today and a new focus collegial leadership and the creation of a sense of community is required in terms of shared leadership. Goleman (2004) also suggests that leaders that are emotionally intelligent can connect more smoothly with people in terms of reactions and feelings and can handle disputes more astutely when it arise. Thilo (2004) cited in Singh et al., (2007) argues that EI leaders experience greater sense of wellbeing, improved relationships, happier employees and lower employee turnover.

Childs (2004) cited in Singh et al., (2007) suggests that leadership need to evolve in order to match the growing sense of democracy and independence in the workforce and employees have far more choices and options than before. Leaders now need to manage and lead an empowered workforce beyond the consultative, co-operative and democratic styles of today. Zaleznik (2004) cited in Singh et al., (2007) argues that managers and leaders are different in that managers are more reactive and prefer to work with people to solve problems but have low emotional involvement. On the other hand, leaders are more emotionally active and seek to shape ideas instead of responding to them.

Caruso (2003) cited in Singh et al., (2007) suggests that EI is not replacement for on the job skills and logical thinking but adds to the variety of skills that enable one to develop people through effective leadership skills. Goleman (1998) supports this view in that EI can be more effective than IQ in terms of personal communication, motivation, self-control and empathetic behaviour. He argues that there are emotional factors that are not IQ related and have greater impact in the workplace when addressing relationships. Traditional cognitive intelligence (IQ) is

combined with non-cognitive intelligence (EI) in order to assist leaders to perform to their optimum and inspire their followers to be successful and happy (Bazerghi, 2003).

Furthermore, Bliss (2006) suggests that all leaders share common traits; the first being guiding vision and purpose where the leader has a clear idea of what to do in a professional and personal capacity regardless of obstacles that may arise. The second characteristic is passion or enthusiasm and the ability to communicate this passion to others. The third factor is integrity that consists of self-knowledge, candour and maturity. He also points out that a leader has to have EI in order to align personal and subordinate goals to accomplish organisational goals.

Evidently the collegial approach toward understanding leadership is strongly supported by research findings. Dantley (2005) cited in Singh et al., (2007) suggests that much of this kind of thinking is based on the tenets of scientific management by Frederick Taylor. Traditional management implies that the ideal organisation is characterised by stability and the organisation runs like clockwork. Collegiality on the other hand is a collaborative process that involves the devolution of power to teachers and lecturers in order for them to become an integral part of the leadership process guided by the institution's shared vision. Under these circumstances collegial leadership is viewed as a process that encourages and facilitates shared decision-making and shared leadership with the purpose of getting people to want to act.

Visionary leadership is the ability to inspire others to work together toward common goals. Furthermore it is about the ability to articulate and arouse enthusiasm for a shared vision and mission. According to Kippenberger (2000) cited in Barry and Plessis (2007) the use of a wrong leader sometimes leads to project failure. Ammeter (2002) cited in Barry & Plessis (2007) found leadership behaviours to be a critical success factor of project management. He also found that

project managers using transformational leadership styles and not transactional leadership styles combined with emotional intelligence abilities do enhance actual performance.

Catalysing change is the ability to recognise the need for change, to remove barriers and to pursue new opportunities (Cherniss & Goleman, 2001).

Teamwork and collaboration is the ability to work co-operatively with peers. Team orientation and team collaboration are two key indicators for project success. Most work activities are structured in such a way where employees are put into teams and work together with far greater dependency than before.

It has also become very critical at tertiary institutions where educators need to be able to raise the level of emotional intelligence of students in order for them to be able to become more people oriented in terms of the current paradigm where organisations are experiencing significant changes in a complex business environment. In addition, students also need to adopt a more creative approach after graduating due to the nature of limited employment opportunities that are prevalent in the market.

People with low EI skills tend to be reactive and are dictated by the environment and the situation. This view is supported by Palmer, Jansen and Coetzee (n.d.) where EI has become an important leadership attribute to improve organisational effectiveness.

The 21st century has been characterised by leaders and managers who are expected to cope with the rapidly changing world of work. Organisations have become flatter in terms of hierarchical structures meaning that leaders and managers now engage employees by giving them more and more responsibility. Lewis (1998) cited in Coetzee and Schaap (2005) argue that leaders need to be able to cope with change more effectively in order to be successful. This implies that they

need to be strong on abilities such as team orientation, communication, problem-solving and change makers. Ryback (1998) suggests that leaders and managers should be more able to demonstrate a greater empathy and concern for people issues than before. Leaders need to be much more aware and conscious of the way in which people view the world. An EI leader should focus on shared values, training and development of people and should be able to instil vision and purpose. Bliss (2000) supports this view and states that a leader has to have EI in order to motivate people to achieve company outcomes.

According to Coetzee and Schaap (2005) successful leaders need the ability to be aware of their own feelings and emotions but more importantly, they need to be able to identify the emotions of people. Leaders need to be able to read people's emotions and by doing this well can lead to building trust and loyalty and improve organisational performance. This view is generally supported by most researchers who agree that this is one of the most important abilities that a 'new' leader should have (Coetzee & Schaap, 2005).

A study done by Stuart and Paquet (2001), focused on the EI factors that can be considered to be characteristic of effective leaders. People that are not in control over their emotional life, tend to fight battles within that are counter productive in terms of being clearly focussed and maintaining clear thoughts. This kind of mindset contributes to decreased productivity and an overall decline in organisational success. It is envisaged that leaders that are able to control their emotions and that are clearly focussed will be required to lead an emotionally intelligent organisation (Cooper, 1997).

According to Stuart and Paquet (2001) excessive emotions can disrupt reasoning or analysis and recent research findings suggest that too little emotion can be more destructive to a company.

Emotions are a vital source for activating energy for ethical values such as trust, resilience and integrity. Emotions also provide energy for social capital which represents the individual's capacity to build trusting and profitable business relationships. The main underlying feature in this argument is that a successful leader must display the ability to use emotions to build social capital. This aligns with Goleman's observation that EI includes the ability to motivate self and others.

Table 1: Why it is important for leaders to possess EQ (Quinn, 2004)

Leaders vs. Followers

It is normal to be...	Leaders need to be...
➢ **Self- Focused** • Personal needs drive most behaviour • Serving own interests is the primary motivation	➢ **Other – Focused** • Secure and put the common good above own personal interest • Genuinely as concerned about the welfare of others as his/her own
➢ **Externally- Directed** • Identity is shaped by the groups to which you belong and/ or possessions • Conscious of the judgments of others, you try to meet their	➢ **Internally – Directed** • Realistic about who they are, with congruent values and behaviour • Reflective on life, internalizing the lessons to be learned

expectations	
➢ **Comfort – Centred**	➢ **Purpose – Centred**
• Preferring a stable world; reactive	• Curios about what lies beyond his/her knowledge horizon
• You know what you know and you are satisfied with that	• Committed to doing work that is meaningful
	• Resilient in the face of uncertainty
➢ **Internally Closed**	➢ **Externally Open**
• For you the world is simple and you are prepared to defend your point of view	• Recognises that the world is way too complex to be sure about much
• You focus on the real world which you know to be unforgiving.	• Quickly adaptable to new situations.

Bar-On (2006) explains leadership in relation to leadership skills and behaviours underpinned by four pillars specific to leadership behaviour, namely, centred and grounded, action-taking, participative and tough-minded. Furthermore, he classifies leadership skills into three functional areas, namely, people-oriented, process-oriented and organisation-oriented. The importance of this definition and classification of leadership skills allows for the interpretation of underlying attributes or competencies that could have an impact on leadership performance.

The construct of EI has gained much popularity as a potential underlying attribute of effective leadership. Current researchers have described effective leadership skills to depend on the understanding of emotions and abilities that are associated with EI (Palmer et al., 2000).

To what extent EI can account for effective leadership skills remains unknown. Although there has been much research that tried to relate effective leadership skills to EI, there is too little published research that explicitly examines this relationship. There also appears to be quotations that are out of context from organisational psychologists for example, "EI accounts for more than 85% of exceptional performance in top leaders". According to Mayer et al, this claim is not supported by empirical evidence and is unfounded in applied psychology (Palmer et al., 2000).

2.8 MANAGEMENT AND EMOTIONAL INTELLIGENCE

There are also managerial implications where the performance of individuals is critical to the effectives of any organisation and needs to be managed. Organisations require performance management systems that are directly linked to strategic objectives of the organisation ensuring that the strategic objectives are converted into operational goals and objectives for each employee (Hayward et al., 2008). In terms of this argument managers play a crucial role regarding the implementation of a performance management system and also in the leadership of desired performance outcomes of their subordinates. Organisations need to be able to identify an appropriate leadership style that is most relevant in order to be in alignment with strategic performance indicators. The organisation should not only be in alignment with these indicators but in tune throughout the organisation.

McCauley (1998) argues that the effectiveness in the workplace of employees goes beyond traditional interpersonal and teambuilding roles of the manager. He suggests that relationships

depend on personal qualities such and EI behaviour. The focus of managerial development should be on enhancing leadership attributes such as self management, self motivation, self esteem, self reliance and capacity to interrelate with others in an emotionally intelligent manner (Palmer et al., n.d.). He further suggests that managers that are emotionally intelligent tend to express their emotions more appropriately to others and respond to emotions of others at work. EI managers tend to be more capable of managing their emotions and those of others in the workplace.

EI managers achieve greater overall organisational performance and they are more committed to the organisation and use positive emotions in order to bring about improvements in the organisation (Palmer et al., n.d.). EI managers also use emotions in order to improve their decision-making. They are also able to instil enthusiasm, trust and cooperation within employees. According to Collins (2001) managers with high EI had subordinates with higher organisational commitment. This paper makes a significant contribution to the literature particularly with regard to the EI and its influence on the performance of South African managers in tertiary institutions.

2.9 EMOTIONAL INTELLIGENCE AND SELF-ACTUALIZATION

According to Bar-On (1996) self actualisation is the ability to realise one's potential capacities characterised by becoming involved in pursuits that lead to meaningful, rich life. This is closely linked to the pursuit of personal and career goals. This type of thinking is about coming to know the individual purpose by identifying specific talents and aligning them in life. Research in this area indicates that only when people discover their unique potential and purpose are they able to overcome obstacles and meet challenges of success.

Individuals with high ratings on self actualisation are regarded as optimists. Optimists are regarded as better performers in school, universities, at work and on the sports field (Stuart & Paquet, 2001). They also tend to exceed aptitude test predictions; they have better health and even live longer. EI involves aspiring to higher needs of others as well as tuning into ones own personal growth needs. Part of self actualisation can be the ability to find one's own unique purpose and potential. Once this platform has been created, motivation and energy are generated and form linkages for leading others.

In order to understand self actualisation of others, leaders need to have understood and experienced the process of self-actualisation. Another way of interpreting this is to look at Maslow's model of hierarchical needs . Individuals will first try to satisfy their most basic needs before paying attention to higher needs such as self actualisation. This would imply that leaders would have satisfied more lower order needs than other students.

In addition, leadership requires constantly meeting challenges and overcoming obstacles. According to Bar-On (1996) having a clear career and life plan is also an indicator of a developing self actualisation process. In terms of this study there appears to be a marked difference between EI of leaders compared to non leaders. In addition, it has been found that non leaders rate much higher on external locus of control than leaders. Non leaders tend to conform to organisational norms where leaders can be regarded as creative non conformists who are at times regarded to work against the system (Stuart and Paquet, 2001).

2.10 EMOTIONAL INTELLIGENCE AND PERSONALITY

There are several reasons to understand emotional intelligence and personality together. Emotional intelligence is a part of human personality, and personality provides the context in

which emotional intelligence operates. Emotional intelligence can be considered a mental ability that involves the ability to reason validly emotional information, and the action of emotions to enhance thought. Personality can be defined as a person's pattern of internal experience and social interaction that results from the action of that individual's major psychological subsystems. More psychological subsystems involve emotion, cognition and the self (Reinhold & Reinhold, 2009).

Placing emotional intelligence in a psychological context allows one to compare and to contrast the different parts of personality (Reinhold & Reinold, 2009):

1. those that are similar

2. those that are related

3. those that are different

4. understanding EI as a part of the broader personality system can also alert researchers as to what parts of personality may influence EI

5. Considerable research exists as to how personality parts are expressed. Understanding that EI of personality indicates a great deal about how it will be expressed

According to a study done by Coetzee et al (2006) on 107 South African leaders in manufacturing found results that indicates that others perceived introverted types as more emotionally competent than the extraverted types. It is argued that this could be due to the introspective and quiet nature of these personality preferences, which may have lead them to being perceived as more emotionally competent and in control of their emotions. Extraverted personality types on the other hand, appeared to have higher confidence in their level of

emotional competence. These personality types are action oriented, confident and sociable and may verbalise their emotional nature (Myers et al, 1998).

Higgs's (2001) study regarding the relationship between the MBTI personality preferences and emotional intelligence indicated that the dominant mental function of intuition and associated personality types are significantly related to higher levels of emotional intelligence.

There is also a lack of a strong and comprehensive relationship between the MBTI personality preferences and the emotional competency scales of the ECP and may be partly due to the psychometric limitations of the MBTI and moderate ability to predict behaviour (Higgs, 2001). Further reasons point to methodological limitations and its potential bias in terms of gender and race. The findings imply that emotional intelligence is closely associated with self awareness and one's sense of psychological being.

2.10.1 PERSONALITY, EMOTIONAL COMPETENCES AND SELF-ESTEEM

Positive relationships were found between three constructs. Self-esteem construct was found to be a more reliable predictor of emotional competence than the MBTI personality preferences. This finding makes an important contribution to the existing body of knowledge concerned with the evaluation of personality variables that influence effectiveness of leaders (Coetzee, Martins, Basson & Muller, 2006).

The global nature of competitiveness within which leaders operate has placed higher demands than before on their ability to understand and manage the impact of emotions and related behaviours in terms of organisational success (Higgs, 2001; Kinicki & Kreitner, 2006; Martin, 2005). The focus of leader development within an organisational context has shifted to the

enhancement of leader attributes such as self management, self motivation, self esteem and the capacity to increase emotional intelligence (Coetzee, 2005, Dearborn, 2002). These trends have subsequently led to a renewed interest in personality traits and the role of emotions in organisations. A number of scholars have supported this view and emphasise the importance of personality traits as a means of predicting a leader's behaviour and the contribution of a leader's emotional intelligence to organisational effectiveness (Ashkanasy & Daus, 2005).

Knowledge about individual's personality preferences enhances individual's ability to obtain a better understanding, stress management, interpersonal communication, problem solving and decision making (Kennedy & Kennedy, 2004). Self esteem has been pointed out to be an important self actualising characteristic of effective leaders (Coetzee, 2005). Self esteem includes internal, private feelings and self consciousness that influence emotional stability in a social context (George, 2000).

The factors that underpin a leader's ability to demonstrate emotionally intelligent behaviour is varied and complex (Dulewicz & Higgs, 1999). Cognitive theories suggest that behaviour is shaped by personal dispositions in addition to a person's specific cognitive and effective processes including perceptions and feelings of people in situations. Behaviour is a product of both situation and stable personality characteristics.

Limited research has been conducted on the relationship between personality, self esteem and emotional competence. Current research suggests that although these three constructs are unique and distinct, they are likely consequences of each other (Coetzee, 2005). Research by Higgs (2001) presented positive and strong relationships between personality and emotional intelligence of leaders. Ciarrochi, Chan & Caputi (2000) found that emotional intelligence and

self esteem were positively related, with higher emotional intelligence being associated with higher self esteem.

According to Dulewicz and Higgs (2000) emotional intelligence implies that someone who has higher emotional intelligence has certain abilities and competencies that another individual might not have. Individuals with well developed emotional intelligence abilities and competencies can negotiate their way more effectively than others through interpersonal exchanges in challenging situations. Emotional competence also implies a sense of psychological well being.

2.10.2 EMOTIONAL INTELLIGENCE, PERSONALITY AND SOCIAL RELATIONSHIPS

In Lopes, Salvovey and Straus's (2003) study, a sample of 103 college students was studied and it was found that both emotional intelligence and personality traits were associated with concurrent self reports of satisfaction with social relationships. Individuals scoring higher on managing emotions subscale of the Mayer, Salovey and Caruso Emotional Intelligence Test (MSCEIT), were more likely to report positive relations with others and less likely to report negative interactions with close friends. These associations remained statistically significant even controlling for significant Big Five personality traits and verbal intelligence.

While personality theory emphasises temperamentally driven dispositions, theories of emotional intelligence focuses on skills that can be acquired through learning and experience. However, traits and skills are most likely intertwined. Personality traits may be, in part, genetically based and fairly stable over time. However, adult personality is not rigidly determined and can be changed. Individual learning and experience, in interacting with the environment changes and develops the personality (Caspi, 2000). Empirically the link between emotional intelligence and

personality is minimized when emotional intelligence is assessed through an ability test and personality through a self report. Personality measures tend to reflect typical performance while ability tests may reflect optimal performance.

2.10.3 THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND PERSONALITY AMONGST UNIVERSITY STUDENTS

The traditional approach by educationists has been to focus on logical and linguistic intelligence. This view have been challenged by many studies recently where researchers are beginning to argue that interpersonal and intrapersonal competencies and emotional intelligence may be more important for success. Studies of managerial derailment have been attributed to personality characteristics such as inability to change, poor treatment of others and interpersonal relationship problems.

Education has been built on mindset of logic and analysis. For a long time the outcomes within an educational framework has focussed on developing graduates and students with sound knowledge and the ability to be creative, adaptive and practical. Very seldom is this the case where most of the emphasis is placed on cognitive factors. Instead it has been shown that over 90% of success has been attributed to non cognitive factors (Kemper, 1999).

Developing of emotional intelligence of students is not seen as the responsibility of an educational system. This view fails to take into account the fact that students relate emotionally to instruction and determines to a large extent whether they learn or want to learn. Feelings relate directly to thinking which guides human behaviour. EQ is created by high quality thinking which can lead to high quality emotions (Elder, 1997).

Most educational institutions and programmes tend to focus on technical skills development and very little time is devoted to emotional development. Higher education does not normally include the development of interpersonal and intrapersonal skills (Richardson, 2000).

Goleman (1995) has described EI in terms of knowing what you are feeling and being able to manage these feelings without being swamped. In addition, it is about being able to motivate yourself to get the job done and being creative.

Cooper (1997) supported the view that emotions when properly managed, drive trust, loyalty, commitment and account for improvement in productivity and organisational accomplishments. According to Goleman (1996) EI can be regarded as more important than cognitive intelligence and technical skills combined.

Goleman and Bar-On (1996) regard EI as a disposition rather than a cognitive ability. Currently there is little research that has been done regarding the relationship between EI and personality characteristics. Dulewicz and Higgs (2000) cited in Rothmann et al., (2002), have conducted a study and looked at the relationship between EI and broad measures of personality. Bar-On found that there was an association between EI and emotional stability. Others such as Newsome, Day and Catano (2000) found a relationship between EI and independence, self control and aversion. The above studies suggest that a relationship between EI and personality does exist, however, it must be noted that personality itself is complex and dynamic. Thus it is apparent that a gap does exist where there is a need to conduct more studies on the relationship between EI and personality factors.

In the study done by Rothmann et al., (2002), students demonstrated highest levels of EI in terms of emotional self awareness and flexibility. These higher levels can be explained by the fact that

university students are mature young adults who have taken the time to assess their personal strengths, weaknesses and preferences. In addition, the findings also suggest that their age is an attributable factor to the high levels.

The results of this study also showed that extraverts rated higher on interpersonal relationships, flexibility and tolerance than others. Significant differences were also found between extroverts and introverts regarding emotional self awareness and assertiveness with extroverts rating higher on both dimensions. The interesting point here is that introverts tend to control their impulses better than extroverts do. Extraverts tend to seek mutually satisfying relationships characterised by emotional closeness and can adjust their emotions to changing situations.

Students rated higher on interpersonal relationship, empathy and social responsibility who preferred feeling rather than thinking. The ones who preferred feeling tend to be more vigilant and aware of feelings of others and look for mutually satisfying relationships that are characterised by emotional closeness.

The results of this study confirm the findings of Newsome et al (2000) that personality characteristics correlate with EI and more specifically that extraversion is related to EI. Educationists should note that when planning curriculum and their educational strategy, business students need to be able to adapt to changes to tolerate stress and to be impersonally effective. These students are the future managers, leaders, employees and entrepreneurs. It is some concern that in South Africa the educational system produces students that prefer to organise and control while few of them prefer to report and explore.

2.10.4 THE ROLE OF EMOTIONAL INTELLIGENCE AND PERSONALITY VARIABLES ON ATTITUDES TOWARDS ORGANISATIONAL CHANGE

The paper written by Vakola, Tsaousis and Nikolaou explores how EI and the Big Five dimensions of personality can facilitate organisational change at an individual level by examining the relationships between these attributes and attitudes toward the organisational change. The sample consisted of 137 professionals who completed self report inventories assessing EI, personality traits and attitudes toward organisational change. The results indicate that there is a relationship between personality traits and attitudes toward change. Similarly, the contribution of EI to the attitudes to change was found to be significant indicating the value added value of using an emotional intelligence measure above and beyond the effect of personality.

George and Jones (2001) presented a theoretical model of the individual change process and propose that emotionally intelligent employees are more likely to adapt in emotional reactions to situations since they are more responsive to their emotions and moods with better knowledge. The current study explores the role of personality and EI in attitudes toward organisational change through the assessment of personality traits and the ability of the individual to manage emotions.

Change management literature show that in addition to beliefs, perceptions and attitudes, there are some individual difference variables such as personality traits and EI that seem to differentiate individual responses to change (Vakola et al., 2003)

Bar-On (1997) defined EI as an umbrella concept of non-cognitive capabilities, competencies and skills that can assist an individual to become more efficient to cope with environmental

demands and pressures. He proposed a model of non-cognitive intelligences that include five broad areas, namely, intra-personal skills, inter-personal skills, adaptability, stress, management and general mood. In recent years there has been an increased interest in EI in an effort to determine whether this concept accounts for variance not accounted for by personality and intelligence (Fox & Spector, 2000).

According to the study done by Vakola, Tsaousis and Nikolaou (2003), on 137 professionals found that personality characteristics have been linked to a number of significant organisational variables such as leadership, stress or work performance. Current research contributes to this direction as it supports a significant relationship between personality traits, EI and attitudes to change. These findings have several implications for research and practice within organisational change. Firstly, the relationship between extraversion, openness, agreeableness, consciousness and attitudes to change confirmed that stable individual characteristics are linked to organisational change. More in-depth analyses indicate that employees who are extravert, open to new experiences and agreeable tend to indicate a positive to organisational change profile. Focusing on this, managers or leaders who are selected to act as change agents may contribute significantly to the overall success of organisational change efforts. These personality characteristics can be used not only to select change agents but also to select employees for influential positions. In addition, attitudes to organisational change also relate to EI dimension of use of emotions for problem solving and beyond the effect of personality. This dimension describes optimistic, energetic and hopeful people and prepares well organised plans using their own emotions appropriately (Tsaousis, 2003). Organisational change causes redistribution of resources and power and consequently challenges the employees' assumptions of the organisation (Bartunek, 1984). Challenging stability could trigger an invoke severe resistance

and defence mechanisms (Schein, 1992). Being able to induce positive emotions to develop positive attitudes is critical toward employees' ability to cope with change.

2.11 THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND AGE AMONGST UNIVERSITY STUDENTS

Existing research indicates a slight relationship between EI and age. The findings suggest that EI is developing ability, particularly since accumulated life experiences contribute to EQ. The study's also challenges popular beliefs that age comes with wisdom and a perception that a generation gap exists in motivation and altruism. The relationship between EQ and age is slight with a majority of older people with higher EQ scores. There are also many young people with higher scores than others. This finding suggests that EQ could be enhanced through training and development. EI is a critical factor for success and while older people are perceived to be more endowed with EI than younger people, EI is a developing ability and therefore young people could be trained and become more committed to their own development in relation to success (Calif, 2011).

In a recent study done by Girdhalwal (2007); where 120 respondents in the Health Care Industry; correlations was used to test the relationship of EI with respect to age and gender. The study indicated a positive relationship (r = 8.98) between EI with respect to age. It showed that as age progress the scores of EI increases and vice versa. The study also showed a significant difference in the perception of male and female supporting staff with regards to EI. Therefore, EI of supporting staff increases as age progresses. Another study conducted by Salovey & Mayer (1990) included a sample of more than 3000 men and women of varying ages. The study

revealed a significant finding in EI with age. Emotional maturity tends to be after the age of 40. This finding is supported by Mayer (1990) where individuals peaked after 40. There is also a significant difference between males and females relating to supporting staff with regard to EI. Women tend to be stronger on competencies based on empathy and self regulation. Emotional sensitivity increases as age increases and vice versa. This could be based on experience and life long learning as individuals progress with age. In another study conducted by Girdhalwal (2007), he suggests the inclusion of demographic categories and how this affects age and EI. He argues that through his subjective experience higher academic levels are not necessarily correlated to IQ.

2.12 THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND GENDER AMONGST UNIVERSITY STUDENTS

It has been reported though that there are more similarities rather than differences between males and females. The differences that exist between males and females relate more to unique strengths that exist such as emotional self management and self confidence (Dearlove, 2003). Woman in relation to men tend to have more interpersonal skills, they are more aware of their emotions, show more empathy, are more socially responsible and relate better to others interpersonally. Men on the other hand tend to have a higher interpersonal capacity; they are more adaptable, solve issues better, are more flexible, cope better with stress and are more optimistic (Jopie Van Rooyen and partners, n.d.). Robbins (2003) suggests that gender differences have been found relating to EQ and the ability to lead others. He specifically emphasises that women have greater ability to emotionally to express themselves than men demonstrating a greater need for social approval and thus being able to lead more effectively.

Further studies show that EQ is closely related to IQ with gender differences (Furnham & Martin, 2004). Evidence also indicates that participants provided higher self estimates of their mother's EQ compared to their father's EQ and this related to both genders. This finding is consistent with most research that was conducted previously emphasising that women are more empathetic and socially skilled than their counterparts.

2.13 THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND RACE AMONGST UNIVERSITY STUDENTS

2.13.1 RACE DEFINED

Historically, the concepts of race imply that whole human groups are distinct and different from all other groups in relation to origin (Coon, 1982). This definition minimises the reality of individual variation within groups as well as biological features across groups.

Race could be defined as a population which differs significantly from other human populations with regards to the genes it possesses. It is an arbitrary matter which relates to geneloci (Boyd, 1950).

There is a general agreement that a race is a breeding population, largely, if not entirely isolated reproductively from other breeding populations. The measure of race is a reproductive isolation, arising commonly but not exclusively from geographical isolation (Gam, 1960).

Races are defined as populations differing in genes, but actually exchanging them (Dobzansky, 1944).

2.13.2 EMOTIONAL INTELLIGENCE AND RACE

Research indicates that members who exhibit a high level of EI come together faster and achieve higher levels of productivity more quickly than teams with less EI. Emotional contagion is a term that describes the ability of team members to derive emotions from other team members. In a local context EQ could play an important role in assisting with cultural/race diversity so team members can develop a more coherent purpose and common goals (Keogh, n.d.). For reasons highlighted above, race, culture and diversity will be utilized interchangeably.

The growing economy around the world is not purely residing within a technological paradigm of development and expansion, but several demographic factors are also at play which contributes to the change in the basic assumptions of work. Statistics point to an ageing workforce in many countries such as USA and Europe, as well as increasingly ethic and racial diversities (Boyatzis, 2001).

Cross cultural knowledge is a prerequisite for team building and working together in a team within an organisational context. Managing cross culturally is complex because business issues can be complex and often require a multi-dimensional approach. This presents new challenges as companies are expanding internationally with key factors such as gender, age, race, personality and EI to be taken into account. Understanding cultural differences is key but it is not the only factor to consider in achieving a successful team. Other factors that need to be taken into account could include purpose of the team, personality differences, culture, professional identities, EI and a robust support system (Keogh, n.d.).

2.14 ISSUES OF CONTROVERSY WITH REGARD TO EMOTIONAL INTELLIGENCE

While the schools of thought involving EQ have contributed significantly to the field of psychology, a great deal of criticism exists. The criticism is essentially aimed at seemingly naïve popular acceptance of the concept and sweeping claims; such as criticism has been levied against the self-report scales as a primary measure of EQ as opposed to EQ measured as an ability.

Despite the many mentioned and unmentioned assets to emotional intelligence, there are many view points against it, such as (Robbins & Judge, 2007):

➢ EI is too vague – many researchers do not understand the concept of EI. Different researchers focus on different skills which makes it difficult to get a definition of EI.

➢ EI cannot be measured – Due to the fact that EI is a form of intelligence; many critics have raised questions about the validity of some of the questions. In addition, measures of EI are diverse and have been subjected to the rigor as measures of personality and general intelligence have been.

➢ Validity of EI is suspect – The critics suggest that EI is too close to intelligence and personality and after controlling for these factors, EI is reduced to nothing. The arguments around this type of thinking are centred on the fact that EI is closely related to measures of personality, especially emotional stability.

Further critical analysis of EI studies indicated limitations in terms of the following (Groves, McEnrue & Shen, 2006):

• Lack of control group;

- Use an EI measure of unknown psychometric quality;

- Fail to control for demographic factors;

- Measure training effects at periodic times;

- Provide no check on social desirability as an alternative for results reported;

- Rely on suspect EI model;

- Involve training that does not involve EI;

- Use training criteria that appear devoid of emotional content

As result of the fact that the field of EQ is current and entails continuous and on-going development, several findings and literature is not integrated into relevant journals and other publications (Becker, 2003; Pfeiffer, 2001). Lastly, criticisms are levied against the importance of EQ in the field in relation to other factors which may warrant more attention.

2.15 CONCLUSION

The ability to interact with others can be determined by multiple factors and explanations. Some of these factors include intelligence, aptitude, experience, motivation, age, gender, cultural beliefs and the environment. Research indicates that intelligence is not a very good predictor of performance (Hunter & Hunter, 1984). Further investigation shows that non-cognitive factors are also important in a person's make-up and emotional intelligence is important for effective leadership (Cherniss, 2000). While lots of controversy exists in the literature regarding EQ, significant findings have been made to suggest that EQ can play a crucial role in effective leadership, particularly within an organisational context (Goldman, 2001).

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter essentially is an overview of how the research was conducted in order to determine whether there indeed is a relationship between *Emotional Intelligence gender, race and age* or not. Definitions of the various components will be furnished, together with the sampling design, research design, data collection methods and analysis techniques that will be utilized to determine and analyze the results to the proposed study.

3.2 RESEARCH OBJECTIVES

This is the overall goal of the research, also referred to as the primary objectives / primary problems or aim. This objective or aim describes the scope of the research process (Wisker, 2001).

The primary objectives of this study was to investigate if there does indeed exist differences between Emotional Intelligence based on gender, race and age amongst undergraduate university students.

3.3 HYPOTHESES

The *Research hypotheses* involve a prediction that may or may not be borne out of the data, hence an assumption.

H1- There is a statistically significant difference in EQ amongst undergraduate university students based on gender.

H2- There is a statistically significant difference in EQ amongst undergraduate university students based on race.

H3- There is a statistically significant difference in EQ amongst undergraduate university students based on age.

3.4 SAMPLING TECHNIQUE AND DESCRIPTION OF THE SAMPLE

Sampling is a process of selecting a sufficient number of elements of a population in order for the study, the understanding thereof, the properties and characteristics would make it possible to generalize the properties and characteristics to the population (Sekaran, 2003).

3.4.1 POPULATION

A population is defined as an entire group of people or thing of interest which the researcher intends to investigate; this could also be referred to as the target group (Wisker, 2001). The population for the intended research was conducted on that of the undergraduates university students a renown university in the Western Cape.

3.4.2 SAMPLE

The sample is a subset of the whole population, which is investigated by the researcher and whose characteristics will be generalised to the entire population, this is known to be the sample (Struwig et al., 2004). The sample subjects of a study are the individuals who have been selected to partake in the study.

The sample size was 150 subjects (N= 150). The sample subjects that were utilized for the proposed study are undergraduate university students. Due to it being the only practical method of data collection, especially taking into account the fact that population being large, thus making a study of all the elements impossible. The usage of 150 subjects is recognised as an adequate chosen sample and can be seen as a representative of the whole population (Sekaran, 2003).

3.4.3 SAMPLING PROCEDURE

This is the process involved in selecting the appropriate type of *sampling design* for the relevant study (Sekaran, 2003).

3.4.3.1 SAMPLING DESIGN

There are two main types of sampling designs, these being a) *Probability Sampling* and b) *Non-Probability Sampling.* Probability sampling is primary based on the principle that every element within the population has an equal opportunity of being selected as the sample subjects, this design results tends to be more representative of the population of interest and has the propensity to be relatively unbiased(Coldwell & Herbst, 2004). Non- Probability sampling is when the elements within the population do not have known chance or probability of being selected as part of the sample subjects (Sekaran, 2003). When this sampling design is utilized, the findings of the study cannot be generalized with buoyancy if it should be used to make inferences in contrast to the population (Sekaran, 2003).

For the purpose of this study, the process of *non-probability sampling design* was utilized. Which refers to the case where the probability of including each element of the population in the

sample is unknown, i.e. it is not possible to determine the likelihood of the inclusion of all representative elements of the population into the same (Sekaran, 2003).

This sampling design involves *availability sampling*, also known as *convenience sampling*. This sampling procedure consists of taking all cases on hand until sample reaches the desired size; this implies a collection of information from members of the population who are conveniently available to provide (Sekaran, 2003).   The advantages of selecting convenience is that is less costly in terms of time and money and being able to get the basic information quickly and efficiently. Whereas the disadvantages is that it could introduce serious biases as certain groups may be under-represented and being the nature of low levels of generalization potential it will therefore possess low external validity (Struwig, 2003).

3.5 DATA COLLECTION
Research relies on quality of the facts on which it is based. Therefore, an excellent research design and a representative sample are not suffice, if the analysis rests on the shoulders of incorrect data. Hence, the usage of an appropriate and accurate instrument for measuring and collecting data cannot be over looked and is of paramount importance (Struwig et al., 2004).

3.5.1   DATA COLLECTION METHOD

The data method that was employed in this study was questionnaires; hence it is a *Quantitative Study* which was personally administered to the respondents.

Questionnaires are written formulated set of questions to which the subjects/respondents record their answers, in most cases these answers has rather closely defined alternatives. Questionnaires

may used when the researcher knows exactly what information is desired or when a large population are meant to be reached in various geographical regions or lastly, when a sample can be assembled in a meeting area where questionnaires could be administered and collected immediately (Sekaran, 2003).

3.6 DESCRIPTION OF THE QUESTIONNAIRE

The questionnaire for this study was divided into two sections. Section one compromised of biographical data and section two compromised of the BarOn Emotional Quotient-Inventory. For both sections closed ended questions was used simply because the subjects will respond faster and it will be more effective for coding and capturing, this way paving the way for one to conduct the statistical evaluation required to derive the results. These sections was accompanied by a cover letter that stated the purpose of the study, the level of confidentiality, who would be exposed to the data and lastly thanking the participants for their co-operation.

3.6.1 BIOGRAPHICAL DATA

The biographical and demographical information questionnaire comprised of three questions, this data was necessary to draw the relevant conclusion needed to conduct the relevant study, so information regarding their age, gender and race was elicited from the sample of respondents. The biographical/ demographic variables each had categories for which the respondents needed to select the appropriate response.

3.6.2 THE BARON EMOTIONAL QUOTIENT-INVENTORY

To conduct the research, a proudly South African questionnaire was used, that was developed by Dr. Reuven BarOn, known as the BarOn Emotional Quotient-Inventory, also referred to as the BarOn EQ-i. The instrument measures emotional intelligence, one's ability to deal with daily environmental demands and pressures. The BarOn EQ-i can provide an assessment of an individual's general degree of emotional intelligence, their areas of social and emotional deficit and just as importantly, the patients' areas of strength.

Figure 4: The BarOn-EQ-i Model

INTERA PERSONAL	INTER PERSONAL
STRESS MANAGEMENT	ADAPTABILITY
GENERAL	MOOD
EFFECTIVE PERFORMANCE	
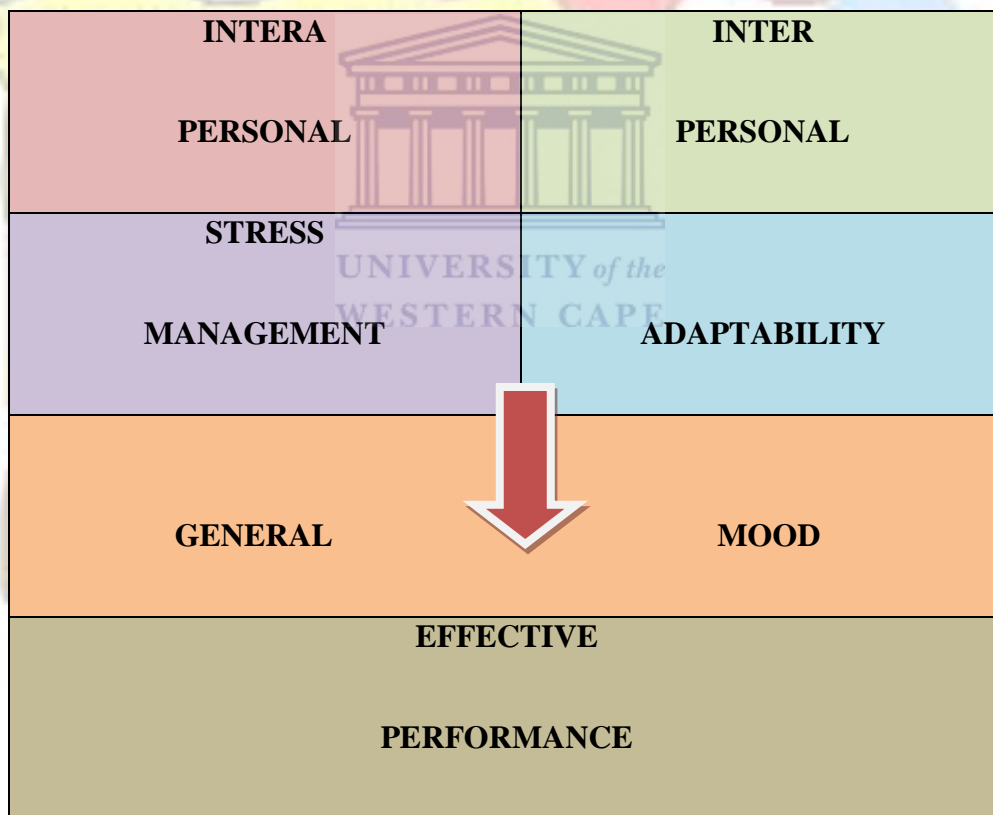
(BarOn, 2009)

The instrument can be conducted on subjects sixteen and older, the administration is easy and will be that of self-report and takes approximately 30 minutes. The method of scoring will be paper-and-pencil and the test will be in English. The BarOn EQ-i can be used in various settings ranging from clinical to educational (Parker, Taylor & Bagby, 2001).

The EQ-i comprises of 133 items in the form of short sentences and employs a 5-piont response scale with textual response format ranging from "very seldom or not true of me" (1) to "very often true of me or true of me" (5) (Bar-on, 2005).

The individuals' responses render a total EQ score as well as scores on the following 5 composite scales and 15 subscales (Bar-on, 2005):

- ❖ **Intrapersonal**
  - Self-regard
  - Emotional Self-Awareness
  - Assertiveness
  - Independence
  - Self-actualisation

- ❖ **Interpersonal**
  - Empathy
  - Social Responsibility
  - Interpersonal relationship

❖ **Stress Management**

- Stress tolerance

- Impulse control

❖ **Adaptability**

- Reality testing

- Flexibility

- Problem solving

❖ **General Mood**

- Optimism

- Happiness

Average to above average scores on the EQ-i suggest that the respondent is effective in emotional and social functioning, meaning that the individual is most likely emotionally and socially intelligent. The higher the scores, the more positive the prediction for effective functioning in meeting environmental demands and pressures. On the other hand, an inability to be effective in performing well and the possible existence of emotional, social and/or behavioural problems are suggested by low scores. Significantly low scores on the following subscales indicate the potential for serious difficulties in coping on a daily basis: Stress tolerance, Impulse control, Reality testing and Problem solving (Bar-on, 2005).

Baron (2005) further proposes that the EQ-I has an incorporated correction factor that instinctively adjusts the scale scores based on scores obtained from two of the

instruments' validity indices, which are positive and negative impression. This is an essential attribute for a self-report instrument to reduce potentially distorting the effects of the response bias, in this way increasing the accuracy of the results.

3.6.3 PSYCHOMETRIC PROPERTIES

Sekaran (2003) says that the result of any research is only as good as the measures that are used to draw on the concepts being premeditated; it is for this very reason that it is essential that a reliable and valid measure is used to ensure that the research is indeed scientifically credible.

3.6.3.1 RELIABILITY

Reliability indicates the degree to which an instrument is error free, thus ensuring the consistency of the measurement across time and across diverse items in the instruments (Sekaran, 2003).

Dawda and Hart (2000), Reker and Parker (2000) and Parker and Taylor (2001) conducted studies and found that:

- The *internal consistency* of the EQ-i scales shows desirable levels of statistical accuracy in measuring the constructs they were developed to measure, the overall average for internal consistency lies at a coefficient of .76. This is an excellent result, considering that internal consistency methods tend to undermine the actual reliability (Jopie van Rooyen & Partners. n.d).

- The *retest reliability* studies demonstrate the temporal stability of the EQ-i. Two groups of South African subject were retested, one group after one month and another group after four months, the average retest reliability coefficients were .85 and .75 respectively (Jopie van Rooyen & Partners. n.d).

3.6.3.2   VALIDITY

Validity may be defined as evidence that the instrument, process or technique implored to measure a theme or concept does indeed measure it and not something else (Kumar, 2005).

The BarOn EQ-i was developed using rigorous test-development procedures to determine its scientific validation. Empirical justification for its use is detailed in the reliability and validity data presented in the technical manual (Bar-on, 2005).

Extensive *validity* studies were conducted, including *content, factor, construct, convergent, divergent, criterion-group, discriminant* and *predictive validity*, the overall results demonstrates that the instrument possesses good validity, in other words that the assessment measures what it was designed measure.

The empirical research supports the theoretical scale structure of the BarOn EQ-i and shows that scales correlate well with measures believed to tap similar related constructs. Findings are consistent with the authors' conceptualization of emotional intelligence and definitions of the EQ-i subscales. Based on these findings, it can be concluded that the inventory is psychometrically sound.

With research done on different instruments, the EQ-i came across as ideal for the study, as it touches on all the facets that may be valued as essential when seeking to access an individual's levels of emotional intelligence. More essentially when conducting an instrument one should ensure that the test possess all the proper psychometric properties and the EQ-i comes across as highly reputable, not forgetting that the test is South African based as well.

3.7   DATA COLLECTION

The sample size of 150 subjects was based on subject of availability and taking on subjects until the desired sample size complement will be filled. The subjects were divided into six groups and, these six groups were gathered at various intervals within working hours in tutorial rooms where tables, chairs and equipment will be provided. Once the subjects were seated they were handed the questionnaire together with the answer sheet, they were briefed on the various sections of the questionnaire and explained in detail as to exactly what the questionnaire aims to elicit and what the study is aimed at. The anonymity of the subjects was reiterated and assured, as well as the permission granted by the department. It was conveyed to the subjects that the assessment was not time bases so there should be no need to rush and that they should feel free to ask any questions. Once completed, the subjects handed in their questionnaire together with their answer sheets and thanked for their co-operation.

3.8   Ethical issues to consider

Research ethics provide researchers with a code of moral guidelines on how to conduct research in a morally acceptable way. Many ethical issues involve a balance between two values: the pursuit of scientific knowledge and the rights of those being studied (Struwig et al., 2004).

Hence, whilst conducting the study the following ethical issues were adhered to:

> **Voluntary Participation-** It was ensured that no individuals were coerced to participate in the research study.

> **Informed consent-** It was ensured that the prospective research participants were fully aware and informed about the procedures involved in the research and did give their consent and willingness to participate in the research study.

> **No harm to participants-** It was ensured that no harm was brought upon the participants whilst conducting the research study.

> **Anonymity-** It was ensured that the participant remained anonymous throughout the study.

> **Confidentiality-** It was assured that the participants were aware that the information that they were providing was not be made available to anyone who was not directly involved in the study.
> *Hence, the use of a cover letter.*

> **Deceiving subjects-** It was ensured that the participants were not deceived whilst conducting the study.

> **Analysis and reporting-** The participants were made aware of the shortcomings of the research study hence; this was known and disclosed to the readers.

> ➢ **Falsification of Data-** The data was not deliberately be tampered with, as tampering with the data is seen as an indication of dishonesty.

> ➢ **Physical, psychological or legal harm-** No harm what so ever was brought upon the participants whilst conducting the study, example: loss of self-esteem.

3.9 DATA ANALYSIS

This section will outline how statistics will be utilized to analyze the data to test the hypotheses and to evaluate the particular objectives of the current study. For this study, *Inferential Statistics* was employed.

3.9.1 INFERENTIAL STATISTICS

Inferential statistics are statistics used to make certain inferences about the population of interest by establishing relationships between variables and being able to draw logical conclusions from it (Sekaran, 2003).

3.9.1.1The T-Test

This technique is employed to establish whether there any significant differences in the mean scores or responses for two groups, the test is called the Levene's Test for Equality Variences also known as a t-test for short. Gender is classified as a nominal variable that is split into two subgroups; hence the purpose of the t-test was to determine whether a significant difference existed between these two subgroups on the dependent variable. The t-test also took into account

the means and standard deviations of the two groups and examined if the numerical difference in the means was significantly different from zero as postulated by the null hypothesis (Sekaran, 2003). For this study the technique of T-Test was utilized to ascertain whether there indeed is a difference between gender and emotional intelligence.

3.9.1.2Analysis of Variance (ANOVA)

Analysis of Variance commonly known as ANOVA is used to determine whether there are significant mean differences between multiple groups. ANOVA indicates whether indeed a significant difference in a dependant variable between two or more groups does exist or not.

3.10   CONCLUSION

This chapter fundamentally sketches the modus operandi that was ensued when conducting the research that has been proposed herewith. A clear sketch has been given as to who participated in the research study, how the sample was selected, the method in which the data was collected and the statistical analysis that was exercised to embark on this research study.

CHAPTER 4

PRESENTATION OF RESULTS

4.1 INTRODUCTION

This chapter presents the results of the research study based on the empirical analysis of the data solicited from the research respondents. The presentation proceeds with an analysis of the descriptive statistics on the variables under consideration. To facilitate ease in conducting the empirical analyses, the results of the descriptive analyses are presented first, followed by the inferential statistical analysis.

The statistical programme used for the analyses and presentation of data in this research is the Statistical Package for the Social Sciences (SPSS) version 18. The descriptive statistics utilized are based on frequency tables and graphical illustrations to provide information on key demographic variables in this study. This was achieved through summary statistics, which includes the means, standard deviations, minimum and maximum values which were computed for each of the variables in the study.

This is followed by presentation of the inferential statistics based on examination of each hypothesis formulated for the research. The upper level of statistical significance for null hypothesis testing was set at 5%. All statistical test results were computed at the 2-tailed level of significance in accordance with the non-directional hypotheses presented (Sekaran, 2003).

4.2   DESCRIPTIVE STATISTICS

This section outlines the descriptive statistics calculated as obtained by the variables included in the biographical questionnaire. The demographic variables that receive attention are:

- Gender,
- Age,
- Race.

Descriptive statistics in the form of frequencies and percentages are subsequently graphically presented for each of the above-mentioned variables.
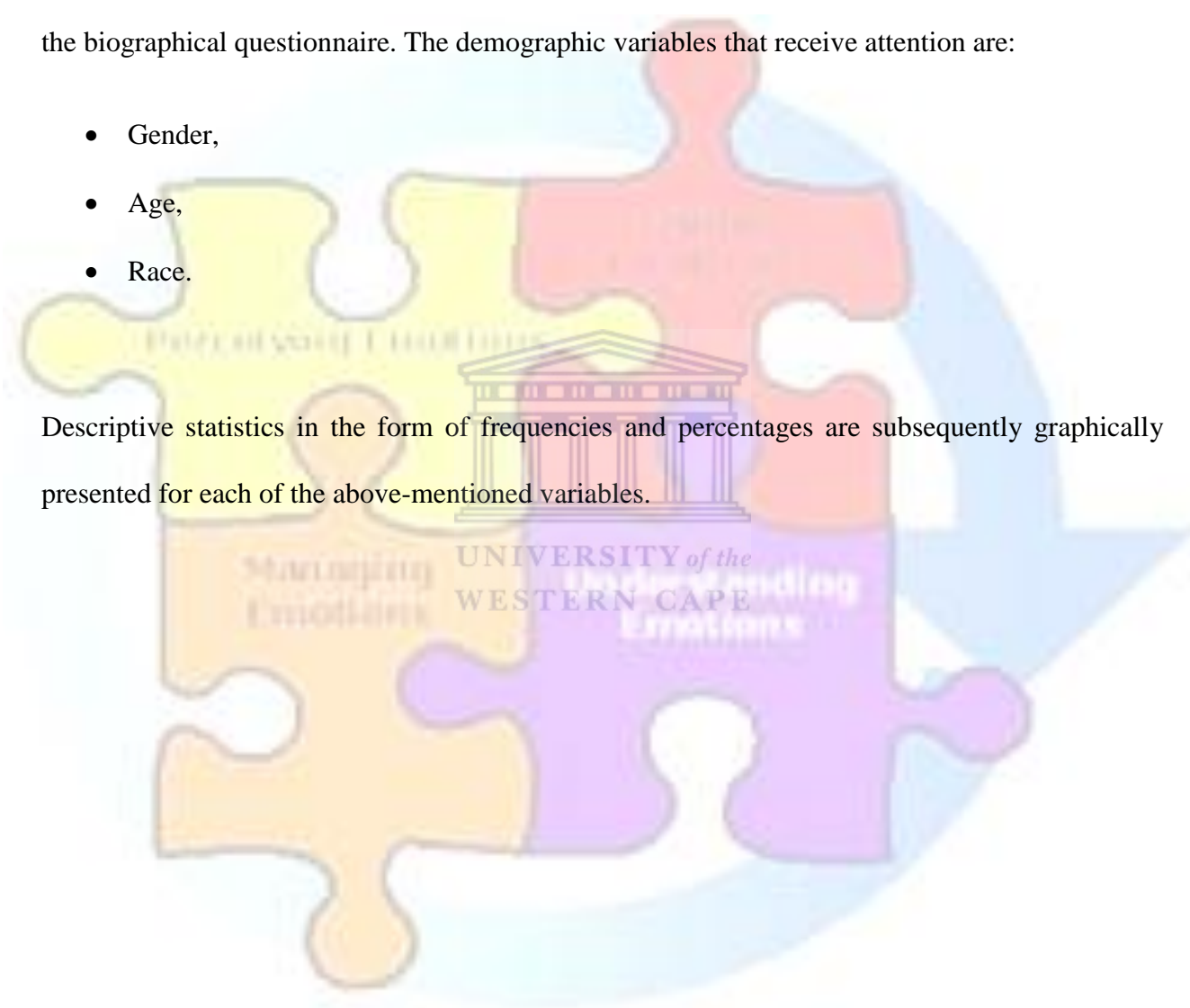
4.2.1 BIOGRAPHICAL CHARACTERISTICS

The respondents' gender is depicted in Figure 5.

Figure 5: Gender of respondents
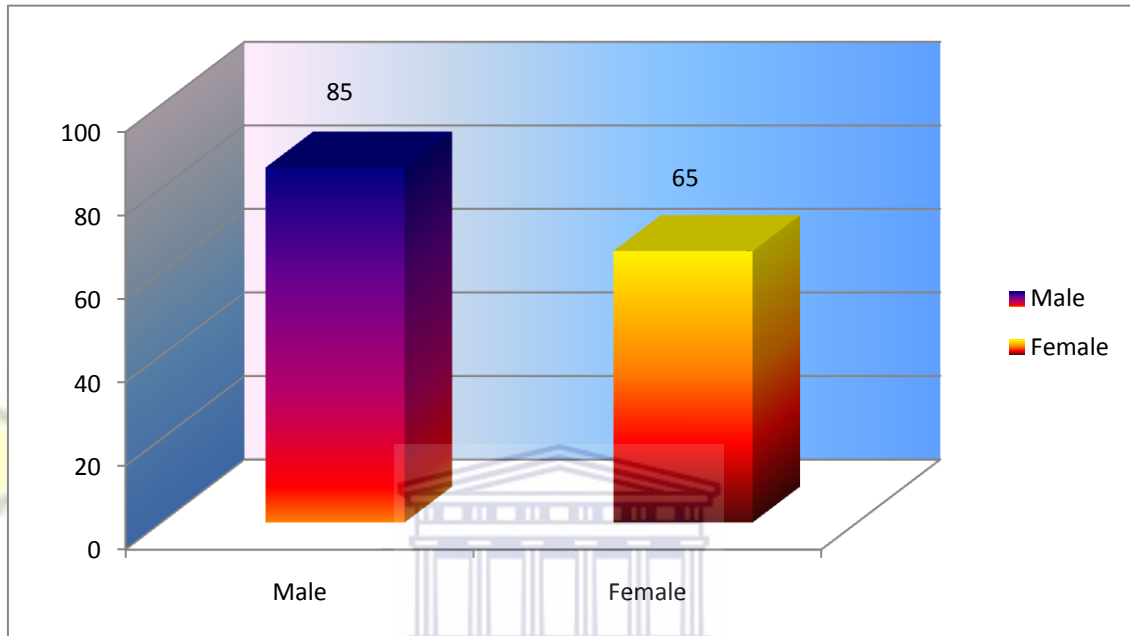
Figure 5 indicates that 57% of the sample (n=85) were male, females (n=65) comprised the

remaining 43% of the respondents.

Figure 6: Age of respondents
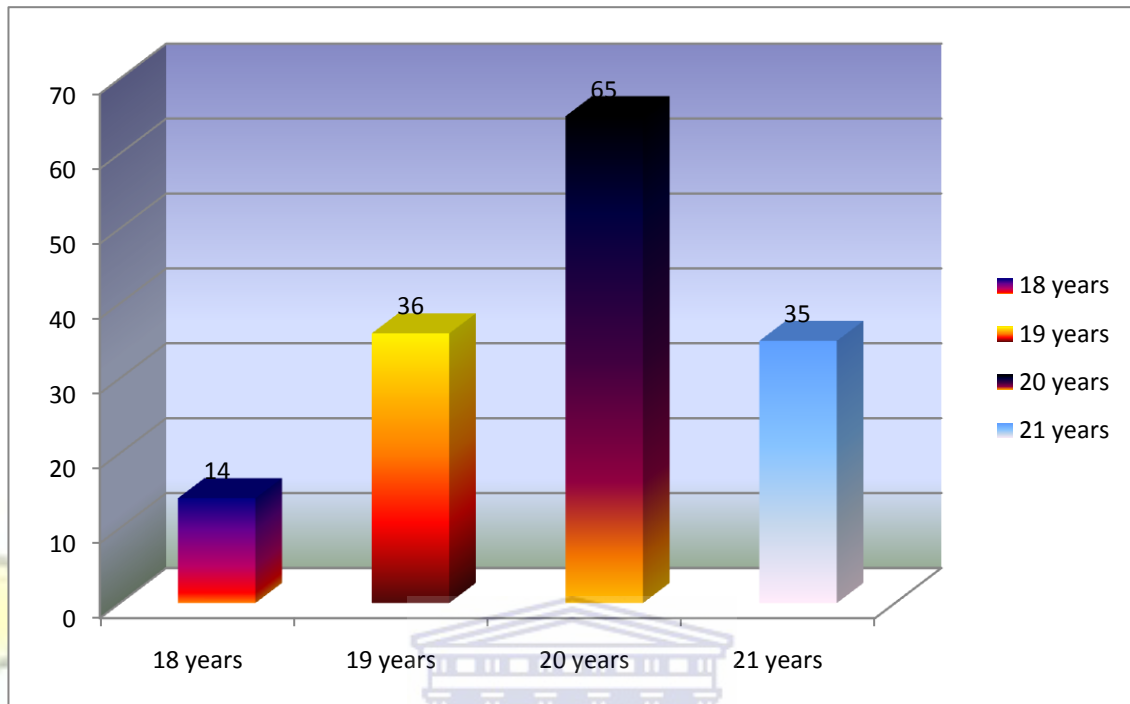
Figure 6 shows that 43% of the respondents in the sample, (n=65), are 20 years old with a further 24% (n=36) being 19 years old. While those that are 21 years (n=35) comprised 23% of the sample, the smallest proportion of respondents (n=14) constituted 9% of the sample.

Figure 7: Race of respondents
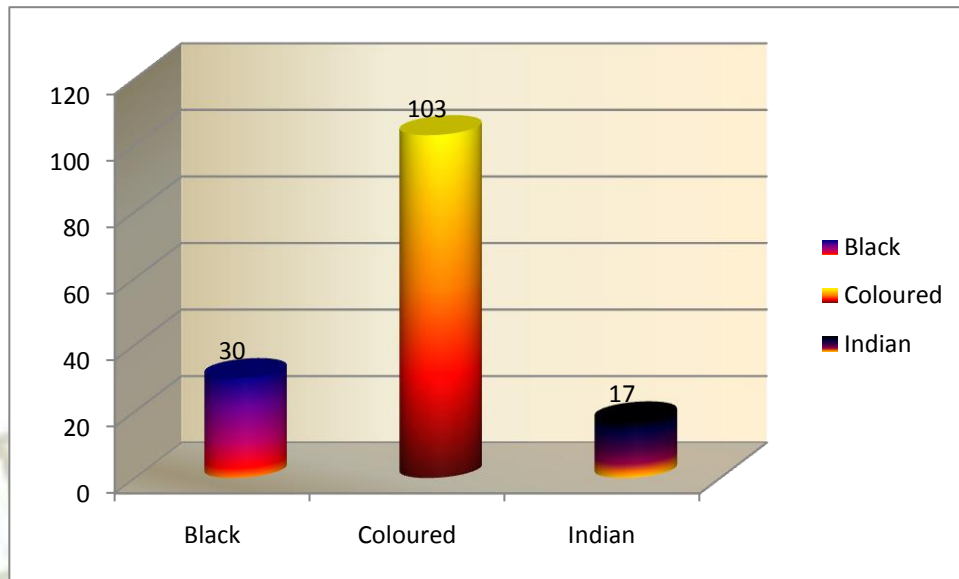
In terms of Figure 7, the majority of the respondents (n=103) or 69% were Coloured, while Black respondents represented 20% of the respondents (n=30). Indian respondents comprised the remaining 11% (n=17) of the sample.

4.2.2. DESCRIPTIVE STATISTICS

The descriptive statistics calculated for the sample are provided in the sections that follow. That is, the data pertaining to the variables included in the study, as collected by the three measuring instruments employed, are summarised by means of graphic representation and the calculation of descriptive measures. In this manner, the properties of the observed data clearly emerge and an overall picture thereof is obtained.

4.2.1   MEASURES OF CENTRAL TENDENCY AND DISPERSION

This section outlines the descriptive statistics calculated on the basis of the variables included in the questionnaire. The measures of central tendency and dispersion for the dimensions of EQ are shown in Table 2.

Table 2: Means, Standard deviation, Minimum and Maximum scores for the dimensions of the EQ questionnaire

Variable	N	Min	Max	Mean	Std. dev.
Intrapersonal	150	1	5	3.28	.45
Interpersonal	150	1	5	2.56	.32
Stress Tolerance	150	1	5	2.42	.30
Adaptability	150	1	5	3.19	.68
General Mood	150	1	5	2.78	.39

The mean score (M=3.28) for the Intrapersonal dimension that students general experience higher levels of self regard, independence, assertiveness, self actualisation and emotional self awareness which constitute the content of this facet. The standard deviation (.45) shows moderate variation in the responses that were obtained with respect to Intrapersonal aspects of EQ.

For the Stress Tolerance dimension, the mean score (M=2.42) indicates that students report this facet to be the lowest average aspect with respect to EQ. The standard deviation (.30) indicates that there was similarity in the responses obtained.

The mean score (M=2.56) for the Interpersonal dimension indicates that students showed Interpersonal aspects to be one of the dimensions on which their EQ was lower relative to most other aspects except Stress Tolerance. The standard deviation (.32) shows that the responses did not differ substantially amongst students.

In terms of the Adaptability dimension, the mean score (M=3.19) reveals that students report higher flexibility, problem solving and reality testing which comprise the content of this aspect of EQ. The standard deviation (.68) indicates that there were moderate variations in the responses obtained on this dimension.

For the General Mood dimension, the mean score (M=2.78) suggests that students experience moderate happiness and optimism despite adversity. The standard deviation (.39) indicates that there was similarity in the responses obtained.

4.3   INFERENTIAL STATISTICS

Inferential statistics in the form of t-tests and ANOVA to determine differences in EQ based on gender, age and race, respectively.

Table 3: T-test: EQ by Gender

	Mean	S	Std error	T	P
Male	93.18	12.16	2.72	3.573	0.04*
Female	101.27	17.34	3.45		

* $p < 0.05$

Table 3 depicts the results of the t-test with respect to EQ based on the gender of respondents. The results indicate that there are statistically significant differences, t = 5.573; p < 0.05, with male respondents reporting significantly lower EQ (Mean = 93.18, s = 12.16) compared to females (Mean = 101.27, s = 17.34). Hence, the null hypothesis, is rejected with respect to differences in EQ based on gender.

Table 4: ANOVA: EQ by Age

	Sum of squares	Mean square	F	P
Between groups	18.7888	6,263	.581	0.001**
Within groups	614.458	10.780		
Total	633.246			

** $p < 0.01$

Table 4 depicts the ANOVA with respect to EQ based on the age of respondents. The results indicate that there are statistically significant differences, F (0.581; p < 0.01, in the EQ levels of respondents based on their ages.

Table 5: ANOVA: EQ by Race

	Sum of squares	Mean square	F	P
Between groups	25.729	8.576	.954	0.421
Within groups	512.533	8.992		
Total	538.262			

The results with respect to EQ based on race are shown in Table 5. The results clearly indicate that there is no statistically significant difference in EQ based on respondents' race (F = .954, p > 0.05).

4.3. RELIABILITY ANALYSIS

Cronbach's Alpha is viewed as an index of reliability associated with the variation accounted for by the true score of the underlying construct (Cronbach, 2004). It is argued that Alpha coefficients range in value from 0 to 1 and may be used to describe the reliability of factors extracted from dichotomous and or multi-point formatted questionnaires or scales. However, there is no lower limit to the coefficient, however, the closer Cronbach's coefficient alpha is to 1, the greater the internal consistency of the items of the scale (Cronbach, 2004).

Table 6: Cronbach's Coefficient Alpha for the EQ questionnaire

Reliability Coefficient			
	No. of cases	Alpha	No. of items
Job satisfaction	150	0.84	133

The scores obtained for the EQ questionnaire can be regarded as satisfactory in terms of the reliability of the instrument. George and Mallery (2003) argue that coefficients above 0.8 can be considered to be good indicators of the reliability of an instrument. Hence with the current study, this was exceeded, indicating a high degree of reliability.

4.3   CONCLUSION

This chapter has provided an overview of the most salient findings obtained based on empirical analysis of the data. Chapter five presents a discussion of the findings obtained and contextualises the research findings based on previous research on Emotional Intelligence amongst students.

CHAPTER 5

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

The purpose of this study was to examine the importance of EQ in relation to race, gender and age within a tertiary environment. Universities operate and depend on student's capacity to contribute intellectually to obtain a degree; hence it makes sense to drive high levels of EQ of the student within a tertiary context.

5.2. DESCRIPTIVE STATISTICS FOR THE SAMPLE

In terms of the demographic characteristics of the sample, 57% of the sample (n=85) were male, females (n=65) comprised the remaining 43% of the respondents. The respondents were mostly 20 years old, with the median age being 20.4 years. The largest proportion of the students was Coloured (n=103) or 69%.

5.3. DESCRIPTIVE STATISTICS FOR EMOTIONAL INTELLIGENCE

Students' scores were highest on the Intrapersonal scale which measures their level of self regard, independence, assertiveness, self actualisation and emotional self awareness. This was followed by the Adaptability content scale which determines the respondents' flexibility, reality testing and problem solving. In addition, their General mood, as assessed by questions relating to happiness and optimism revealed moderate scores. Their scores on the Interpersonal facet indicate that students report average levels of social responsibility, empathy and interpersonal relationships.

Their lowest scores were recorded on the Stress Tolerance dimension which determines their capacity to manage stress as well as to manage impulses.

5.4 EMOTIONAL INTELLIGENCE AND GENDER AMONGST UNDERGRADUATE UNIVERSITY STUDENTS

Hypothesis 1- There is a statistically significant difference in EQ amongst undergraduate university students based on gender.

The results emanating from the current research indicate that there are statistically significant differences (t = 5.573; p < 0.05), with male respondents reporting significantly lower EQ (Mean = 93.18, s = 12.16) compared to females (Mean = 101.27, s = 17.34). **Hence, the null hypothesis is rejected with respect to differences in EQ based on gender.**

There appears to be no overwhelming empirical evidence that supports the notion that a positive relationship exists between EQ and gender of undergraduate students in a tertiary institution. The general perception exists that EQ of women are generally higher than males in a tertiary environment. In a research study by Liptak (2005), the males' total emotional intelligence score was higher than that of females. Specifically, male students' scores on the subscales were significantly higher than the scores of females. This is the opposite result of some previous research where women have repeatedly had higher scores than men on tests of EQ (Day & Carroll, 2004; Dawney, Papageorgiou, Stough, 2005; Brown et al., 2005; Van Rooy, Alonso, & Viswesvaran, 2005). Although no significant differences were found between EQ and gender, a significant difference between gender and some factorial components of EQ existed in a study conducted by BarOn (Jopie Van Rooyen and partners, n.d). It goes without saying that more studies are needed in this area.

Another example is the research of Shi and Wang (2007) who studied the impact of gender on EQ of 1458 undergraduate students, comprising of 62% of which were males and 38% female in the Beijing and Shandong province, where they found complicated patterns of the gender difference on the EQ Scale scores. There was no significant gender difference on the Optimism/Mood regulation factor. On the appraisal of emotions and social skills factors, females scored higher than males. Males scored higher than females on the Utilization of Emotions factor. The discrepancy may be due to measurement choice. It should also be noted that the gender difference in our research was quite small, and the significance of the difference may be possibly due to the large size of the sample.

In a study by Goldin, Brannick, Wahi, Paidas, Arce, Cannarozzi, Johnson and Nazin (n.d), undergraduate medical students were selected in order to determine whether gender impacted on EI. In Fall 2006, 152 first and second year medical students agreed to do the assessments. The average age was 24, 61% of which were male and the remaining 39% female. The subjects were tested in terms of their ability to cope with personal emotions and social interactions. It was assumed that medical students had a higher EI compared to the general population because of their higher achievement orientation. Two tests were applied in this study, namely, MSCEIT and WLEIS. The findings were that gender of medical students in their first and second year had no impact on EI. In fact it was suggested that the same tests be applied to third and fourth year medical students, particularly amongst female students.

In another study by Katyal and Awasthi (2005) on the gender difference in EQ amongst adolescents of Chandigarh, using a sample size made up of 75 males and 75 females. Found

gender had a slight impact on EI with female students having a higher mean than male students. The finding in this study is not conclusive but it is suggestive of a trend that gender has an impact on EI. Furthermore, these results are in line with the findings reported by Bhosle (1999), King (1999) and Sutarso (1999) where female students had a higher EI than male students.

In another preliminary study conducted by Bay & McKeage (2006) who measured EQ in undergraduate accounting students, the sample 47 of which 53% were female and 47% male. Their findings postulated that gender impacted slightly on EQ in accounting undergraduate students, however, it was argued that the variation of these differences could be as a result of the fact that the students were in their first and second year of study.

However, there have been studies in other sectors where female students were found to be more successful in the Health and Society exam component, a result consistent with previous findings on gender difference in academic performance of medical students (Ferguson, James & Madely, 2002), but suggesting that females may be advantaged only on some course components. Previous findings on male/female differences in EI and empathy (Hoffman, 1977; Hojat, Manjione, Nasca, Cohen, Gonella & Erdmann, 2001; Van Rooy et al., 2005) were also partially confirmed, with higher scores being observed for females on all scales, but with the gender differences mostly failing to reach significance when the effect of multiple comparisons was corrected for. Structural equation modelling suggested that there was a direct effect of gender on exam performance in autumn term only, with subsequent exam performance being predicted by previous performance. EI was found to partially mediate the effect of gender on exam

performance. This suggests that the observed better performance of females in medical courses (Ferguson et al., 2002) may be in part, but not entirely, accounted for by EI differences.

Sanchez-Nunez, Berrocal, Montanes and Latorre (2008) who conducted a study in Spain on whether EQ depends on gender, found that females scored higher on empathy, social responsibilities and interpersonal relationships than male students. This study was vital to educators, parents and counsellors as it was a vital component of success. Again these studies were not conclusive in terms of the overall findings and revealed slight differences between male and female undergraduate students. The reasoning behind these findings was concluded to be due to the fact that females are more emotional and intimate in their relationships compared to males. Also higher EQ in females can be explained through personality characteristics.

In the study by Sanchez-Nunez, et al., (2008) it was also found that female students were more expressive than male students and understood their emotions better and also have a greater ability relating to interpersonal skills. Hence, these results in terms of empathy and recognising people's emotions of EI were significantly higher in female students than male students.

The studies that found gender to have an impact on EQ may have been as a result of the type of tests that were applied. Some tests were conducive to the environment in some instances, but were not when applied in another setting. For example, the Bar-On test takes into account the cultural factors in a South African context whereas in other instances when other tests were used in other settings such as the Multifactor Emotional Intelligence Scale (MEIS) or the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) favourable results were found with

regard to predominance for women when compared to men and their EQ (Sanchez-Nunez, 2008). This may be on account to those EQ instruments and others, which may have not taken into account the social-economic factors of South Africa would not be suitable, hence this may be a key factor as to why different studies produced different findings.

5.5 EMOTIONAL INTELLIGENCE AND AGE AMONGST UNIVERSITY STUDENTS

Hypothesis 2- There is a statistically significant difference in EQ amongst undergraduate university students based on age.

In terms of the current research, the results indicate that there are statistically significant differences, F (0.581; p < 0.01, in the EQ levels of respondents based on their ages. **Hence, the null hypothesis is rejected.**

In recent times EI has become a popular research topic in mainstream management. EI has received greater interest particularly since leadership roles have become so critical in relation to job performance and leadership ability. Research also points to greater levels of impact in schools and learners' ability to be more compassionate and to develop a better understanding for fellow students and others (Shipley, Jackson and Segrest, n.d.). Goleman points out that EI is not fixed genetically nor does it only develop in early childhood. This is particularly different to IQ which changes very little after teen years. EI is largely driven by life experiences and other forms of development (Shipley et al., n.d.).

Research suggests that a positive relationship exists between EI and age and work experience. Mayer, Caruso & Salovey (1999) suggests that EI can be considered as a standard intelligence measure and should increase with age and experience. While some studies have found significant correlation between EI and age (Van Rooy, Alonso & Viswesvaran, 2005), there continue to be very few studies that have examined the relationship between EI and work experience.

The research done by Fariselli, Ghini and Freedman in 2006 indicated that EI are higher in older people and supports the notion that EI is a developing ability. The research study suggests that as people grow they have the opportunity to learn more about their emotions, increase emotional vocabulary and experience more varied life situations. It is further pointed out that individuals accumulate more feedback and integrate this into their self awareness. This finding points out that there are younger people with higher self awareness than older people emphasizing the need to develop EI.

For many adulthood and aging increases the need to connect with others such as understanding children in relation to parents. With this line of thinking it is expected that parents and leaders in organizations should be more adept at understanding and solving problems in the community and in organizations. However, it is suggested that this might not be the case particularly with the absence of a clearly defined vision and set of goals. This study highlights the fact that the popular belief that age is closely associated with wisdom could be overstated. In a social, business and educational context many young people's EQ could be enhanced to produce better leaders and become an important source of human capital (Fariselli et al., 2006).

A study done by Jopie Van Rooyen and partners (n.d.) indicated a copious significant difference exists between various age groups; the study further indicated that the older group had significantly higher scores than that of the younger group and the 40-49 year old group had the highest mean. The age differences were essentially the same for both genders. These results indicate that EQ proliferates with age and changes throughout life and hence is not static. However, a study conducted by Dearlove (2003) has shown significant relationships between gender and EQ but not between age and EQ. In another study done by Birks, McKendree and Watt (2009) amongst healthcare students, the correlation between EI and age for the sample were not significant.

In a study done by Shipley et al., (n.d.) on academic performance, it was found that age was not positively correlated to EI The explanation provided suggests that older students differed significantly from students who attend universities at a traditional age. The study suggests that the findings could have been stronger if the sample was not limited to business students in an undergraduate program. The majority of the students in the sample were between the age group of 19 and 29 years old. They point out that in order to obtain better results the relationship between EI and work experience a broader and more inclusive sample should be used in future. Studies using this approach have used age groups ranging from 19 to 84 with a mean age of 50.74 years. This study showed that EI peaked in the 35 to 44 category while EI declines in older age.

5.6 EMOTIONAL INTELLIGENCE AND RACE AMONGST UNIVERSITY STUDENTS

Hypothesis 3- There is a statistically significant difference in EQ amongst undergraduate university students based on race.

The results clearly indicate that there is no statistically significant difference in EQ based on respondents' race (F = .954, p > 0.05). **Hence, the null hypothesis, is accepted with respect to race differences in EQ.**

The study Keogh (n.d.) suggests that a multi-national team was strongly affected by personality differences by team members rather than purely by culture. Much of this was attributed to the fact that "unpleasant" characters exist within any culture. In this context the MBTI was used to assess personality differences and styles and how they complement one another. They learnt to respect differences in style and treated that as a strength rather than a limitation. The intervention also allowed the practitioners to get the participants to look at their family situations and relate this to the work situation through more effective communication styles. In short, the use of EI allowed for the participants to obtain a new understanding of the importance of respecting race differences as well.

The pioneers of this research on cross cultural communication was conducted by Hofstede, Hall and Trompernaar (cited in Keogh, n.d.) who illustrated the role of cross cultures on team building. This work has provided for an international framework where management styles are

influenced by culture. Keogh's (n.d.) approach allows the individuals to identify their own cultures and belief systems before attempting to understand other cultures. This method has proven to be quite successful in team building and enhancing performance.

The global leader faces new challenges and has to deal with a combination of diverse cultures and personalities. Therefore a new set of skills is required that include understanding different cultures and personalities and getting members to learn new things from peers. Above all they need patience, experience, emotional resilience and a sense of humour in order to manage these diversities that exist within the organization. These skills are not taught in schools and therefore the learning experience could be rather limited when leaders get into leadership and senior management positions (Keogh, n.d.).

Only a small number of studies have been done between EI and culture (Shipper, Kincaid, Rotondo and Hoffman, 2003; Van Rooy, Alonso, Viswesvaran, 2005). The predicted associations found between the variables of emotions and culture along with EI and culture could provide a better motivation for researchers to explore the relationship between EI and culture.

In a paper done by Zawawi and Tsang (2009) one of the hypothesis involved looking at the impact of race on EI. The results indicated that race is significantly correlated with EI. One the basis of this survey one can infer that people from different race groups vary in their ability to deal with emotions. Although there are no studies that have been conducted between EI and race exclusively, sufficient evidence exists from cross cultural studies on emotion relating to similarities and differences between cultures

Test were conducted to determine the effects of age, gender, race and EQ on individuals and the test showed that there is a significant correlation between these variables. This further indicates the importance of taking these variables into account whilst weighing the importance of EQ on individuals (Jopie Van Rooyen and partners, n.d.).

5.7 DISCUSSION

5.7.1 ORGANISATIONAL BENEFITS WHEN APPLYING EMOTIONAL INTELLIGENCE

There are a number of intelligences such as mathematical intelligence, musical intelligence, linguistic intelligence and spatial intelligence. These intelligences are developed in the first 18 years of one's life. However, a number of EI can be developed over time that enhances potential and improves competence. Against this backdrop, it is essential for organizations to invest in the development of individuals (Moller & Powell, 2001).

Researchers have pursued a relationship between success and intelligences. They have found that traditional IQ to contribute no more than 4% to success while EI contributed more than 25% to success (Moller et al, 2001). This leaves a gap of about 70% of people who will be dependent on other kinds of intelligences such as practical intelligence and creative intelligence (Moller et al., 2001).

EI has its roots in 'social intelligence' that was identified by Thorndike (1920). Researchers have been discovering other intelligences and grouped them into 3 clusters (Johnson & Indvik, 1999):

- Abstract intelligence = ability to understand and manipulate with verbal and mathematical symbols;
- Concrete intelligence = ability to understand and manipulate with objects;
- Social intelligence = ability to understand and relate to people.

Researchers have argued that individuals with the highest EI excel in 4 areas (Johnson et al., 1999):

- Ability to persist and stay motivated in the face of frustration;
- Ability to control impulses;
- Ability to control emotions;
- Ability to empathize with others.

The above mentioned factors are considered to have a greater impact on individual and group performance than traditional intelligence measures such as IQ. Traditionally leaders and bosses ignored the emotions of employees and they were treated in a manner where emotions virtually had no place in the work milieu. EI is about self awareness and empathy which are the skills that employees and bosses need in building a successful organization (Johnson et al., 1999).

EI can help leaders to carry out activities and contribute to leader effectiveness in the following ways (George, 2000):

- Development of a collective sense of goals and objectives and how to go about achieving them – the goals and objectives in this context refers to the vision of the leader for the organization and EI can enhance this vision. Leaders are faced with a large amount of information and often complex information that is characterised by ambiguity and uncertainty. EI can enhance their information processing of challenges, threats, issues and opportunities. For example, it has been found that positive moods have a positive effect on an individual's creativity and can influence a leader's ability to create a compelling vision for an organization.

- Instilling in others knowledge and appreciation of the importance of work activities and behaviours – in order for leaders to instill a sense of appreciation of employees toward work activities, they need to make employees aware of problems and major issues concerning the organization. Leaders need to be able to influence employees in such a way so that they become aware of the seriousness of the problems and also become enthusiastic about resolving these issues.

- Generating and maintaining excitement, enthusiasm, confidence and optimism in an organization as well as cooperation and trust – in order for leaders to maintain the level of enthusiasm they need to be able to appraise how their employees feel. They need to be sensitive to how the employees will react to varying circumstances. More importantly, they need to be able to manage these emotions of employees in such a way that unison is achieved in terms of striving toward the accomplishment toward the organization's goals.

- Encouraging flexibility in decision making and change – when leaders are in touch with their own emotions, they are better able to improve their decision making. Leaders are faced with complex demands and emotions can serve as important information to use in

prioritising these demands. Emotions can also provide leaders with information about problems and opportunities. When a leader can effectively manage his or her emotions, then this should prevent interference with effective decision making and become more flexible in solving problems.

- Establishing and maintaining a meaningful identity for an organization – an organization's identity is derived from a consequence of culture and organizational members develop a collective identity within this paradigm. Organizational culture is embodied shared ideologies containing beliefs, norms and values. In this context values, beliefs and norms are emotion laden. Trice & Beyer (1993) cited in George 2000, further suggests that cultures are infused with emotions and that the violation of these values and norms can invoke strong emotional reactions (George, 2000).

5.7.2 EMOTIONAL INTELLIGENCE AND PERFORMANCE

A paper written by Nel and Villiers (2004) research findings that confirm EI is related to job performance in the workplace. The results of this study indicate that the cluster of self-management shows the strongest relationship with performance. This suggests that self management is directly related to performance in these environments. It also shows the importance of managing one's emotions through self discipline, integrity and motivation toward one's goals in order to achieve optimal effectiveness. The general interpretation from this finding is that the competencies in self management form a meaningful pattern of abilities that facilitate successful performance in the tertiary institutes.

It is therefore recommended that organizations develop training programs in order to develop emotional competencies of students. Due to the fact that social and emotional learning is more complex than cognitive learning, organizations should develop EI according to specific guidelines (Nel & De Villiers, 2004).

EI also plays an important role in well being. The results from this study show that EI and Social Well-Being (SWB) are significantly related. The result of a study done by Bar-On (2005), who is one of the fathers of emotional intelligence, confirms that there are additional contributors to SWB that were unexplored before. This implies that increases in EI can lead to increase in aspects of human performance as well as overall satisfaction with oneself and others.

Some studies done by Brown and Schutte (2006) looked at the relationship between EI and fatigue of university students and mediation effects by factors such as single lifestyle and sleep quality. Disturbed sleep has previously been shown to predict fatigue in healthy workers and therefore, negatively impact their productivity which leads to a reduction in performance. The thinking here is that individuals with higher EI are able to better use strategies to promote good quality sleep.

5.7.3 EMOTIONAL INTELLIGENCE AND STUDENT RETENTION: THE SUCCESSFUL TRANSITION FROM HIGH SCHOOL TO UNIVERSITY

A study done by Parker, Hogen, Eastabrook, Oke and Wood (2006) focused on examining the relationship between EI and academic performance of a sample of 1270 respondents that made the transition from high school to university. There were divided into two groups where the first group represented students that withdrew from university before going onto second year. The

second group consisted of a group of students that remained at the university for a second year of study (Parker et al., 2006).

Students that make the transition from high school to university face a variety of stressors as they need to create new relationships and function independently as adults. Academic success in this instance has traditionally been predicted by standardized measures of cognitive abilities. Researchers have now turned their attention to a broader range other possible predictors for academic success. Recently, studies have tried to examine the linkages between EI and academic achievement in students making the transition from high school to university. Most of these studies were done on a longitudinal basis so that the researchers could track students throughout the year. It was found that academically successful students were significantly higher on most of the emotional and social competency variables than the unsuccessful students.

The overall finding of the relationship between EI and academic retention is consistent with a range of emotional issues when they make the transition from high school into university. It was also found that stress levels were higher in the first year of study compared with second year. These trends have been linked to a variety of emotional and social variables (Parker et al., 2006).

A paper done by Austin, Evans, Goldwater and Potter (2005) focused on the individual differences in EI and competencies and its relationship to academic success. In a study at a Canadian university it was found that students that obtained high marks at the end of their first year study scored significantly higher on EI than students who obtained poor grades and that were at risk of dropping out. Most of these findings indicate that students with higher levels of interpersonal EI skills and intrapersonal EI skills are better able to handle the transition from

high school to university (Evans et al., 2005). Jaeger (2003) also found similar results where there were positive associations between EI and academic performance in postgraduate students.

5.7.4 HOW USING EMOTIONAL INTELLIGENCE CAN HELP TERTIARY STUDENTS SUCCEED IN THE WORKPLACE

According to Liptak (2005) college students must have a wider array of skills and knowledge to become successful employees. Other skills are needed to compliment job related knowledge and skills in order to be successful. For this reason educationists particularly at universities have changed their approach. Many colleges and universities are now educating students using a broad, holistic approach that combines job related knowledge and skills with social skills. A survey conducted recently indicated that employers rated interpersonal skills as the most important skills that they desired from college graduates, followed by ethics and integrity, leadership, perseverance and knowledge.

The theory of EI has contributed significantly toward career counsellors at higher education institutions and in aligning graduates to be successful in the workplace. Traditionally, career counseling literature has largely ignored the contribution of EI and the success of new college graduates.

According to Goleman (1995) career counsellors should first understand what EI is before they can assist students to acquire EI skills. Generally, he viewed general EI skills as being able to motivate one, being persistent in facing obstacles and achieving goals, controlling impulses and moods. The thinking here is that career counsellors can assist college students to succeed in their

transition from college to work. Knowledge of guiding principles of EI is critical for career counsellors in terms of developing career counselling models. When career counsellors use EI skills as the focus, they can integrate personal and career counseling. Liptak (2005) argues that people that come for career counseling often seek personal counseling as well. Further findings in research done by Liptak (2005), states that students should acquire career and job search skills. This is regarded as the traditional skills that career counsellors use to develop their careers. Career counsellors perform and administer a variety of career assessments and explore the thinking patterns of students. They attempt to match personal characteristics to appropriate occupations. Secondly, career counsellors attempt to assess the personal competencies and in this area they try to make students aware of their personal strengths and weaknesses and enhance their personal responsibility. Thirdly, career counsellors attempt to assess and develop the students' social competence in order to be more supportive of co-workers and cooperative.
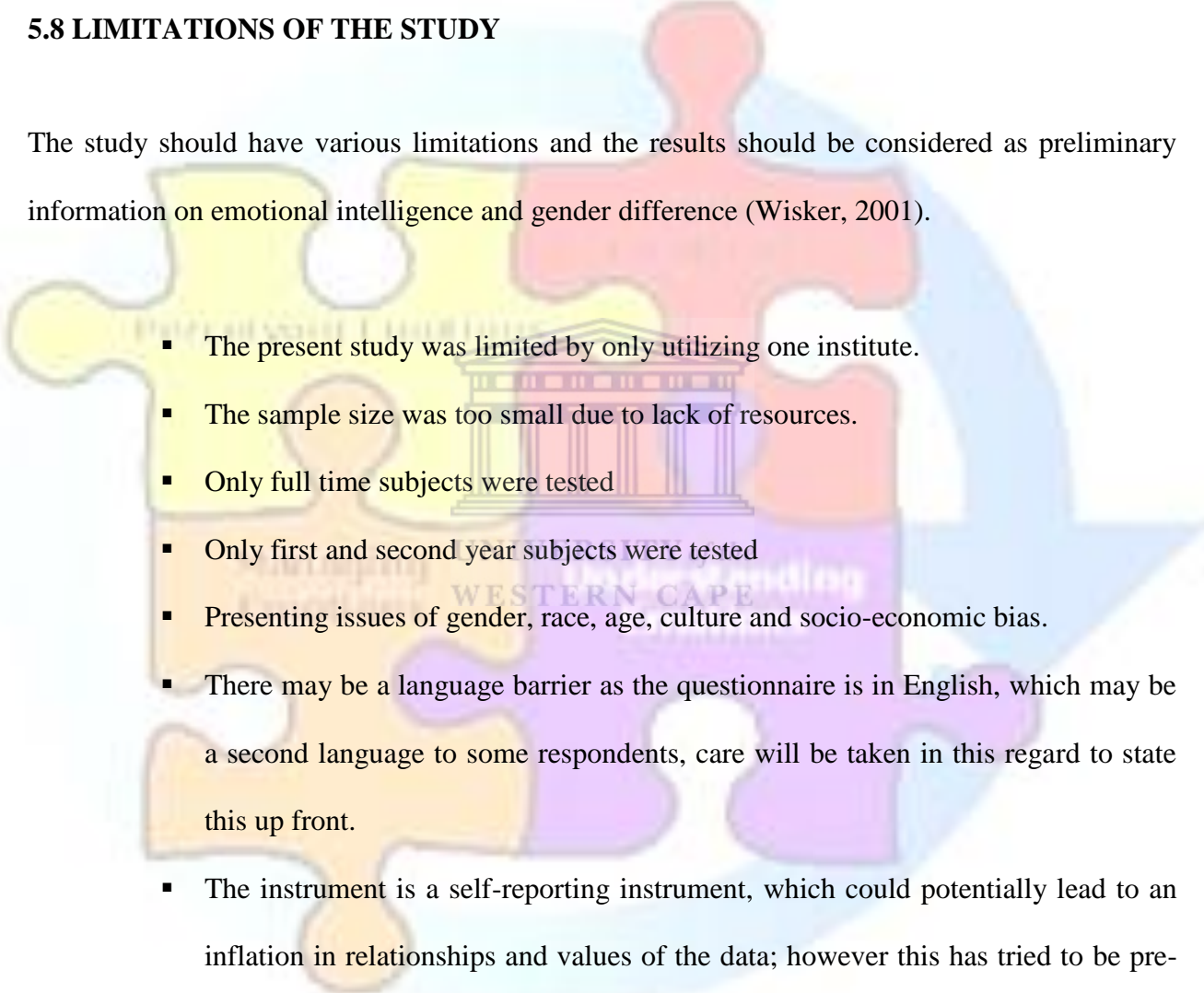
Kolb (1984) suggests that the transfer of EI skills should be action learning based where individuals plan in action, engage in it, reflects on how effective it was and taking appropriate steps to make adjustments. He further suggests that experiential learning emphasises what one is studying, building personal commitment to learn, and being responsible for organizing conclusions.

Research has indicated that EQ-based leadership is the most important driver of organizational performance and it has been realised that factors such as trust, confidence, empathy and self control are very important resulting the development of soft skills training (Caudron, 1999). It is evident that universities need to incorporate EQ values as an integral component of core competencies and quality control, as organizations will start to hire people not merely on their technical abilities but also on the basis of emotional capabilities (Caudron, 1999).

EQ training could enhance students' abilities to improve intuition, gain insight into complex challenges and to behave appropriately where needed. Other benefits point to team building, creativity and innovation. EQ supports the view that effective learning could be enhanced with the interaction of cognitive and emotional domains (Sala, 2001).

5.8 LIMITATIONS OF THE STUDY

The study should have various limitations and the results should be considered as preliminary information on emotional intelligence and gender difference (Wisker, 2001).

- The present study was limited by only utilizing one institute.

- The sample size was too small due to lack of resources.

- Only full time subjects were tested

- Only first and second year subjects were tested

- Presenting issues of gender, race, age, culture and socio-economic bias.

- There may be a language barrier as the questionnaire is in English, which may be a second language to some respondents, care will be taken in this regard to state this up front.

- The instrument is a self-reporting instrument, which could potentially lead to an inflation in relationships and values of the data; however this has tried to be pre-empted by carefully selecting a well designed questionnaire that takes this sort of concern into consideration.

- A cross-sectional study was done, due to time constraints and the inherent problem that may exist when conducting a cross-sectional study is that while the

aim is to understand casual processes that occur over time, the conclusions will typically be based on observations made at only one time. In order to overcome this limitation the study should be repeated to confirm the results.

- The usage of non-probability sampling leads to low generalisation potential hence, low external validity and can introduce serious biases as certain groups may be under-represented.

- Quantitative methods were used to gather information. A method where both qualitative and quantitative methods, also known as triangulation could have been used to validate the findings or data collected.

- More research needs to be conducted on the implications and impacts of emotional intelligence and gender, race and age differences.

- Evaluating the components of emotion-related skills is a challenge given the myriad of factors involved in emotional situations and cultural, race, age and gender differences.

5.9 RECOMMENDATIONS AND IMPLICATIONS

The impact of EQ in different schools within economic and management sciences need to be researched further in order to obtain more empirical evidence to support the notion that gender has an impact on EQ. The differences as a result of gender within different schools need to be taken into account and incorporated through Departments of Higher Learning so that EQ can be formally adopted as a vital and a core skill and requirement within Economic and Management Sciences.

More research is required to determine the impact of gender on EQ in terms of academic performance as well as coping strategies with stress in tertiary environments. South Africa attracts a small percentage of undergraduate students and this is accompanied by a high failure rate, particularly in first and second year of studying. Furthermore, the progress of the number of graduate students to post graduate is poor and most graduates tend to look for job opportunities. The result of this is that the true academic potential of an individual is not realized and this impacts on the country's ability to produce highly qualified graduates.

In order to attain substantial understanding of emotional intelligence and gender difference, more empirical and theoretical research is needed. Empirically, the usage of triangulation combined with complementary methods may result in a more favourable result. It would be interesting in future research to assess if a larger sample is used if the results produce the same or similar results. Ideally a proportioned stratified random sample should be used which would help to eliminate sampling bias. In addition, further research can be conducted on the relationship between emotional intelligence and performance of the undergraduate students. A longitudinal study can be conducted which involves the analysis and development of the students emotional intelligence throughout their undergraduate studies to assess if there is development in their emotional intelligence whilst studying.

5.10 CONCLUSION

A huge fissure exists when it comes to universities preparing and equipping students with emotional skills to cope with all the adversities study life may present and ultimately which will assist the students not only on their academic success but in career success in the long run. According to Goldman (2000), the most forward – thinking educators will recognise the value of EQ in higher education, not just for the students, or the students employers but for the prosperity of the nation as a whole.

Individuals should start taking cognisance of their untapped aptitude of EQ; this can be seen as a hidden competitive edge within an individual. It has become eminent that by taking care of the soft competences such as EQ within higher education, the harder competencies should take care of themselves. Once students realise this, their capacity for success may be expanded.

Cherniss and Goldman (2001) states that: "Competencies in technical and cognitive realms are threshold skills. These competencies are an essential requirement to enter a field, but because everyone in that given field should possess these technical and cognitive skills, their power in setting outstanding performers apart from average ones starts diminishing. Therefore, once people are in a given job or field, emotional intelligence emerges as the predictor of who will emerge as the star performer in a field. For the purpose of this study it should be emphasised that, when looking at star performers within a certain job or profession, it is learned that emotional intelligence is a more powerful predictor of success than IQ".

Emotions can purposely be utilized and orchestrated to work at the advantage of the student by guiding their train of thought, impacting their thinking, cascading into guiding their behaviour and action, in this way increasing and boosting their results and success rate at university. As hard as it is to embrace, emotions are apart of individuals, hence part of their success or failure whilst embarking in higher education. Therefore, in order to be a star performer, the student needs to make use of every ounce of their intelligence.

6. REFERENCES

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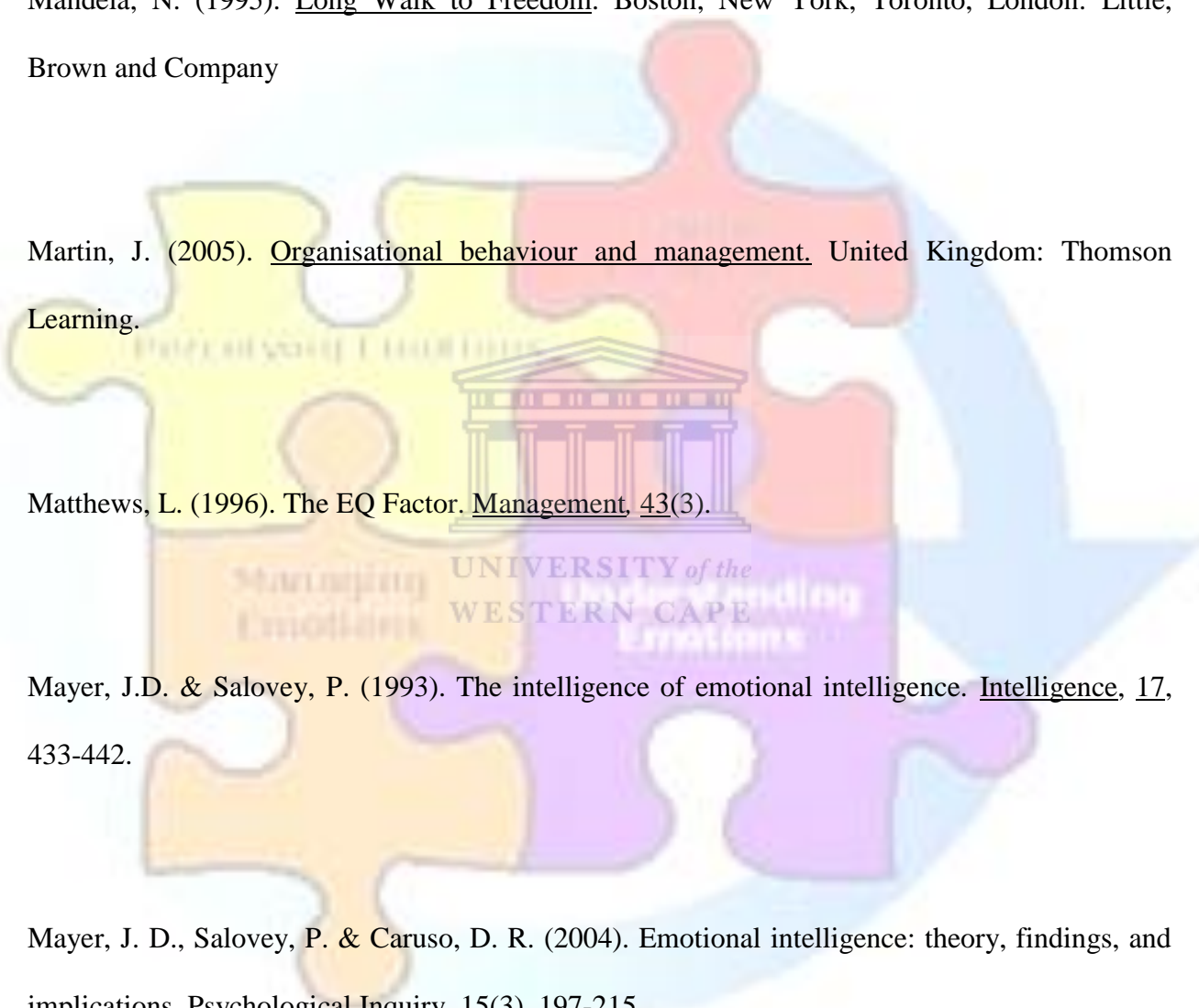
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Department of Industrial Psychology

University of the Western Cape

September 2010

Dear Participant

This questionnaire is designed to study aspects of Emotional Intelligence. The information you provide will help us better understand the essence of Emotional Intelligence on university students. Because you are the one who can provide us with the correct information on how Emotional Intelligence impacts your tertiary experience, I request you to respond to the questions frankly and honestly.

Your response will be *kept strictly confidential*. Only I will have access to the information you give. The numbers, names, or completed questionnaire will not be made available to anyone other than the research team.

Thank you very much for your time and cooperation. I greatly appreciate your organisations and your help in furthering this research endeavour.

Kind Regards,

Nasheeta Adams

H.Com (Industrial Psychology)

Biographical Information

Age:

17-20	21-23	24-25	25-30	31-over

Gender:

Male	Female

Race:

White	African	Indian	Coloured

Marital Status:

Single	Married	Divorced

Educational level:

1st Year	2nd Year	3rd Year

Course:

Year started:

Prior to 2006	2006	2007	2008	2009

Year intended completion of degree:

2010	2011	2012	After 2012

Full time	Part time

If Part time, your occupation: