An exploration of how emotional intelligence abilities are utilised by

successful students in tertiary education

by

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DECLARATION

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I declare the thesis titled **"An exploration of how emotional intelligence abilities are utilised by successful students in tertiary education"** is my own work, and I have utilised or quoted from other sources only as specified and acknowledged in full references.

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ABSTRACT

Low student success, throughput rates, and high attrition are major concerns in the South African higher education system. Emotional intelligence (EI) has been linked positively to academic performance, behaviours, and attitudes regarding tertiary education, including how well they adjust to tertiary education. The research intended to explore the EI abilities used by tertiary students to successfully complete their studies in the allocated time period. Mayer and Salovey's Four-Branch Model of EI (1997) was used as a guide as to assist in identifying relevant abilities and factors relating to this model and EI. Semi-structured interviews were conducted with students that had successfully completed their degrees in allocated time. The study adapted an interpretive paradigm and a qualitative, interpretive phenomenology as a methodology. Content analysis was followed during data analysis and was used to explore EI abilities based on Mayer and Salovey's model. This allowed a closer examination of EI abilities that aided in the adjustment, performance, and retention of students in tertiary education. The findings supported previous investigations that have revealed that there is a positive correlation between EI and academic achievement, behaviours and attitudes that lead to success. The exploration of these EI abilities may be useful to examine how these skills were successfully applied during their studies and contributed to successfully navigating the various challenges that tertiary education presents, both socially and academically.

Key words: Emotional intelligence, student success, tertiary education, adjustment, retention.

CHAPTER 1: INTRODUCTION

1.1 Introduction

In South African tertiary education "just under half of the young people who enter undergraduate degrees never graduate" (Department of Higher Education and Training (DHET), 2019, p. 31). The Council on Higher Education (CHE) reported that "the South African higher education system is currently producing too few graduates, both in absolute numbers and relative to intake. Therefore, there are mismatches between current graduate attributes and the broader needs of society and the economy" (CHE, 2013, p. 32). The CHE have identified high dropout rates and slow completion rates to be of a major concern in tertiary education in South Africa (CHE, 2013). In addition, the greatest attrition occurs at the conclusion of first year of study in South African universities (CHE, 2012).

It is reported that in South Africa, under 30% of university students graduate in the regulated time, less than two-thirds graduate within six years, and one-third have not graduated after a decade (CHE, 2018; DHET, 2019; Scott, 2018). Statistics from the South African Council of Higher Education (CHE) (2012) show that one third of students drop out of their degrees in the first academic year at university.

Higher education has gone through significant changes and transformations since the 1994 and the beginning of formal democracy in South Africa (Scott & Ivala, 2019; Tom et al., 2020). In addition to global challenges to retention and pass rates, South Africa is faced with various multi-faceted challenges in the tertiary education system (Bantjes et al., 2021). These include socio-economic challenges, language barriers, quality of education at school level, first generations of university students, and issues of access and equity (Le Grange, 2011; Mouton et al., 2013; Scott & Ivala, 2019; Tom et al., 2020). These add to the complexity of difficulties students face when entering tertiary education (Bantjes et al., 2021; Petersen et al., 2014).

As a lecturer in higher education, I find myself continuously asking why so few students are completing tertiary education as well as what separates those that are successful from those that aren't? The largest determining factor in graduation is understandably academic performance and is also identified as a key indicator in retention (Hamoud et al., 2018). However, there are various factors that influence academic performance (Alyahyan & Düştegör, 2020). By regarding the successful completion of studies as the end goal it is evident that there are serious shortcomings in tertiary education. However, it is also acknowledged that whether one is successful in tertiary education or not is dependent on a range of intricate variables (CHE, 2013). In review of literature compiled by Alyahyan and Düştegör (2020), they observed that prior achievements in academics, student demographics, and psychological characteristics were prevalent elements in predicting academic success. It is widely recognised that academic abilities and achievements involve more than a student's scholarly potential and acknowledge the significance of a more complicated set of student-related variables linked to success (Alyahyan & Düştegör, 2020; Bantjes et al., 2021; Parker et al., 2017). One such factor that has been identified as key in determining academic performance is adjustment (D'Errico et al., 2018; Holliman et al., 2019; Kantanis, 2000). There are many new individual and social challenges that students are presented with while changing from school to tertiary education (Tom et al., 2020). Stress levels of students in first-year is thought to be higher than in any other year (Dubois & Brooks, 2015). Friedlander, Reid, Shupak, and Cribbie (2007) identified the three most important areas to consider in the change from school to university to be a students' academic, social, and emotional adjustment. Academic adjustment includes how a student handles the academic and educational requirements of their studies (Haktanir et al., 2021). Social adjustment includes integrating into university life, social support networks, new social freedoms, as well as managing previous social connections and situations such as family, loneliness, and homesickness (Credé & Niehorster, 2012; Friedlander et al., 2007; Gerdes et

al., 1994). Emotional adjustment includes dealing with factors such as stress, worry, depression, self-esteem, and emotions (Friedlander et al., 2007; Haktanir et al., 2021). Adjustment is therefore a dynamic, changing process, where one attempts to balance their thinking and behaviours to conform to the needs of a given environment (Haktanir et al., 2021; Petersen et al., 2014; Salami, 2011). Overall university success depends on making this transition to university life (Haktanir et al., 2021; Kantanis, 2000; Petersen et al., 2014; Walsh-portillo, 2011).

Previous studies have shown that in order to move from high school to tertiary education successfully, emotional and social competencies are crucial (Parker et al., 2004, Parker et al., 2005). Emotional intelligence (EI) is a skill used in the accurate perception of emotions, it is utilising emotions to enhance thinking and reasoning, to identify emotions, and to regulate one's own emotions and of others (Mayer & Salovey, 1997). According to research EI is linked to students' academic achievement, behaviours and attitudes regarding tertiary education, including how well they adjust to university (Salami, 2010; Salami & Ogundokun, 2009; MacCann et al., 2020). It has been asserted a favourable connection exists between student adjustment and EI (Bar-On, 2001; Parker et al., 2004; Salami, 2011) and students who have higher EI and social skills are more likely to graduate (MacCann et al., 2020). This study provides a closer examination of EI abilities that may aid in the adjustment, performance and retention of students in tertiary education.

1.2 Background of the problem

Transitioning from high school to university can be tremendously challenging for students and problems in the adjustment to university life is a common reality (Dubois & Brooks, 2015; Esmael et al., 2018; Haktanir et al., 2021; Petersen et al., 2014). For many, this is their first major life transition and one that they may not be adequately prepared for (Dubois & Brooks, 2015; Fernández et al., 2017; Haktanir et al., 2021). Challenges include leaving family,

increased independence, financial implications, creating new relationships, academic complexity, and general adjustment to the new academic environment (Dubois & Brooks, 2015; Esmael et al., 2018). As previously indicated, failure to successfully negotiate these challenges seems to be the most typical explanation for withdrawal from tertiary education (Esmael et al., 2018; Haktanir et al., 2021). From their research on adjustment, Credé & Niehorster (2012) have concluded that the student's ability to adjust during tertiary education seems central to succeeding academically, obtaining a degree and to regard their experience at university positively.

Higher levels of success, leadership, and personal well-being can all be attained by students, educators and faculty with the aid of emotional knowledge, skills, and EI (Low, et al., 2004). Investigating the part emotions play in the learning process has emerged as an significant field of research in education (Pekrun et al., 2017).

Emotions are described by Mayer and Salovey (1990) as, "organised responses, crossing the boundaries of many psychological subsystems, including the physiological, cognitive, motivational, and experiential systems" (p. 186). Emotions likely stem from a response to a stimulus, internally or externally. This can lead to a the person experiencing positive or negative affect (Rolls, 1990). Intelligence is understood by Weschler (1944, p. 3) as an "aggregate" or "global capacity" of a person to behave with purpose, to reason, and to effectively interact with his environment.

Mayer and Salovey (1990) were first to propose the idea that elements of emotion can be conceptualised as a skill. They suggested that some individuals possess the ability to have a better understanding of emotions than others and are able to apply them more effectively to advance thought (Mayer & Salovey, 1990). People high in EI are said to comprehend, utilise, and control their emotions in constructive ways. These serve as adaptive functions that have

the potential to benefit the individual and others (Mayer et al., 2004; Salovey & Grewal, 2005). EI is comprised of abilities used to process complex information about emotions, and use this understanding to guide thought and behaviour in a positive direction, in order to grow emotionally and intellectually (Mayer et al., 2008).

As EI has grown in popularity, along with subsequent models and research, it is split into two distinct perspectives (Petrides et al., 2004; Petrides & Furnham, 2003). *Ability EI* follows from traditional definitions of EI such as those of Mayer and Salovey (1990) and view EI as an emotion-related cognitive ability calculated through maximum performance assessments (Brackett et al., 2004; Qualter et al., 2012; Mayer & Salovey, 1997). *Trait EI*, however, defines EI not as a cognitive ability, but as a collection of emotional self-perceptions and behaviours, measured with self-report questionnaires (Petrides & Furnham, 2001, 2003). Trait EI (or 'emotional self-efficacy') incorporates various personality traits, such as being optimistic, impulsive, or assertive (Petrides et al., 2004). Trait EI draws heavily on personality variables, ability EI (or 'cognitive-emotional ability') denotes to an individual's true ability to identify, understand, and use emotion-loaded information (Petrides & Furnham, 2000; Petrides et al., 2004). These concepts will be discussed in more detail in future chapters. The focus will be on ability EI for the purpose of this research.

Mayer and Salovey (1997; see also Salovey & Mayer, 1990) created the first ability-based assessments of EI and proposed a model to study the range of individual variations in abilities related to emotion. Their Four-Branch Model of EI (Mayer & Salovey, 1997) was the conceptual model guiding this study. Mayer and Salovey's approach is well accepted by the scientific community, and widely published in the subject of EI (Matthews et al., 2002). Mayer and Salovey's Model (1997) is an integrative model of EI, by combining several specific abilities to get a comprehensive understanding of EI. These abilities combine intelligence and emotion to improve cognition (Mayer et al., 2011; Mayer et al., 2008). The model gathers

emotional abilities from four classes or branches. Each of these branches specifies a combination of abilities that make up a person's EI (Mayer et al., 2008). According to the authors, "EI includes the abilities to (a) perceive emotions in oneself and others accurately, (b) use emotions to facilitate thinking, (c) understand emotions, emotional language, and the signals conveyed by emotions, and (d) manage emotions so as to attain specific goals" (Mayer & Salovey, 1997, p. 22). This model can be viewed in Appendix B and will be discussed in more detail in later chapters. These abilities are part of the focus for this study, regarding the role they play in students' achievement, behaviour and attitude during tertiary studies. Also of interest is how students utilise these EI abilities to successfully achieve their academic goals.

Research on EI indicates that it can be an important ingredient in aiding academic achievement (Bar-On, 2006; Feldmann et al., 2011; Parker et al., 2009). EI also addresses various elements of psychological sciences such as the neuroscience of emotion, theories of self-regulation, commitment, metacognition, and other human cognitive abilities beyond what is traditionally regarded as academic intelligence (Byzova & Perikova 2019; Drigas & Papoutsi, 2018; Estrada et al., 2021; Matthews et al., 2004). Higher EI scores are generally associated with students who succeed academically, according to research on the topic (MacCann et al., 2020; Walsh-portillo, 2011; Estrada et al., 2021). Extant literature acknowledges that EI does not replace intelligence quotient (IQ) (Hagen, 2012; Mayer et al., 2004). However, when EI is partnered with IQ, the numerous benefits are apparent in all areas of life (Cherniss et al., 1998; Hagen, 2012).

Previous studies demonstrated that high EI has positively influenced the adjustment of students to university life (Elias et al., 2007; Parker et al., 2006; Salami, 2010). EI may also contribute positively to other areas of a tertiary student's life focuses on certain qualities of a person's personality and attributes of self-control, such as the capability to delay gratification, inability to endure unpleasant feelings or stressful situations, and the impulse control (Drigas &

Papoutsi, 2018; Moeller et al., 2020). In research conducted by Mayer, Roberts and Barsade (2008), the authors concluded that better social connections, notably those with family, are associated with EI. Additionally, higher EI was associated with greater academic performance, improved social interactions at work, and positive psychological wellbeing. People with high EI were also seen as being friendlier, more empathic, and having greater social skills (Estrada et al., 2021; Mayer et al., 2011). EI is also said to be a protective factor for depression, anxiety and stress (Moeller et al., 2020).

1.3 Research Problem

High attrition rates and poor throughput rates at university are of major concern in South Africa. There are many academic, social, and emotional challenges for the student to face during their studies. Many students find it significantly difficult to adjust to life at university and the greatest attrition is reported to occur in the initial year of tuition (Ajoodha et al., 2020; CHE, 2013). The need for the growth and promotion of EI is needed as a necessary tool for students, especially in tertiary education (Morales-Rodríguez, 2019). Certain EI skills can be utilised in challenging situations and assist in students the adaption to university life, for example resilience, control of emotions and regulation of behaviours. Those that are more aware of their emotions and the nature and causes behind them, are more likely to respond to them appropriately and not give up under pressure (Drigas et al., 2020). This study will explore the EI abilities that may assist students' in effectively negotiating their adjustment to tertiary education, to better understand the EI skills that were utilised during this time and aided in their success. Once these skills are identified in such research, one may be able to harness these abilities or recognise those that are lacking and find ways to nurture such skills.

1.4 Aims and objectives of the research

This qualitative study aims to explore the EI abilities of students who have completed their tertiary education successfully within the regulated time and examine how students have

utilised these abilities to complete their studies. The research aims to determine the EI abilities used and investigate where and how they applied these strategies during their studies. The research also examines the role of EI in assisting students to adjust to university successfully. The objective of this study is to interview students that have been successful in negotiating this adjustment and gone on to complete their degrees.

1.5 Research questions

What EI abilities were used by tertiary students who have successfully completed their studies within regulation time and how did they utilise these EI abilities?

Key questions guiding this research are:

- Which EI abilities have been used by tertiary students in their studies?

- How have tertiary students utilised different EI abilities?

- How has EI assisted students in adjusting to university life?

- How has EI impacted the student's tertiary studies and ultimately their academic achievement?

- How can EI and related abilities assist students with their tertiary endeavours?

- How can EI aid in facilitating thought, judgement and problem solving?

- How do successful students use EI to manage their emotions?

1.6 Research approach

1.6.1 Research paradigm

This qualitative research utilises an interpretive paradigm, where the key focus is the process by which humans try to understand the world around them. People come from diverse cultural backgrounds, experience unique circumstances, and attach different meanings to various objects and symbols and therefore create their own social realities (du Plooy-Cilliers, 2014; Saunders et al., 2019). The ontological viewpoint of interpretivism is one where humans

construct their own knowledge through their actions and social interactions. Reality is dependent on the meanings people assign to experiences, and can vary subjectively (Alharahsheh & Pius, 2020; du Plooy-Cilliers et al., 2014; Ritchie et al., 2013). Epistemologically, interpretivism posits that social research should not be conducted using natural science methodologies and are too simplistic. The researcher must investigate and comprehend the social environment through the subject's own perspectives, where it is a truism that one cannot separate people from their own knowledge (Alharahsheh & Pius, 2020; Du Plooy-Cilliers et al., 2014; Ritchie et al., 2013).

Interpretivist research seeks to develop fresh, rich perceptions of social circumstances and environments (Saunders et al., 2019). Therefore, in the context of this study, interpretivism is used to gain an in-depth understanding of how tertiary students have experienced their university life and successfully completed their studies, and the abilities they utilised to do this.

1.6.2 Research methodology

This study investigated the research problem phenomenologically. Interpretive phenomenology was used, because it assisted the researcher accentuate the real experiences of the participants, as well as their memories and perspectives of those events (Maggs-Rapport, 2000; Saunders et al., 2019).

Interpretive phenomenology aims to investigate a phenomenon from the perspective of those who have experienced it. In doing so, the researcher better understood the meaning that the participants ascribed to the phenomenon (Neubauer et al., 2019; Teherani et al., 2015). Therefore, this was an appropriate method for the study and the results contributed to our understanding of the students' tertiary education experience and EI abilities utilised for their success and adjustment.

1.6.3 Research design

1.6.3.1 Population and sampling

Tertiary students from a private university in Durban, South Africa, founded the population from which this sample was recruited. Most were recent graduates and were moving onto postgraduate studies. Students were from the School of Humanities and had completed their degrees in the regulated time of three years. To identify participants for this study, purposive sampling was selected. Purposive sampling is a non-random technique as the choice of a participants is deliberate due to the qualities they possess (Creswell, 2007; Etikan et al., 2016). Recently graduated students were contacted via email as well as during a presentation to a postgraduate class. The study was explained, and students then volunteered to participate in the study. They were of mixed cultural groups, race and demographics which will be outlined in Chapter 4.

1.6.3.2 Data collection

To collect data for this study, semi-structured interviews were conducted. Semi-structured are, "verbal interchanges where one person, the interviewer, attempts to elicit information from another person by asking questions" (Longhurst, 2009, p. 103). This type of interview uses both closed- and open-ended questions (Adams, 2015). However, mostly open-ended questions were asked with probing of certain responses of the interviewees to allow in-depth exploration (Wagner et al., 2012). The interviews were conducted by means of an interviews schedule (see Appendix A). These interviews were prearranged with the student participants and were conducted one-on-one with the interviewer. The Mayer and Salovey's Model of EI and their ability-based model of EI (Mayer & Salovey, 1997) was the conceptual model that guided this study. The questions were developed by the researcher with the four branches of this model taken into consideration when doing so.

1.6.3.3 Data analysis

The researcher transcribed the interviews once they were completed. ATLAS.ti, which is a computer-assisted qualitative data analysis software, was utilised to aid in the analysis of the data. As mentioned, Mayer and Salovey's Model of EI and their ability-based model of EI (Mayer & Salovey, 1997) was used as a guide as to assist in identifying relevant abilities and factors relating to this model and EI. The researcher created 17 codes falling under four main themes, based on the Mayer and Salovey Model (1997). The model was used during content analysis to gather similar data together, based on the themes from the Mayer and Salovey's Four-Branch Model. This allowed the researcher to interpret the data using the seventeen codes and four themes to better comprehend how each code (EI ability) was used during the participants' tertiary studies.

1.7 Results

Participants in the study were able to successfully show how they utilised their EI abilities effectively during their tertiary studies. All the aspects of the Mayer and Salovey (2017) model, being the four themes and seventeen codes, were demonstrated by the participants to varying degrees. They were able to recognise feelings clearly, utilise emotions to improve thoughts, identify and show understanding of emotions, and were able to regulate emotions in their self and others (Mayer & Salovey, 1997). The results also supported previous findings that there is a positive relationship between student adjustment and EI (Bar-On, 2001; Parker et al., 2004; Salami, 2011) and students with higher levels of EI and social competencies were more likely to graduate (Moeller et al., 2020). Those who have higher EI are said to be more adept at managing emotional distress and conflict that may arise during their studies, and this was demonstrated in their self-motivation and resilience (Wijekoon et al., 2017; Haktanir et al., 2021). Utilising these abilities is particularly pertinent in the adjustment during first year and

showed that no matter how challenging this time was, they were able to persevere by utilising these abilities. These results will be further discussed in Chapters 5 and 6.

1.8 Significance of this study

The findings of this research may be useful in creating awareness and understanding of the emotional intelligence abilities that play a role in academic achievement, and how these manifests in practice. In addition, it can aid in attempts to improve tertiary retention and throughput and assisting 'at risk' students.

1.9 Trustworthiness

Trustworthiness in qualitative research is used to describe how accurate, relevant and worthwhile the research is and whether the claims that are made are warranted (Denzin & Lincoln, 2005; Levitt Motulsky et al., 2017). A rigorous and methodical qualitative analysis can generate reliable and informative findings (Järvinen & Mik-Meyer, 2020). Lincoln and Guba's (1985) criteria to create trustworthiness will be discussed in more detail in Chapter 4.

1.10 Ethical considerations

Ethical considerations were kept in mind at all phases of the investigation for this study. This included the necessary permissions and ethical clearances with the University and the students. The American Psychological Association's (2017) general ethical principles were applied during this study, namely, beneficence and non-maleficence, fidelity, and responsibility, integrity, justice, and respect for people's rights and dignity. These principles are discussed in more detail in Chapter 4.

1.11 Limitations

A discussion on the limitations and recommendations for future studies will be discussed in the final chapter. It is, however, noted, that by focusing on EI ability in this study, there may be gaps in certain important constructs of EI, that being aspects of trait EI. Therefore, an

examination of people's self-perception regarding their emotional abilities and aspects of self-efficacy, and the link between EI and personality traits are areas to be considered for future research. Mayer & Salovey's (1997) Four-Branch model of EI was adopted as the conceptual framework that guided this study and may be considered as to specific and narrow in focus.

1.12 Definitions of terms

Ability EI (or 'cognitive-emotional ability'): is described by Petrides, Frederickson & Furnham (2004) as an individual's authentic abilities to identify, process, and make use of emotional information.

Adjustment: in this study, adjustment is regarded as a process that helps students successfully fulfil the demands of their academic, social, personal-emotional, and institutional environments.

Emotions: emotions are described by Mayer & Salovey (1990) as a human being's structured reactions to an internal or external stimulus. This can result in an emotion that can be either positive or negative and involves bodily, cognitive, motivational, and experiential systems within an individual.

Emotional Intelligence (EI): Salovey and Mayer (1997) define EI as:

"The ability to perceive accurately, evaluate, and express emotion; the ability to retrieve and/or generate feelings when they facilitate thought; the ability to comprehend emotion and emotional knowledge; and the ability to regulate emotions to encourage emotional and intellectual growth" (p. 10).

Intelligence: The ability of a person to act with purpose, reason, and environment-appropriateness (Wechsler, 1944).

Regulation time: In this study, this is the amount of time it should take a full-time student to finish a qualification, such as three years for completion of a degree.

Student Success: Simply put, student success is getting students through tertiary education to obtain a degree (Tinto & Pusser, 2006; Wellman & Ewell, 2007). However, other elements to consider include students' satisfaction and comfort in their learning environment, the extent to which students have a feeling of belonging and a degree of psychological health that support their tenacity to graduate and allows them to get the full benefits of being in university (Kuh et al., 2006; Schreiner, 2010).

Trait EI (or 'emotional self-efficacy') Petrides, Frederickson & Furnham (2004) explain this as a collection of self-perceptions regarding one's abilities to recognise, process, and use of emotional information. It also includes a variety of elements of the personality, such as compassion, determination, and decisiveness as well as components of social intelligence (Thorndike, 1920) and personal intelligence (Gardner, 1983).

1.13 Outline of chapters

Chapter 2: Literature review

The aim of this chapter is to provide the theoretical background to the study as well as focus on development and theories of EI.

Chapter 3: Theoretical framework

This chapter examines the Mayer and Salovey's Four-Branch Model of EI which is the conceptual model guiding this study.

Chapter 4: Research design

In this chapter the research design is explained, as well as the interpretive paradigm and a qualitative, interpretive phenomenology as a methodology. Content analysis is discussed as the approach followed during data analysis.

Chapter 5: Research results

This chapter describes the results and findings of the study as gathered during the interview process. It describes participants' experiences of tertiary education and their adjustment to it, with reference to specific EI abilities that were utilised.

Chapter 6: Summary of findings

This chapter provides a discussion on the findings gained during the research. Each of the seventeen codes that were used are examined, under the four branches of the Mayer and Salovey Four-Branch model.

Chapter 7: Conclusion

This is the final chapter in which conclusions are drawn. The contributions and limitations of this study are discussed and recommendations for future research are made.

1.14 Conclusion

This introductory chapter provided an overview of this research project. The high dropout and slow completion rates in South Africa are a major concern in tertiary education, as much as worldwide, with the highest attrition rate occurring at a first-year level. Academic achievement is the most recognised factor contributing to the success of a student, however, recently it is more commonly recognised that academic achievements involve more than a student's scholarly potential. It is acknowledged that more complex variables are linked to student success, such as adjustment – both academically and emotionally – to university life. The aims and objectives were discussed which includes examining emotionally intelligent abilities in tertiary students that may play a vital role in tertiary education, particularly in the successful adjustment of the student to university and throughout their journey towards achieving completion of their qualification.

This study adapted a qualitative, interpretive phenomenological approach. Students of mixed cultural, racial and demographics were selected for the study using purposive sampling. Semi-

structured, face-to-face interviews were conducted with each participant. The EI ability-based model (Mayer & Salovey, 1997) was adopted as the conceptual model guiding this study in questioning and during analysis. The data was analysed qualitatively by applying content analysis. Trustworthiness and ethical considerations were then outlined. The chapter ended with the definitions of key terms. The following chapter will investigate the relevant literature on EI and aspects of success in tertiary education in greater detail.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The South African and international higher education systems continue to experience problems with student success rates, university throughput, as well as the lack of relevant and acceptable student support (De Klerk et al., 2017). In this chapter, the concept of 'student success' is examined, as well as the factors that influence tertiary student success and throughput rates. Subsequently, a prevalent concern is the adjustment of the student to the demands of tertiary education, as well as the student being underprepared for this transition. An increasing quantity of evidence indicates that navigating these factors successfully may involve a range of emotional and social competencies (Jagers et al., 2019). This leads to emphasis on emotional competencies and the concept of EI. EI is considered as a key factor in student success and the adjustment of students to a tertiary environment and subsequently, completion of their studies. Different conceptualisations of EI are explored, via the three main models of EI. EI is then examined in an educational context, particularly in tertiary education.

2.2 Student success and factors influencing student success

"Student success" can be simply understood as enrolling students in tertiary education and ensuring their completion to obtain a degree (Tinto & Pusser, 2006; Brandt, 2020). The CHE defines the goal of student success as: "Enhanced student learning with a view to increasing the number of graduates with attributes that are personally, professionally and socially valuable" (CHE, 2014, p. 1).

Other facets of success include the degree to which students are happy with their time in tertiary education and feel secure and supported in their learning (Kuh et al., 2006). This can also include the degree to which students have a sense of belonging and levels of psychological

health that can assist them persist through to graduation and reap the full rewards of attending university (Bowden et al., 2021).

Student success could be quantified using conventional academic achievement indicators, such as test and assessment results, which show advancement toward the degree (Eubanks, 2021). Other conventional measurements of student success include progressing into post-graduation education and programmes, future employment, and income. This may also include many ideal student and personal development outcomes that can ultimately benefit the individual and society such as critical thinking, advanced literacy, skills, and a developed levels of self-awareness and social competence (Eubanks, 2021).

The CHE groups the factors that impact on South African students' performance and success into three broad factors, namely, material, academic and affective factors (CHE, 2013). Material factors include socio-economic conditions and financial resources. This is especially relevant in a South African context, where financial difficulties are frequently cited as a major cause of attrition and suspension of studies (Scott et al., 2007; CHE, 2013). Academic factors, according to Scott et al. (2007) refers not only to "teaching approaches but all aspects of the formal system, including the curriculum framework, the design of its component parts, assessment, and student support" (p. 39). Affective factors play a significant role in learning and can influence students success (Bowden et al., 2021). This may include levels of motivation, anxiety, students' confidence, ability to cope and student engagement (CHE, 2013; Scott et al., 2007). This includes the difficulty many students have in successfully negotiating the adjustment of moving from school to university and is a widely recognised occurrence that can result in high rates of student failure and attrition (Van Zyl et al., 2012). Adjustment in relation to student success will be discussed in more detail, after examining tertiary education, particularly in a South African context.

2.3 Student success in South African tertiary education

In South Africa, "just under half of the young people who enter undergraduate degrees (in either contact or distance mode of tuition) never graduate" (DHET, 2019, p. 20). Low student success and throughput rates, leading to low absolute numbers of graduates, are a major concern in the South African higher education system. For this reason, there is a pressing need to increase the number of graduates in South Africa, especially as their disciplinary and professional knowledge is needed. Graduates also fill important jobs, build research and increase teaching capacities (CHE, 2013).

The task team of the CHE (2013) consider the time taken to graduate in tertiary education as an important indicator of how effective educational institutions are. Regulation time refers to how long a full-time student may take to complete a qualification. The formal time allotted in the funding framework indicates the anticipated length of qualification. For example, a bachelor's degree should be completed in three years and a professional bachelor's degree should take four years (CHE, 2013).

The curricula at tertiary institutions are created around students being able to complete their degrees within the regulated timeframe. However, no matter how well the programmes are designed, if students cannot follow the curriculum and cannot keep up with work expected of them, poor results and failure can follow (CHE, 2013). Looking at students in South Africa, more than 70% do not graduate within regulation time. Less than 66% graduate within six years since first registration and after ten years 33% are still in the system (DHET, 2019; CHE, 2018). The transition of students into higher education involves many difficulties. The change may result in diminished academic performance and heightened psychological distress (Tom et al., 2020). In South Africa, the greatest attrition rate occurs at the conclusion of the first year of tuition, with an overall dropout rate of 33% across all three- and four-year qualifications (CHE,

2012). In South Africa, first-year attrition has been a problem for a very long time and there has been very little change in this regard since the year 2000 (Scott et al. 2007; CHE, 2013).

2.4 Adjustment

A students' adjustment to their tertiary environment is regarded as a significant factor in predicting student success (Tom et al., 2020). The more positive the adjustment students experience in their first year of study, the more likely they are to persevere and successfully complete their degree (Haktanir et al., 2018). By examining the concept of adjustment, we can better understand this multidimensional concept and aim to support students through this transitional phase. The concepts of adjustment, perceived social support, under-preparedness and student engagement are covered in this section.

2.4.1. Concept of adjustment

Adjusting to tertiary life is generally challenging for the student due to the notable variations between the educational contexts of school and university (Holliman et al., 2019). Starting university may be an exciting and novel experience for students, but it can also be a challenging one, where leaving high school and moving on to tertiary education constitutes a key life shift (D'Errico et al., 2018; Holliman et al., 2019; Tom et al., 2020). Ramsey, Jones and Barker (2007) explain adjustment as a fluid practice of attempting to find a meaningful place for an individual in their environment. Salami (2011) describes adjustment as a position where students feel their needs are being addressed, and they act in a way that is suitable for the situation. According to this study, adjustment refers to the process by which students successfully satisfy the demands of their academic, social, personal-emotional, and institutional environments.

2.4.2 Adjustment to university life

As a first-year student in tertiary education, students are confronted with various challenges in two significant chapters in their life, namely: that of tertiary education and adulthood (Haktanir et al., 2021). There are many new individual, academic, and social challenges, such as increased workloads, building independence, making new friends and connections as well as maintaining and modifying existing relationships (Madson et al., 2022). It is not surprising that most students perceive this as a particularly stressful period. Students frequently claim that their first year of study was more stressful than their following years (Esmael et al., 2018; Haktanir et al., 2021). Many authors have discussed the numerous pressures and difficulties first-year university students experience. Salami (2011) notes that students must meet a variety of new requirements and obstacles, including those related to establishing new, mature interpersonal connections with teachers and peers, adjusting to new assessment systems, and developing appropriate study skills for their new academic environment. Other transitory adjustments include more personal autonomy, changes in social relationships, changing to new roommates, using support services, eating habits, and the academic curriculum (Madson et al., 2022). In order to create effective intervention programmes for students who are experiencing adjustment challenges, it is crucial to be able to recognise these issues (Awang et al., 2014). There are other factors that may present themselves in the adjustment process and can ultimately affect the transition to university and ultimately the student's success. These include perceived social support, under-preparedness, and student engagement.

2.4.2.1 Perceived social support

How well a student effectively copes with the increasing academic, social, and personal demands of higher education may influence the amount of stress experienced by the individual and in turn, how the student adjusts to tertiary life (Haktanir et al., 2021; Koonin, 2014; Madson et al., 2022). Perceived social support has proved to be among the most crucial protecting

factors for first year students being able to cope with their transition to university (Bowden et al., 2021). Salami (2011) explains that perceived social support refers to the perception of availability and accessibility from significant others. Social support may be presented in numerous ways such as direction and advice, non-directive support such as empathy and listening, positive interpersonal communication and physical aid, for example, in the form of food or money. Perceived social support may also play a role in adjustment to tertiary education (Paramo et al., 2014). Social support assists in boosting confidence, which enables students to handle whatever various academic, social, and emotional difficulties they might experience as first-years. This suggests that first year students require social support from their parents, peers and significant others in order to adjust adequately to tertiary education (Esmael et al., 2018).

2.4.2.2 Under-preparedness

Many believe that a substantial percentage of new students are not adequately prepared for university-level studies, which is the main cause of underperformance in higher education. (CHE, 2013). This reveals itself in several ways, from students having trouble transitioning to self-directed learning and a university environment, to having difficulty with the official curriculum (Nel et al., 2009; CHE, 2013; Tom et al., 2020). According to the CHE (2013), under-preparedness is a key obstacle that needs attention considering those that have made it as far as university have the potential to succeed. Unfortunately, under-preparedness negates this possibility.

When students enter university, they realise that they are inadequately prepared for higher education. This may also entail having irrational expectations about continuing their academic achievement from high school in university, their subject and vocational options and the effect of increased independence (Esmael et al., 2018; Nel et al., 2009). This is also related to what is known as the 'articulation gap', which refers to the incoherence between the levels of leaving school and entering tertiary education. Figures on first-year attrition support the claim that the

disconnect between school and higher education is a major cause of the subpar performance in higher education (CHE, 2013). This gap might be a major contributor to attrition, leading to poor academic performance as well as demotivation and final dropout. Inability to manage the educational environment they are in may damage students' commitment, self-esteem, and overall health (Haktanir et al., 2021).

2.4.2.3 Student engagement

It is generally acknowledged that student engagement is important for student retention. Enhancing this engagement is essential to increase student success (Crosling et al., 2009; Picton et al., 2018). There is much research on how students interact with their studies and what organisations and educators can do to foster engagement (Bonet & Walters, 2016; Bowden et al., 2021; Collie, et al., 2017; Picton et al., 2018). Student engagement indicates academic commitment and application (Horstmanshoff & Zimitat, 2007). Engagement is "the amount of physical and psychological energy that the student devotes to the academic experience" (Astin, 1984, p. 298). Students who are engaged tend to put forth a lot of effort and focus on the execution of academic activities. They also tend to exhibit positive emotions, such as eagerness, optimism, interest, and excitement (Skinner and Belmont, 1993).

Engagement incorporates the concept of integration, or how involved students are with their university life. The likelihood that students will persevere with their studies and graduate increases with more academic and social involvement (Bowden et al., 2021; Tinto & Pusser, 2006). Perhaps one of the most influential models of attrition from higher education was proposed by Tinto in 1975, with his Student Integration Model (SIM) (cited in McCubbin, 2003). According to Tinto, students must effectively **commit** themselves to both the academic and social domains and **integrate** themselves into life at a tertiary level in order to persevere through to complete their degree (cited in Pekrun et al., 2017). Both the academic and social

communities of the tertiary environment comprised of formal and informal components (Tinto, 2007).

Formal academic integration includes the students' academic abilities, and whether these are congruent with the demands of the tertiary institution. **Informal academic integration** included common values of the student, compared with those held by the institution (Morrison & Silverman, 2012).

Social integration allows the student to contribute collaboratively in learning by sharing ideas, forming study groups and support networks, and ultimately positively influencing continued attendance and class participation (Tinto, 1997). Formal social integration includes involvement of the student in the system of the tertiary institute, such as clubs, groups, and other forms of social activities. Informal social integration includes peer and friendship groups (Morrison & Silverman, 2012).

Another important factor mentioned by Tinto relating to retention is the importance of **commitment of the student,** both to the attainment of their goal (i.e. the achievement of their degree) as well as the commitment to the tertiary institution (cited in McCubbin, 2003). In addition, Tinto (1997) focuses on the importance of what happens in the lecture room or classroom. He states that this **classroom engagement** is an integral part of any learning experience, and it is here that the academic and social integration merge. Classrooms can be seen as small communities that are part of the broader academic community of the tertiary institution. Engagement in the community of the classroom presents an integral link to the subsequent social and academic involvement in the institution at large (McCubbin, 2003; Tinto, 1997). This also relates to the impact of relationships formed by the student, not only with peers but also with members of the institution. The potential for a learner to establish a sense of identity and feel cared for within the institution can lead to feelings of satisfaction with their

tertiary experience, and ultimately prevent student attrition (Esmael et al., 2018; Haktanir et al., 2021; O'Keeffe, 2013; Tinto, 1993).

Chapman (2003, cited in Mandernach, 2015) outlines three interrelated aspects of student engagement, namely cognitive, behavioural and affective criteria. **Cognitive criteria** include the extent students are investing attention and mental effort in learning tasks and in understanding, or the mastering of knowledge and skills (Newmann et al., 1992, Bowden et al., 2021). These cognitive factors relate to pupils' capacity for self-control and efficient deep learning techniques. (Fredricks et al., 2004; Bowden et al., 2021). **Behavioural criteria** include the time, energy and involvement of students in their reactions to the provided educational tasks. The **affective criteria** of engagement includes the students' emotional reactions and investment in the learning tasks (Bowden et al., 2021; Mandernach, 2015).

2.4.2.3.1 Affective criteria

It is acknowledged that emotional or affective aspects can impact students' cognitive processes, their psychological and physical health, and their academic performance (Pekrun et al., 2002; Scott et al., 2007; D'Errico et al., 2018; Shiota et al., 2021). Emotions can be broadly classified as being pleasant and exciting (positive) or unpleasant and disturbing (negative). This can be dependent on the interpretation by individuals and through their relations with others (Gabriel & Griffiths, 2002; Picton et al., 2018). The engagement of students' in their learning can be influenced by general emotions, such as whether they feel they belong as well as instant emotions, such as pleasure and curiosity (Libbey, 2004; Shiota et al., 2021). Negative emotions, such as anxiety, anger, and depression may even prevent learning from taking place as they interfere with the intake of information (Goleman, 1995; Kort et al., 2001). Pekrun et al. (2002) regards 'academic emotions' as emotions directly related to education, learning, classroom instruction, and achievement. This can include, for example, pride in a good result, enjoyment of a particular subject or stress, and anxiety related to deadlines. Later, Pekrun (2014) and

Pekrun et al. (2007) regarded those emotions emerging from an educational context as achievement emotions. These emotions can activate an individual's behaviour or in contrast, decrease action. For example, positive (activating) emotions such as joy and excitement or negative (deactivating) emotions such as anxiety and boredom (Reilly, 2021). Awareness of these different emotions, to distinguish between them, and to employ pertinent emotional data to inform one's reasoning and action is an integral part of the concept of EI.

2.5 Notions about EI

In this section, a discussion is carried out on EI, beginning from its historical development, in order to gain a complete understanding of the construction of the concept.

2.5.1 History and background

Intelligence is understood to include an individual's ability to comprehend complex concepts, being able to successfully adjust to new situations, learn from experience, to negotiate different types of reasoning, and to problem solve. It is frequently claimed that this ability is represented by a common general element, or g (Carroll, 1993; Mayer et al., 2004). The term "general intelligence" acts as a catch-all for a variety of distinct mental skill sets. The most common subskills studied in modern times include verbal, spatial, and associated logical information processing (Carroll 1993; Mayer et al., 2004). There are many ways to be intelligent, and therefore, there are also many ways to conceptualise intelligence (Neisser, 1996). Rather than viewing intelligence based solely on analytic tasks related to cognition, researchers started to view intelligence as a more diverse set of skills (Gardner, 1983⁄1993; Sternberg, 1985).

EI is a newly developed and expanding field of study with historical roots dating back to the nineteenth century; however, it is now a widely discussed phenomenon in modern times (Bar-On, 2010; Kanesan & Fauzan, 2019). Since the 1990s, literature in this field and the development of models of EI have increased substantially. However, there seems to be a

different definition or justification for the concept's significance with every new discussion about it (Mayer & Salovey, 1997).

EI shows similarities to the notion of social intelligence proposed by psychologist Thorndike in the 1920s. In the 1980s, Sternberg emphasised the value of social skills and even went as far to include them in characteristics of an 'intelligent' person (cited in Chan, 2002). Gardner (1993) delineated "intrapersonal" and "interpersonal" intelligences. The former includes a conscious understanding of one's own thoughts, emotions, and potential. Interpersonal intelligence refers to being aware and perceptive of others and considering ways to communicate with them. These concepts can be regarded as precursors to definitions and conceptualisations of EI (Chan, 2002; Mayer et al., 2001). Gardner's (1983) conceptualisation of 'social intelligence' includes the abilities in accessing one's own internal emotions (intrapersonal intelligence) and being aware of others' emotions and moods (interpersonal intelligence). Similarly, Thorndike (1920) portrays social intelligence as a skill different from abstract intelligence, involving the capacity to manage and comprehend all kinds of people, and to engage in responsible human connections and interactions. Ideas such as these created a supportive environment for thinking about emotional intelligence as a workable construct (Brackett et al., 2011).

The original notion of EI is credited to Professors Peter Salovey and John Mayer. Their initial idea was that some individuals can reason and use emotions more effectively than others. They proposed that some individuals can have greater capabilities to perform complex information processing regarding emotions than others, and use this information to inform ones reasoning and behaviour (Mayer et al., 2008). This initial conceptualisation of EI was a set of interrelated abilities, ranging from the relatively simple, such as reading facial expressions, to the more complex, such as the underlying factors of emotions at play in everyday interpersonal situations (Chan, 2002; Mayer et al., 2008). The concept of EI rose in popularity with Daniel Goleman's

1996 book 'Emotional Intelligence: Why it can matter more than IQ'. He further expanded the concept to include a various skills and personality traits, which lead to a somewhat different conception of what EI includes (Chan, 2002).

2.5.2 Definitions of EI

Despite the large interest around this subject recently, there is still much discussion and debate around an agreed upon definition and measurement. In this section, we will examine various definitions provided for EI.

According to Mayer, Salovey, and Caruso (2004, 2008) the basic abilities of EI are perceiving, understanding, utilising, and managing emotions in oneself and others effectively. This includes the mental functions involved in understanding, using, and managing one's own and other's emotions and utilising the right emotions to control behaviour and successfully overcome barriers and daily challenges (Mayer & Salovey, 1990, 1997; Mayer et al., 2004, 2008). Goleman (1995) concurs with abilities of managing, recognising, and harnessing feelings as an comprising the foundations of EI, however, he also includes aspects such as empathy, motivation, impulse control, and delayed gratification. According to Bar-On (2006) EI is a set of emotional and social abilities that affect how we how we see ourselves, how we communicate, how we understand and connect with others, and how we manage the challenges of daily life.

EI has become widely publicised and recognised, however, in doing so, the concept has become ambiguous and further detached from scientific literature (Mayer et al., 2011). Conceptualisations of EI have come to a broad, all-encompassing intellect that covers a variety of emotional abilities. Too often the term attempts to be all inclusive and inconsistent, such that EI loses its conceptual meaning (Mayer et al., 2011). For example, Goleman (1995) appears to define EI as any likable trait of the personality that is not reflected in cognitive

intelligence (cited in Zeidner, Matthews, & Roberts, 2004). Other descriptions of EI include a varied blend of different traits such as positivity, confidence and self-control which are dispositional instead of ability-based (Bar-on, 1997; Mayer et al., 2008; Petrides & Furnham, 2001). This has resulted in substantial confusion and misunderstanding about what encompasses EI (Mayer, 2006; Mayer et al., 2008). Mayer, Salovey & Caruso (2004) recommend, in order "to restore clarity to the study of EI," that "…the term emotional intelligence be limited to abilities at the intersection between emotions and intelligence — specifically limited to the set of abilities involved in reasoning about emotions and using emotions to enhance reasoning" (p. 514). Mayer and Salovey aim to define EI within the parameters of accepted standards for a new intelligence (Mayer et al., 2003). They assert that EI is primarily related to how emotions and cognitions interact, i.e., how emotions influence and are influenced by thoughts (MacCann et al., 2020).

There appears to be common aspects in the definitions of EI offered above, however, the most notable aspect of EI is that it may be used to explain why people differ in so many ways, as well as how they connect with, process, and use emotional information from others as well as from themselves (Petrides & Furnham, 2003).

2.5.3 Variations in models of EI

Further to defining EI, various theories and models related to EI have been developed. Mayer, Salovey and Caruso (2000) differentiated between mixed models and ability models of EI. The original definition conceptualises EI as a collection of interrelated abilities that allow an individual to make sense of one's own and others' emotions and use them to influence thoughts and behaviour (Mayer & Salovey, 1997). Mayer et al. (2000) proposed that mixed models include a variation of personality factors compared to Mayer and Salovey's ability model, that strongly emphasises cognitive components of EI (Petrides & Furnham, 2000). Petrides and Furnham (2000, 2001) go on to assert that the type of the model is determined by the sort of

measurement rather than the theory itself. They proposed a clear conceptual distinction between two types of EI, that being, trait EI and ability EI (Petrides et al., 2004). The authors considered the various measurement methods and operational definitions accepted by mixed and ability model approaches. The differences also concern the measurement of the concept of EI (Petrides & Furnham, 2003). The first concept, namely trait EI, refers to a number of behavioural characteristics and self-perceptions regarding a person's capability to recognise, process, and use emotional information (Petrides et al., 2004). It includes various personality characteristics, such as being empathetic to others, or being cautious, or impulsive. It also includes aspects of social intelligence proposed by Thorndike (1920) and interpersonal and intrapersonal intelligences of Gardner (1993). The second concept, namely, ability EI (or 'cognitive-emotional ability') describes one's definite ability to recognise, manage, and use emotional data. Trait EI is measured using self-report questionnaires and relates to the framework of the personality. Ability EI requires the use of maximum performance tests and relates largely to the framework of cognitive skills (Petrides et al., 2004). Examples of these measurements will be discussed under the relevant models of EI that follow.

2.6 Models of EI

Three major protagonists and their subsequent models of EI will be discussed: (a) The EI ability-based model (Mayer & Salovey, 1997); (b) Bar-On's emotional-social intelligence model (Bar-On, 1997; 2000); and (c) Goleman's model of EI (Goleman, 1998, 2001). Each of these models will be discussed to provide a comprehensive overview of the concept EI.

2.6.1 The EI ability-based model

Mayer and Salovey (1990) were the first academic authors to put forth a hypothesis of EI. It first evolved as a form of social intelligence related to the emotions of the self and others. They understood the success of a person to adapt and cope with life as dependent on the interrelation of their reasoning and emotional abilities (Salovey et al., 2003). Mayer and Salovey (1990)

define EI as involving "the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings where they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth" (p. 10). Accordingly, to study EI means to study these abilities.

From this viewpoint, EI represents an intelligence system that processes emotional information, and is consequently considered to be a component of other conventional and established intelligences (Mayer et al., 2004). Of particular interest was the concept of "hot intelligences" (Mayer & Caruso, 2012; Mayer et al., 2004). Hot intelligences refer to more personal information such as a person's feelings, self-evaluation, personal objectives, self-esteem, and social interactions. In contrast, traditional intelligences are referred to as "cool" intelligences in that they concern knowledge with potentially minimal immediate personal impact, such as mathematical abilities and visual special intelligence (Mayer & Caruso, 2012; Mayer et al., 2016). EI indicates the crossing of these two essential components of a person's personality, namely the emotional and cognitive systems. Standards of intelligence are usually applied to cognitive functioning. The theory of EI requires the development of criteria to construct and regulate emotions intelligently (Mayer & Salovey, 1995). Mayer and Salovey developed these ideas into an integrative approach to EI, known as the Four-Branch Model of Emotional Intelligence (1997). This model is viewed as an integrative approach and brings together emotional abilities from four areas or branches (Mayer et al., 2011), namely: perceiving emotions, facilitating thought using emotion, understanding and analysing emotions, and managing emotions (Mayer & Salovey, 1995, 1997). In this current research, EI as constructed by Mayer and Salovey (1990, 1997) was used as a benchmark for exploring EI. According to Kanesan & Fauzan (2019) "the ability model is the most influential model as it purely uses cognitive ability in processing emotions and scientifically proven" (p. 4).

The first test developed to measure the four branches was the Multifactor Emotional Intelligence Test (Mayer et al., 2000). This instrument revised and condensed into the Mayer, Salovey-Caruso Emotional Intelligence Test (MSCEIT). Various reiterations have taken place leading to the development of the current MSCEIT Version 2.0 (Brackett & Salovey, 2006). The MSCEIT consists of eight tasks (141 items) that measure various aspects of EI. Each task uses a different item type and different response scales are used by different tasks. The first branch of EI, perception of emotion, is measured by participants identifying emotions shown in photographs of people's faces as well as art and landscapes. The second branch of EI, emotional facilitation of thinking, is assessed by two tests that evaluate one's ability to describe emotional sensations and identify the feelings that may aid or inhibit certain cognitive and behavioural tasks. The third branch of EI, understanding emotion, is assessed by two tests that pertain to a person's ability to analyse mixed or complex emotions and to understand transitions and changes in emotions. The fourth branch of EI, managing emotions, measures how one manages the emotions of the self as well as of others (Brackett & Salovey, 2006). Scores are correlated for overall EI as well as Perceiving, Facilitating, Understanding, and Managing emotions (Mayer, et al., 2008).

2.6.2 Bar-On's emotional-social intelligence model

Later theories continued to expand on ideas related to the concept of EI and in contrast, mixed models have a conceptualisation of EI that is substantially more expansive, to include a combination of intellect and several measures of personality and emotion (Petrides & Furnham, 2001; Webb et al., 2013). Dr. Reuven Bar-On's (1997) theory is a more extensive approach to EI than Mayer & Salovey's model (1997) (cited in Fernandez-Berrocal & Extremera, 2006). Bar-On initiated the use of the term 'emotion quotient' (Bar-On, 1997; Stys & Brown, 2013). His definition of EI includes "a range of non-cognitive abilities, abilities, and skills that impacts a person's capacity to successfully deal with stresses and difficulties from the environment. It

is a cross-section of interconnected emotional and social abilities, skills and catalysts that determine how successfully we know and articulate ourselves and others" (Bar-On, 2006, p.14). He sees EI as a mixed intelligence, including cognitive faculties and personality traits (Stys & Brown, 2013). His model includes the abilities to be aware of, comprehend, and express oneself; awareness, understanding, and relating to others; to control one's emotions and impulses, adapt, and deal with issues both personally and with others (Emmerling & Goleman, 2003).

Bar-On has been very active in research regarding EI on performance, and was involved in a number of studies (e.g. Bar-On, 1997; Bar-On, 2006; Berenson, Boyles, & Weaver, 2008). According to these studies, EI has repeatedly shown to have a very strong connection to performance (Bar-On, 2010).

Bar-On developed, the *Bar-On Model of Emotional-Social Intelligence* (ESI) and the subsequent measure, the *Bar-On Emotional Quotient Inventory* was published in 1997. This is a self-report assessment of emotional and social behaviour that provides an estimate of emotional-social intelligence (Bar-On, 2006).

2.6.3 Goleman's model of EI

Since Goleman published his book *Emotional Intelligence* in 1995, the concept of EI has gained wide popularity and interest. He influenced others to reconsider widely accepted conceptions of intelligence (Ferrándiz et al., 2005). Goleman drew attention to the link between success and EI. In fact, Goleman suggests that EI is more closely linked to lifelong success than intelligence quotient (IQ) (Goleman, 1995; Parker et al., 2009). In his first book, Goleman (1995) describes five elements involved in EI, namely being aware of one's emotions (self-awareness); managing those emotions; motivating the self; recognising other people's emotions; and relating well with others. In 1998, Goleman published his second book, and proposed a model

of EI and a theory of performance in organisations. This model was developed and modified to forecast effectiveness and individual results in the workplace and in organisations (Goleman, 1998; Fernandez-Berrocal & Extremera, 2006). Goleman's framework of emotional competencies (2001) constitutes a refinement of Goleman's 1998 model (Goleman, 2001). Together with Boyatzis, the previous five domains were refined to four, namely: self-awareness; self-management; social awareness; and relationship management (Boyatzis et al., 2000). Goleman views EI as a set of abilities that can be assessed with his Emotional Competency Inventory (Ferrándiz et al., 2005; Goleman, 1995). Goleman's model is also regarded as a mixed model and includes various personality variables including empathy, optimism, and impulsivity (Chan, 2002) and offer a broad definition of EI including skills, emotional and social behaviours, and aspects of the personality (Mayer et al., 2008; Zeidner et al., 2003). Compared to other approaches, the model by Boyatzis and Goleman has less empirical support (Fernandez-Berrocal & Extremera, 2006).

2.6.4 Comparison of models

Despite the fact the three models of EI mentioned are distinct and dissimilar in certain areas, they are comparable theoretically and statistically. All three models aim to comprehend and gauge the components used in the identification and regulation of an individual's own emotions and the emotions of others (Goleman, 2001). There is some consensus across the three theories as to which specific essential features of EI are present. For example, all three models acknowledge that an emotionally intelligent person must be aware of their emotions and be able to control them. Statistical analysis has been used to establish a link between components of the models. In the measures of EI, there is evidence that the various tests for emotional intelligence are connected and may be assessing the same or similar elements (Stys & Brown, 2004; Kanesan & Fauzan, 2019). Evidently, there are both strengths and weaknesses to all three approaches, which will not be evaluated here. However, it has been suggested that when

researchers are uncertain which approach or models to utilise, they should, where possible choose measures of EI most suitable for their purpose. For example, an ability-based approach to EI, such as that of Mayer and Salovey, has been found most useful when one is interested in examining emotional abilities and competencies, where a mixed model, such as that of Bar-On, may be recommended if one's interest is in a broader set of emotion-related and social-related dispositions and competencies (O'Connor et al., 2019).

The ability-based approach of Mayer and Salovey was selected as a base for this study as it is the most researched and supported measure of ability EI and has been cited in more than 1,500 academic studies (O'Connor et al., 2019). It also suits the purpose of our research in examining emotional abilities and competencies and requires a deeper theoretical understanding of emotions.

2.7 EI in an educational context.

As mentioned before, after Goleman's bestselling book, *Emotional Intelligence* (1995), the concept of EI gained much public interest and popularity (Matthews et al., 2002). One of Goleman's (1995) assertions that captured people's attention was that in predicting success in life EI was "as powerful, and at times more powerful, than IQ" (p. 34). Scherer (1997) in *Educational Leadership,* agreed with Goleman by saying "emotional intelligence, more than IQ, is the most reliable predictor of success in life and in school" (p. 5). Such statements created an upsurge of interest in the educational arena (Cobb & Meyer, 2000).

2.7.1 EI in learning

In the study of academic success, traditionally the focus has been on cognitive abilities and achievement. While the main goal of tertiary education may be academic development, the importance of social and emotional development should not be ignored (Bowden et al., 2021). Emotions are significant from an educational standpoint because of how they affect learning

and development, but students' emotional wellness should also be seen as a goal of education that is significant in and of itself (Pekrun, 2019). Emotions affect how and what we learn and social, emotional, and academic growth are interdependent (D'Errico et al., 2018; Pekrun, et al., 2019). As Pekrun argues, "Emotions can have important effects on students' learning and achievement. Emotions control the students' attention, influence their motivation to learn, modify the choice of learning strategies, and affect their self-regulation of learning" (2004, p. 6). Mayer & Salovey's description of EI includes being able to use emotions intelligently. In the fourth branch of Mayer and Salovey's model, namely 'reflective regulation of emotions,' the mindful control of emotions to encourage emotional and intellectual development is included (Mayer & Salovey, 1997). Therefore, the challenge is to make students and relevant people in education to be aware of the power of emotions in learning. Knowledge of EI allows educators as well students to recognise the value of emotional abilities in learning and use them to achieve their common educational goals (Krishnan & Awang, 2020; MacCann et al., 2020; Mohzan et al., 2013).

2.7.2 EI and the student

There is a positive connection between EI and good social relations among children and adolescents and a negative correlation with social deviance (Eisenberg et al., 2000; Izard, 2001; Mayer et al., 2008). In a study conducted by Moeller, Seehuus and Peisch (2020), the authors discovered that pupils with higher EI had more intense sentiments of belonging, which in turn was connected to less general mental health issues. People who have high EI are viewed favourably by others and are considered to be more pleasant, empathic, and socially skilled than people who have low EI (Gil-Olarte Márquez et al., 2006; Lopes et al., 2004; Mayer et al., 2008; Pekrun et al., 2019). Furthermore, EI plays a crucial role in pupils' academic success and growth (MacCann et al., 2020; Estrada et al., 2021). Schutte et al. (2001) found that higher emotional intelligence was characteristically related to positive moods and higher self-esteem.

This in turn correlates with greater life satisfaction better psychological well-being, improved problem-solving and coping skills, and less anxiety and depression (Byzova & Perikova, 2019; Mayer et al., 2008). EI can also serve as a protective factor for students as they can withstand trying times, better handle stress, and are known to be team players, who can work well with others (Krishnan & Awang, 2020).

2.7.3 Learning EI

EI competencies can be learned and can be improved on at any point in life (Kotsou et al., 2018). However, those competencies are best learned through a well-managed learning process that includes motivation, experience, reflection, and mentoring (Feldmann et al., 2011; Panayiotou et al., 2019; Weissberg, 2019). Goleman has been influential in the growth of programmes of social and emotional learning (SEL). SEL is learning to identify and manage emotions, demonstrate effective problem-solving, and have good interpersonal relationships. These skills are seen to be crucial for all students (Zins & Elias, 2007). As a result, SEL focuses on a mixture of behaviours, thoughts, and feelings. In 1998, Goleman cofounded the Collaborative for Academic, Social & Emotional Learning (CASEL). This is an organisation promoting SEL in schools with great success (Weissberg, 2019). SEL has been implemented at schools around the world in several countries. Particularly in the United States of America, where many districts and even entire states have made SEL a curriculum requirement (Goleman, 2005). Authors such as Zeider et al. (2002); Mayer & Cobb (2000); and Mayer & Salovey (1997) are sceptical about the success of such programmes, in teaching 'true' EI. Teaching basic social skills, for example, differs from teaching EI. Students in SEL programmes can learn certain skills without necessarily learning EI (Mayer & Salovey, 1997). Although it is conceivable that school-based programs for EI are advantageous, there is not enough strong proof demonstrating significant advancements in adaptability (Zeidner et al., 2004). This is an area that will benefit from future research.

Nevertheless, it is generally accepted that people can learn certain EI strategies, and even though this may come more naturally to some, emotional competencies can be increased (Panayiotou et al., 2019). It may be more beneficial to recognise where emotional skills are lacking for a given individual (Salovey et al., 1999). It is possible that, instead of arguing as to whether EI can be taught, we should be asking how we can nurture and intelligently use the emotional abilities we already harbour. Therefore, as an alternative, it is suggested that EI not be taught as a separate programme but integrated into the existing curriculum and everyday activities within educational sectors (Weissberg, 2019; Zeidner et al., 2009). For example, educators can encourage a discussion on character's emotions and responses to those feelings. It can be beneficial for educators to encourage general discussions during lessons on emotions such as anxiety, stress, and worry, in order to create awareness of such emotions in oneself and others (Salovey et al., Zeidner et al., 2009).

2.7.4 EI and adjustment to tertiary education

As previously mentioned, many students find difficulty in adjusting to tertiary education and this can have a major effect on success rates for students (Haktanir et al., 2021; Tom et al., 2020). In research conducted by Parker et al. (2004), several emotional and social abilities were discovered to be important during the shift from high school to university. He stated these EI skills were "strong predictors of academic success and influenced a person's capability to cope with environmental demands and pressures" (p.3). During their first year in tertiary education, students not only have to adjust to the new demands of adult independence, changes in relationships and academic pressures, they are also expected to cope with a very different environment to the one they experienced in their schooling years. Therefore, many students experience substantial distress in adjusting to life at a tertiary level. Additionally, this is a common occurrence in the first year when the discrepancy between expectations and realities are made evident (Esmael et al., 2018; Haktanir et al., 2021). When entering tertiary education,

even academically capable individuals may be at risk if they lack specific emotional skills (Walsh-Portillo, 2011).

The degree to which a person can successfully adapt to their environment and manage challenges depends on the combined implementation of emotional and cognitive abilities (Salovey et al., 2003). Researchers such as Gardner (1993) and Goleman (1996) state that positive emotions associated with EI can impact abilities such as concentration, memory, problem solving and learning skills. Other literature state that EI can also enhance areas of leadership, communication skills, and creativity (Chinowsky & Brown, 2008). Increased self-awareness, self-control, and problem-solving skills can lead to more tenacity, motivation, and success (Walsh-Portillo, 2011).

EI can encourage positive **social skills** and relationships and allow individuals to alter dysfunctional patterns (MacCann et al., 2020; Minbashian, 2020; Moeller et al., 2020). Being more socially supported is linked to less academic challenges and an easier transition into tertiary education (Currie et al., 2012). Development of friendships (or lack thereof) and social networks presents as a critical factor in students' level of adjustment (Kantanis, 2000). Using EI abilities such as accurate awareness and appraisal of emotions in others, one can understand, empathise and relate to others effectively. In this way, students can build supportive friendships and social networks with other students and additional key players in their tertiary environment (Salovey et al., 2003). This can be crucial, especially for first year students who may be experiencing difficulties in adjusting to tertiary life. It is believed that students who can establish and sustain meaningful interpersonal relationships with lecturers, peers, staff, and the society at large would be better equipped to do so in their present and future lives (Goleman & Cherniss, 2001; Walsh-Portillo, 2011).

In a study conducted by Liau, Liau and Teoh (2003), low levels of EI were associated with higher levels of externalising behaviours, such as delinquency and violence, as well as higher levels of internalising problem behaviours, such as stress, sadness, and physical reactions. All of these could have negative effects on the student, their performance, and ultimately their journey in tertiary education (Salovey & Mayer 1990).

Emotional intelligence has been found to facilitate **cognitive activities** in numerous ways (Salovey et al., 2003). For example, a skill like time management, is an important tool for a tertiary student in order to meet deadlines. Emotions can aid in the directing of attention to the tasks requiring greatest priority, for example knowing what assessments are due on a certain date (Easterbrook, 1959). Compared to what is done at school, very little guidance is given for completing tasks at a tertiary level and independent learning is a common expectation to which the student may not be accustomed (Kantanis, 2000). EI can enable greater perseverance, enthusiasm, and self-management, in order to accommodate these changes. Those high in emotional intelligence have been shown to develop a more positive attitude toward learning (Hidajat et al., 2020; Picton et al., 2018; Salami, 2010). Positive moods are also found to allow positive outcomes to be more likely and negative moods allow negative consequences to seem more probable (Mayer et al.,1992; Shiota et al., 2021).

Emotionally intelligent individuals may also use emotions in relation to **motivation** (Hidajat et al., 2020)**.** For example, a student may use the fear of not meeting a tight deadline to motivate them to work harder or use the pride of an achievement to spur them on to persevere in a challenging situation. Awareness of emotions and the regulation of those feelings is an EI ability (Mayer et al., 2008; Salovey et al., 2003; Byzova & Perikova, 2019). This allows individuals to understand and analyse how and why they are feeling a certain way and in certain situations. For example, what elicits stress, frustration, or anger in a student or what gives them joy, pride and satisfaction? Once they are aware of their emotions, they may better understand

how to regulate them (Boden & Thompson, 2015; Brackett & Katulak, 2007). Emotional intelligence is therefore a key factor in academic success and adjustment in a tertiary environment.

2.8 Conclusion

It is evident that low student success, throughput rates, and high attrition are a major concern in the South African higher education system. In examining 'student success', it is apparent that there are many aspects that can be included in this category. Ultimately, we are speaking of the student successfully navigating tertiary education. As discussed, there are many factors that can influence students' success, however, particular focus was placed on the importance of students' adjustment to the tertiary environment as well as student engagement, commitment, and integration. Over the last few decades, there has been a growing awareness of EI. With that, there have been a polemic over as to what constitutes EI. The leading theories of EI have been discussed with a review of literature. EI can play a vital role in tertiary education, particularly in the successful adjustment of the student to university and throughout their journey towards achieving completion of their qualification. The EI ability-based model (Mayer & Salovey, 1997) will guide this study. This model will be examined in more detail in the next chapter.

CHAPTER 3: THEORETICAL FRAMEWORK

3.1 Introduction

Mayer and Salovey's Four-Branch Model of EI and their ability-based model of EI (Mayer & Salovey, 1997) is the conceptual model guiding this study. The approach of Mayer and Salovey is one that proves to be most accepted by the scientific community, and they are the most published researchers of EI in scientific literature (Kanesan & Fauzan, 2019). Their model is well supported by empirical evidence from the basic and applied sciences (O'Connor et al., 2019). According to the EI ability-based model, EI embodies abilities that connect intelligence and emotion to enrich thinking (Mayer et al., 2008). Both these cognitive and affective variables can then in turn influence students' success, behaviour, and mindset (MacCann et al., 2020). Each of the four branches of the model describe a set of abilities that make up a person's overall EI (Mayer et al., 2008). These are especially relevant to the study as it is these abilities that guided the focus of the research. It was of particular interest as to how students utilised these EI abilities to successfully achieve their academic goals.

3.2 The EI ability-based model

EI is both an ability, and a type of intelligence, according to Salovey and Mayer (1990). From this standpoint, EI is made up of skills, mental abilities, and capacities (O'Connor et al., 2019). This ability based EI model emphasises that EI ought to be seen as a form of intelligence that must be included in other conventional intelligences and is somewhat unrelated to personality characteristics (Mayer & Salovey, 1997; Mayer et al., 1999).

Prior to developing their four-branch model, Salovey and Mayer (1990) initially defined EI as: "the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 189).

Therefore, their initial conceptualisation of EI included three primary abilities: (1) appraisal and expression of emotion; (2) regulation of emotion; and (3) using emotion. Salovey and Mayer refined their concept as they investigated and developed EI further, defining it as an ability focus and correcting certain potential misunderstandings. (Weinberger, 2002). Salovey and Mayer (1997) further describe EI as: "the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to comprehend emotion and emotional knowledge; and being able to regulate emotions to promote emotional and intellectual growth" (p. 10).

Some researchers posit that the model lacks clear external criteria to assess the effectiveness or impact of these processes on real-world outcomes or performance. Some criticise this structure for oversimplifying the complexity of EI and failure to capture the dynamic interplay between the different dimensions of EI. They also criticise Mayer and Salovey's approach for overemphasising the use of emotions in problem-solving and thought processes (O'Connor et al., 2019). However, where some regard this as a critique, in this research it is not regarded as so. One of Mayer and Salovey's fundamental presumptions is the link between the cognitive and emotional components of intelligence, where emotions are used to think intelligently and we are required to think intelligently about our emotions (Mayer & Salovey, 1995). In a review of different models of EI, Kanesan & Fauzan (2019) conclude that this ability model is the most appropriate model to significantly describe EI, for the following reasons: (1) EI is regarded as an intelligence, (2) the original founders of EI proposed this model, (3) the ability model is compatible with widely used definitions of EI, and (4) the model stresses the pure form of EI, without aspects of personality in comparison to mixed and trait models.

3.3 Mayer and Salovey's Four-Branch Model of Emotional Intelligence

Mayer and Salovey (1997) developed their ideas into an integrative approach to EI, known as the Four-Branch Model of Emotional Intelligence (Figure 1.1). This comprises four branches, namely: (1) Perception, appraisal and expressions of emotion; (2) Emotions to facilitate thinking; (3) Understanding and analysing emotions; and (4) Reflective regulation of emotions to encourage emotional and intellectual development. The four branches of the model are structured to illustrate a continuum from more basic psychological functions to more advanced, greater psychologically integrated practices. Each branch has four representative abilities on it, creating 16 abilities or sub-groups of emotional intelligence. Earlier developed skills are on the left of the branch and abilities that develop later on, are to the right. These later developing abilities emerge within a more integrated adult personality. These abilities are related to emotions both within the individual and relating to others. Those individuals that are higher in EI are likely to acquire these abilities at a faster pace and become proficient in more of the skills than others (Mayer & Salovey, 1997).

Branch 4: Reflective Regulation of Emotions to Promote Emotional and Intellectual Growth

Ability to stay open to feelings, both those that are pleasant and those that are unpleasant.	Ability to reflectively engage or detach from emotion depending upon its judged informativeness or utility.	Ability to reflectively monitor emotions in relation to oneself and others, such as recognising how clear, typical, influential, or reasonable they are.	Ability to manage emotion in oneself and others by moderating negative emotions and enhancing pleasant ones, without re-pressing or exagg-erating information they may convey.

Branch 3: Understanding and Analysing Emotions; Employing Emotional Knowledge

Ability to label emotions and recognise relations among the words and the emotions themselves, such as relation between liking and loving.	Ability to interpret the meanings that emotions convey regarding relationships, such as that sadness often accompanies loss.	Ability to understand complex feelings: simultaneous feelings of love and hate, or blends such as awe as a combination of fear and surprise.	Ability to recognise likely transitions among emotion, such as the transition from anger to satisfaction, or from anger to shame.

Branch 2: Emotional Facilitation of Thinking

Emotions prioritise thinking by directing attention to important information.	Emotions are sufficiently vivid and available that they can be generated as aids to judgment and memory concerning feelings.	Emotional mood swings change the individual's perspective from optimistic to pessimistic, encouraging consideration of multiple viewpoints.	Emotional states differentially encourage specific problem approaches such as when happiness facilitates inductive reasoning and creativity.

Branch 1 - Perception, Appraisal and Expression of Emotion

Ability to identify emotion in one's physical states, feelings, and thought.	Ability to identify emotions in other people, designs, art etc., through language, sound, appearance & behaviour.	Ability to express emotions accurately, and to express needs related to those feelings.	Ability to discriminate between accurate and inaccurate, or honest and dishonest expressions of feeling.
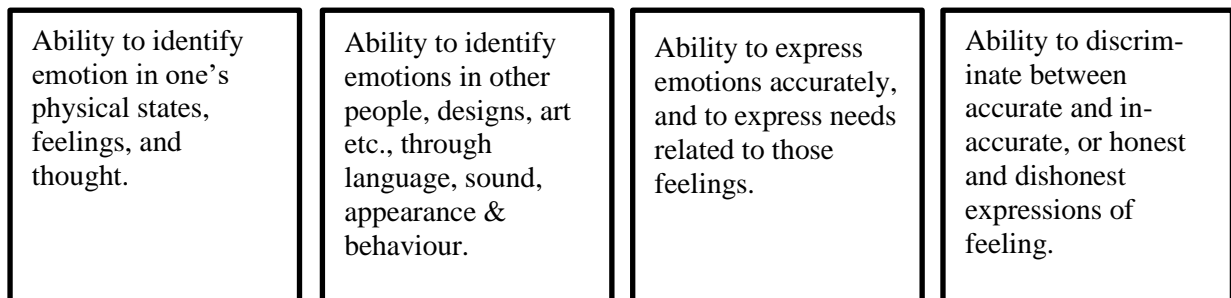
Figure 1. The Four-Branch model of Emotional Intelligence (Mayer & Salovey, 1997, p. 11).

A brief description of the four branches follows.

3.3.1 Perception appraisal and expressions of emotion

The first branch, 'perception appraisal and expressions of emotion,' involves the ability to identify and discriminate between emotions in the self and others. It also includes the ability to correctly identify emotions in physical states such as facial expressions and body language. It

further allows for the identification of emotions in other people, art, and objects utilising indicators like sound, appearance, colour, language, and behaviour. At a higher level, this ability allows one to convey emotions and the needs associated to those emotions accurately. It also entails being able to distinguish between truthful and untrue statements, or between honest and dishonest communication (Mayer & Salovey, 1997).

3.3.2 Emotional facilitation of thinking

The second branch, 'emotional facilitation of thinking,' refers to emotions to assist intellectual and cognitive processes, including analysing, problem-solving, and interactions with others. Using emotions to focus thought on critical information about the environment or other people is a fundamental component of this ability. Developing strong emotions to support judgment, decision-making, and memory processes is a more sophisticated skill. To better understand emotions, they can be created, experienced, controlled, and investigated. Different emotional states can promote different thinking styles (e.g., good moods leading to optimistic thought and bad moods to pessimistic thought) (Mayer & Salovey, 1997).

3.3.3 Understanding and analysing emotions

The third branch, 'understanding and analysing emotions,' include the ability to being able to comprehend and apply emotional information. Basic skill in this area includes labelling emotions utilising precise language and recognising the parallels and contrasts between emotion labels and the actual feelings. Understanding complicated emotions, such as simultaneous moods or mixtures of feelings, and deciphering the meanings and causes of emotions are considered as representing more advanced levels of emotion comprehension. This branch's most complex feature is its ability to recognise changes in emotion (Mayer & Salovey, 1997).

3.3.4 Reflective regulation of emotions

The fourth branch, 'reflective regulation of emotions,' includes the conscious management of emotions to enhance emotional and intellectual growth. It encompasses the ability to control one's own and others' emotional reactions, as well as the ability to feel a range of emotions and decide whether or not they are appropriate or helpful in a particular circumstance. People must be able to accurately monitor, distinguish, and categorise their feelings in order to manage them. They also need to believe that they can change or otherwise modify their sentiments. This also involves the use of strategies to modify their feelings if necessary and analyse the success of these tactics. More advanced levels of emotional regulation involve engaging or detaching from an emotion based on its perceived utility in a given circumstance. This can also apply to assisting others to manage their emotions, for instance, to know the appropriate thing to say or do to motivate or inspire others (Brackett et al., 2011; Brackett & Salovey, 2006; Mayer & Salovey, 1997).

3.4 Conclusion

Salovey and Mayer are considered the foremost scholars in the area of emotional intelligence and view EI as abilities related to emotions both within the individual and relating to others (Mayer & Salovey, 1997; Weinberger, 2002). Their EI ability-based model (Mayer & Salovey, 1997) will be used as a guiding framework for this study. Using the four branches of the model and their respective abilities, this study will attempt to identify such abilities in tertiary students and examine how they have applied them in order to successfully complete their studies in tertiary education. Chapter 4 presents a discussion of the research design.

CHAPTER 4: RESEARCH DESIGN

4.1 Introduction

In this chapter, the research design is explained. The current study adapted an interpretive paradigm and a qualitative, interpretive phenomenology as a methodology (Järvinen & Mik-Meyer, 2020). Content analysis was the approach followed during data analysis and was used explored the emotional intelligence (EI) abilities of tertiary students who have completed their studies within regulation time and how they have utilised these abilities during their studies. Seventeen Codes were derived from the Mayer & Salovey's (1997) Four-Branch model of Emotional Intelligence that were organised into four themes in order to organise the data. The aim was to highlight the EI abilities graduates possess, and how they applied it to adjust successfully to tertiary education and go on to achieve their academic goals. This exploratory approach was used as relatively little is known about this area of research (Du Plooy-Cilliers et al., 2014) because although research has been conducted on EI in education, few have focused on a tertiary environment and particularly in a South African context.

4.2 Research Paradigm

4.2.1 Interpretive paradigm

Ontologically, interpretivism assumes the social world is created and maintained by people through their behaviour and communication. Reality is socially constructed, and dependent on the meanings people assign to their experiences, and can therefore change as their perceptions change (Alharahsheh & Pius, 2020; du Plooy-Cilliers, 2014). The epistemological position of interpretivism is one that challenges objective knowledge, where facts are seen as embedded within a meaning system that depends on the setting and personal understanding of information (Alharahsheh & Pius, 2020).

Interpretive research aims to understand people's experiences as relevant to the study to gain deeper insight into student experiences and abilities used in their tertiary education. Interpretivism emphasises that reality, including our knowledge thereof, is a social product, and therefore incapable of being understood separately from the individuals who create and interpret it (Alharahsheh & Pius, 2020). It assumes that human beings are forever changing, and that they influence, and are in turn influenced by, their surrounding environment. Interpretivists posit that researchers should study and describe meaningful social action and experiences with the aim of understanding human behaviour, without the need to predict or control (Du Plooy-Cilliers, 2014). From an interpretivist paradigm, the research is admittedly influenced by the researcher in terms of interest and involvement (Alharahsheh & Pius, 2020). For instance, the researcher in this study works in a tertiary environment and is particularly interested in what makes students successful. Therefore, using an interpretivist perspective, and through the adoption of qualitative designs and methodologies, it will enable the researcher to explore in further depth, student experiences through formal in-depth interviews.

4.3 Research methodology

4.3.1 Interpretive phenomenology

Interpretive phenomenology was a relevant method for this study, to gather qualitative data. Phenomenology is known as a study of the 'life-world' or 'lived experience' of people and describes phenomena from the perspective of the person experiencing it (Järvinen & Mik-Meyer, 2020). From this perspective, the role of the researcher is to get a better understanding of human actions, the meaning they give to them, and then describe experiences from the persons point of view (Frechette, 2020). Therefore, the purpose of phenomenology is to explain the significance of this experience in terms of what was experienced and how it was experienced by the individual experiencing it, without external influence (Järvinen & Mik-Meyer, 2020; Tuffour, 2017).

Interpretive phenomenology focuses on the necessity of studying human consciousness in order to better understand human nature by focusing on the world that participants experience on a subjective level (Maggs-Rapport, 2000). Interpretive phenomenology aims to generate a sense of an individual's subjective lived experience by providing detailed examination of a phenomenon from the participant's perspective. The primary goal of this approach is to acquire a new understanding of the phenomenon (Frechette, 2020). It also acknowledges the active role a researcher plays in the interpretive process the contextual nature of the qualitative research findings, which are elicited through a co-construction between the participant and researcher (Guba & Lincoln, 1994; Neubauer et al., 2019; Järvinen & Mik-Meyer, 2020). Each student's experience of tertiary education was unique to them, and their own knowledge and abilities are subjective. The researcher, with her own knowledge and experiences, gathered this information through the interview process.

4.3.2 Qualitative Research

Qualitative research aims to better understand the activities, contexts and stories as seen by those who are part of the story. An advantage of qualitative research is the wealth of data that can be gained from participants, allowing a deep exploration into a topic (Järvinen & Mik-Meyer, 2020). This is necessary for the study as we wish to gain deep subjective insight into the students EI abilities and the strategies they used during their tertiary education.

Qualitative research examines the quality of the participants experiences and how they have created meaning and manage situations (Creswell & Creswell, 2019). It starts with the study of a research question, based on a certain assumption or world view, and investigates the meaning individuals assign to events. This requires an 'interpretive, naturalistic approach' as stated by Denzin & Lincoln (2005, p. 3) that requires the researcher to collect data in a natural setting, making sense of, and interpreting information and the significance people ascribe to

them (Creswell & Creswell, 2019). This requires the researcher to make a comprehensive record of participant responses and thereafter, manage and interpret this data (Willig, 2013).

Qualitative research was selected for this study to better understand the meaning, context, and subjective experiences of students in tertiary education. This allowed the inclusion of the participants' personal responses, and it is unlikely that the rich information that was elicited in the interviews would have been gleaned from a quantitative study. This qualitative research also allowed examination of 'how' students utilised their EI skills. This could not be answered as thoroughly using a quantitative approach or a standardised EI test such as the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT).

This researcher is an essential 'instrument' of the research process (Frechette, 2020). Qualitative researchers need to engage in reflexivity to justify the subjective stance that guides their research (Olmos-Vega, 2023). This may lead to certain criticisms aimed at qualitative research including that it is subjective, is non-scientific and lacks rigour. However, it needs to be evaluated according to its own measures of validity and reliability (Mays & Pope, 1995). In qualitative research the equivalent for validity and reliability is trustworthiness. This will be discussed later in the chapter.

4.4 Research design

4.4.1 Population and sample selection

The sampling procedure of choice for this study was purposive sampling. Therefore participants who could meaningfully contribute to the research question were included in the study (Creswell & Creswell, 2019). Graduated students that completed a three-year bachelor's degree in the school of Humanities, at a private institution were recruited to be interviewed. The researcher requested permission from the tertiary institute to conduct the research. After completing the necessary ethical clearances, permission was requested to address classes of

honours students. The researcher also addressed final 3rd year students at the conclusion of their academic year. The purpose and method of the research was explained, as well as the criteria of completing the degree in the regulated three years made clear. Students taking part shared their academic record to confirm adherence to the criteria. Students volunteering to participate filled out a form with their contact details. The students were contacted via email and interview times were arranged with the willing participants. The students were of mixed cultural race groups and demographics. Twelve participants were interviewed, half where male and half female. The majority of the students were between the ages of 20-23. Two participants were mature students aged 35-40. One student was 19 years old. Five of the students where white, three Indian students, two African students and two coloured participants.

4.4.2 Data Collection

The data was collected over a six-month period. Semi-structured interviews were prearranged between the interviewer and interviewee for a specific time and place. The sessions were scheduled ahead of time to conduct the one-on-one interviews with the graduated students. A meeting room was arranged on campus to conduct the interview. When meeting with the student, more information regarding the study was provided verbally and in hard copy and a consent form signed. On average, the interviews were completed within an hour-and-a-half.

The research questions were qualitative in nature and Mayer & Salovey's (1997) Four-Branch model of Emotional Intelligence was the conceptual framework guiding this study. The semi-structured interview schedule was based on this framework (see Figure 1). The four branches of psychological processes of Mayer & Salovey's (1997) model were taken into consideration when formulating the interview questions. Questions were formulated to uncover relevant information pertaining to the four branches of the model. These questions aimed at being broad enough as to not be leading, but specific enough in order to gain relevant information. For example, branch one of the model is, perception, appraisal and expressions of emotion.

Questions were formulated to gain a deeper understanding of how the person perceives, identifies and expresses emotions, such as, "What are some of your greatest strengths and weaknesses?" or "What are some of the highlights of your studies?" and "What were some of the most challenging aspects?" Some of these questions would overlap over different branches. For example, the questions mentioned above might also be relevant to branch three, understanding and analysing emotions. A breakdown of these questions and the relevant branches is outlined in Appendix A.

The semi-structured interviews allowed deeper exploration and probing of initial responses of the interviewees (Wagner et al., 2012) and as is sometimes the case in such interviews, some questions were adapted, changed order or left out in response to what the interviewee has said.

4.4.3 Data Analysis

Data collected through qualitative methods is traditionally vast and numerous, with little structure and organisation. Therefore, through the data analysis process the researcher aims to bring order, structure and meaning to the mass of data (Mezmir, 2020). However, it is also important from the method of research for the researcher to organise the information in a way that is 'true' to the participants experiences while being transparent, rigorous, and thorough (Noble & Smith, 2014). The researcher transcribed the interviews verbatim and these transcripts were then analysed. There are numerous ways to analyse data, however, this typically involves reducing the volume of data, distinguishing the significant information from the insignificant, identifying patterns and uncovering what the data reveals (De Vos et al., 2011). In order to identify these patterns, or themes, content analysis was used. A computer-assisted qualitative data analysis software, ATLAS.ti, was utilised to facilitate the analysis of the data. Mayer & Salovey's (1997) Four-Branch model of EI was used as a guide during data analysis. The researcher created 17 codes falling under four main themes, based on the Mayer and Salovey Model (1997) in order to analysing the data.

4.4.3.1 Content analysis

To group similar data together, content analysis was followed during data analysis. In order to recognise and evaluate meaning in communication, content analysis is performed. A framework is then used to organise the data so that it may be utilised to describe or understand a phenomena (Kleinheksel et al., 2020). The content analysis was guided by the 17 codes derived from the Four-Branch model of EI model, after which the codes were grouped together according to the themes that were also derived from Mayer & Salovey's model. The data that was grouped together using the codes was then investigated and interpreted to determined how EI was applied during the participants' tertiary studies, and how these EI abilities presented themselves within this context. Therefore, content analysis was not used to quantify in this study, but to see how saturated each code and theme was and to interpret the data to gain insight as to how each code (EI ability) was used during the participants' tertiary studies. The results are further discussed in Chapters 5 and 6.

4.5 Rigour and trustworthiness

In qualitative research, rigour is a means of establishing trust or confidence in the findings of a study. It enables the researcher to ensure that the approaches employed over time are consistent and offers an accurate depiction of the population under study. Ensuring the reflexivity of the researcher, or more specifically, a researcher's awareness of their own prejudices and justifications for decisions as the study develops, is also vital to rigour (Johnson et al., 2020). As mentioned, it is acknowledged that the study evolved from the interests of the researcher as well as the choice of methods, approaches, questions and tools utilised during the study, for example, selecting the Mayer and Salovey's Four Branch Model and using the same coding criteria on ATLAS-ti, for all participants. Rigour aimed to be attained throughout the study using a structured and controlled means of planning, conducting, and analysing the research.

In qualitative research, trustworthiness is a vital concept to appraise the rigour of a qualitative study (Koonin, 2014). Lincoln and Guba suggest four criteria to assist in assuring trustworthiness in research, namely: credibility, transferability, dependability and confirmability (Cited in Wagner, Kawulich, and Garner, 2012, p. 243) .

Lincoln and Guba (1985) maintain that **credibility** is one of the most fundamental elements in creating trustworthiness. Credibility shows the degree to which the data has been interpreted correctly by the researcher (Lincoln & Guba, 1985; Shenton, 2004). There are ways to increase the credibility in research such as spending more time with the participants, questioning one's own assumptions as a researcher, triangulation and comprehensive debriefing of participants (Lincoln & Guba, 1985). It is important to spend adequate time with the participants during the interview process, as well as time taken to understand the social setting or area of interest (Lincoln & Guba, 1985). The researcher having worked in tertiary education for 15 years had direct exposure and experience interacting with students and being emersed in the tertiary environment. Every effort was made to provide a non-threatening environment and create a connection with the participants and build an open, relaxed, and trusting relationship (Wagner et. al., 2012). During the actual interviews, time was taken to create a comfortable atmosphere, to open communication and build trust with the participants.

Transferability implies applying the findings to a comparable situation and deliver similar results (Koonin, 2014). For example, even though this research will selectively explore the results from the students of degree graduates, the findings may apply to graduates with other qualifications. This can be achieved through maintaining different versions of the findings in their original form and by thick description to allow for greater insight (Koonin, 2014).

Dependability signifies the consistency with which the research was conducted and the constancy of data over time (Denzin & Lincoln, 2005; Lincoln & Guba, 1985), in other words

if the investigation was repeated in the same context using the same procedures, the findings should be similar (Shenton, 2004). Lincoln and Guba (2005) highlight the correlation between credibility and dependability. To ensure dependability, it is necessary to provide a reliable connection with the collection of data, the analysis, and conclusions produced in the research (Wagner et al., 2012). The researcher maintained an audit trail by keeping thorough records and notes and transcripts, and data were stored in their original form, where continuous reflection was done on interpretations and analysis of the data.

Confirmability refers to the degree to which data, interpretations, and findings correctly reflect participant thoughts and experiences, rather than that of the researcher (Lincoln & Guba, 1985; Shenton, 2004). This includes how effectively the actual data was gathered and ensuring the findings are consistent with the collected data (Koonin, 2014; Wagner et al., 2012). This can be achieved once again through an audit trail by keeping record of activities over time, where if necessary, other researchers could follow (Lincoln & Guba, 1985). Confirmability was demonstrated by the exact transcriptions of the responses of participants in the interviews. The findings are consistent with the collected data in that the researcher provides exact quotes and examples relevant to the themes as evidence. A thorough record was kept of the interviews, transcriptions, and coding on ATLAS.ti. The interview questions and the seventeen codes were also made available.

There are certain threats to trustworthiness of the study. The researcher needs to recognise their own subjectivity and bias, and how these might influence findings (Wagner et al., 2012). Padget (2008) states that threats to trustworthiness fall into three categories. The first is reactivity, or the effects of the researchers presence. This could potentially affect the participants responses (Padgett, 2008).

Another aspect that needs to be prevented is researcher bias. The researcher needs to ensure that there are no preconceptions and personal viewpoints that are going to impact on the findings and research process. Therefore, one needs to constantly reflect on personal bias, be sure one does not ask leading questions, or ignore data that does not support expected outcomes (Padgett, 2008; Wagner et al., 2012). The researcher aimed to prevent this by being aware of potential bias as well as any personal beliefs or preconceptions as an educator that may impact the research. The researcher was in regular contact with her supervisor, who continuously reviewed material and findings, and provided critical feedback, challenged assumptions, and assessed objectivity of the research.

The final threat is respondent bias. This may be a difficult concept to address, not having control over the responses of the subjects in the study, and these may not always be accurate. It is necessary to encourage respondents to be as accurate and truthful as possible without either embellishing or withholding information (Padgett, 2008). Therefore, as the qualitative researcher, it is necessary to routinely engage in member checks, full descriptions, peer reviews, and external audits, in order to trustworthiness of the study (Creswell & Creswell, 2019). The researcher in the current study attempted to achieve this through detailed description and research in the review of literature, offering participants the opportunity to read transcripts of the interview to ensure they match what they had intended, and continuous review of material and findings with supervisors and peers.

4.6 Ethical considerations

A collection of commonly recognised moral principles, known as ethics, provides guidelines and expectations for how to behave toward others (De Vos et. al., 2011). Concerns with ethics should be kept in focus throughout the research process. The researcher is obligated to respect the rights, beliefs, needs and values of the subjects (Creswell & Creswell, 2019).

The necessary permissions were granted from the private institution of the students included in the study. The necessary processes were followed, and this was approved from the academic body of the private institution as well as the students themselves. This is in addition to the ethical clearance application that was completed with University of South Africa (UNISA). These can be found in Appendix C and D.

4.6.1 General ethical principles

The American Psychological Association (2017) general ethical principles were used as a guide during this study. These include beneficence and non-maleficence, fidelity and responsibility, integrity, justice, respect for people's rights, and dignity.

Beneficence and non-maleficence state that one should endeavour to protect the rights and welfare of the research participants and to carry out the research with the intention to do good. This should be done through maximising participants benefits while minimising possible harm (Nagata, Kohn-Wood, & Suzuki, 2012). This filters through into research to ensure that the researcher eliminates biases, affiliations, and prejudices that may influence their work (APA, 2017). Due to the nature of qualitative research, it requires participants to disclose personal, subjective experiences, where the researcher needs to be particularly aware of beneficence and non-maleficence. The researcher in this study aimed to protect the participants by ensuring confidentiality, anonymity and right to privacy, as well as the right to withdraw from the research at their discretion (Orb, Eisenhauer, Wynaden, 2001).

Fidelity and responsibility urge psychologists to always uphold a professional standard of conduct including creating a climate of trust and accountability. This also includes clarifying researchers' professional role and behaving responsibly and accepting responsibility for all stages of the research process (APA, 2017). The researcher aimed to always conduct themselves in a responsible, professional, and ethical manner. Providing research participants with the details

of the study, making the purposes transparent, having ethical clearance, and allowing access to their interview transcription, were all means of demonstrating fidelity and responsibility.

Integrity promotes accuracy, honesty, and truthfulness (APA, 2017). Participants in research must not be deceived in any way (Christians, 2005). Ensuring that data is accurate is a primary principle in ethical codes. Fabrications, intentional misrepresentation of fact, fraudulent materials, omissions, and contrivances are both non-scientific, and unethical (APA, 2017; Christians, 2005). The participants were briefed on the purpose, aims, and objectives of the research, and were in no way deceived. The interviews were accurately transcribed and were no way altered and/or distorted.

Justice in ethics relates to an obligation to be fair and impartial and treat people equally. This also includes the researcher applying fair assessment and ensuring there are no potential forms of bias (APA, 2017). Informed consent ensures that participants have the right to be well-versed in the purpose and consequences of the research, what is the expected duration, and information on the procedures. Research subjects can also decline to take part and remove themselves from the research at any stage (APA, 2017; Christians, 2005). During initial communication, it was made clear to the students that they were free to participate without feeling coerced, and that they are aware of the purpose, duration, methods, and any other relevant information regarding the interviews (Wagner et al., 2012). They were given a letter to read and to sign in this regard. The letter also explained that their participation in the study was voluntary and could be discontinued at any point in time.

Psychologists **respect the rights and dignity** of all people. This include the rights of individuals to privacy and confidentiality that involve a code of ethics that insists on safeguarding and protecting people's identities and specific details (APA 2017). Confidentiality in research must be assured as a primary defence against unwanted exposure.

In some instances, total anonymity is hard to achieve, but all necessary precautions must be taken (Christians, 2005). As specified in the information and consent forms, the participants were assured that their names and private information were used for administrative purposes by the researcher only and would be kept confidential. All these principles were applied and followed when the interviews and research was conducted.

4.7 Conclusion

This chapter presented the research design used for this study. The study adapted an interpretive paradigm and a qualitative, interpretive phenomenology as a methodology. Content analysis was used during data analysis based on the Mayer & Salovey's (1997) Four-Branch model of EI. The data that were grouped together using the derived codes and were then investigated and interpreted so as to determined how EI was applied during the participants' tertiary studies and how these EI abilities presented themselves. Matters of rigour, trustworthiness and ethics were also examined. In Chapter 5 the results of the research will be presented.

CHAPTER 5: RESULTS

5.1 Introduction

Exploring how students have utilised EI abilities to successfully complete their tertiary studies within three years was the purpose of this study. To gain an understanding of these EI abilities, ten graduated students were interviewed on a one-on-one basis and the results were analysed. This chapter describes the results and findings of the study. It also describes participants' experiences of tertiary education and their adjustment to it, with reference to specific EI abilities that were utilised.

5.2 Data analysis

The data obtained from the interviews were recorded and transcribed verbatim for analysis. The researcher followed a deductive approach and analysed the data using codes based on the Mayer and Salovey's (1997) Model of EI. This model describes four areas of mental abilities (or branches) and under each of these there are sets of abilities that were used as codes during analysis. These are illustrated in the framework below and can also be found in Appendix B:

The Four Branch Model of Emotional Intelligence (based on Mayer & Salovey, 1997)

Theme 1: Perception, appraisal, and expression of emotions
• Code 1: Identify emotions in the self
• Code 2: Identify emotions in others
• Code 3: Accurately express emotions
• Code 4: Discriminate between emotions

Theme 2: Emotional facilitation of thinking
• Code 5: Use emotions to prioritise thinking
• Code 6: Generate emotions to facilitate judgement and memory
• Code 7: Use mood changes to alter perspective
• Code 8: Use emotional states to facilitate problem solving

Theme 3: Understanding and analysing emotions
• Code 9: Label emotions and recognise relations between them
• Code 10: Interpret the meanings of emotions and their relationships
• Code 11: Interpret complex and mixed emotions
• Code 12: Understand transitions between emotions

Theme 4: Managing emotions
• Code 13: Open to emotions, both pleasant and unpleasant
• Code 14: Engage or detach from emotions
• Code 15: Monitor and reflect on emotions
• Code 16: Manage emotions in self
• Code 17: Manage emotions in others

Each of the four branches represent a set of abilities that are arranged in a hierarchical order based on their level of complexity. The subset of abilities are further ordered in relation to complexity in that the higher-level abilities of each branch rely on abilities from the other branches of the model.

5.2.1 Theme 1: Perception, appraisal and expression of emotions

This first theme reflects the first branch of the model, which at a more basic level, denotes the ability to identify and perceive emotions in the self (code 1) and of others (code 2). At a more advanced level, it entails expressing emotions and needs related to these emotions accurately (code 3), as well as discriminating between emotions (code 4) (Mayer & Salovey, 1997).

5.2.1.1 Code 1: Identify emotions in the self

An area that easily reached saturation was the ability to identify emotions in one's physical and psychological states. It was, therefore, evident that the participants were mindful of their emotions and had the ability to identify emotions they were experiencing. Both positive and negative emotions were regularly experienced, and each participant had a variety of examples of how they both identify and perceive emotions. Certain emotions were repeatedly mentioned by participants. Under positive emotions – *enjoyment, pride and independence,* were common, indicating regular positive emotions the participants experience.

This participant describes their tertiary journey, referring to emotions of enjoyment and pleasure:

> I've really, really, really enjoyed it. It has been an awesome experience. (P1)

Another participant explains how they felt proud after reaching the end of their degree, despite the challenges:

> So, ja, its was a tough ride at times but so worth it and rewarding. Im pretty
>
> proud of myself. (P7)

Under negative emotions, *stressed, overwhelmed, anxious and adjustment*, were repeatedly stated as common feelings. A description of how a participant knows when he is experiencing feelings of stress is reflected in the following example:

I am, well, I'm aware that my heart beats really fast, I get butterflies, I get very

jittery…(P4)

Another participant describes feelings of uncertainty during the change from school to

university:

Just everything is new in the beginning. It was scary. (P6)

Feelings of anxiety were expressed in the quotation by Participant 3:

Sometimes it felt like I didn't know where to start and this made me feel even

more anxious. (P3)

5.2.1.2 Code 2: Identify emotions in others

It was evident that the participants regularly identified emotions within their fellow students

and their lecturers. This element reached saturation as participants displayed the ability to

identify emotions in others such as feelings of *support, motivation* and *pride* as well as *anxiety,*

jealousy and *disappointment.* One participant describes their experience with a fellow student,

where she sensed feelings of animosity and jealousy from her:

I did have a girl that was very competitive and tried to bring me down a lot, I

picked up on her jealousy and her attitude towards me. (P2)

Another participant described a challenge working with other students:

Just students that you can see are there for the wrong reasons, like they not

focused and taking it seriously. Sometimes they can be disrespectful, talking

and messing around in class, and it's frustrating when you just want to do your

work. (P9)

Another participant describes a similar challenge:

Especially, I remember this one class there was this guy, who was very

outspoken and passionate about a lot of subjects. It was quite a challenge for

the class and the lecturer because you want to, like, you know, give the guy a

chance, say what he wants to but also give others a chance, and also just to do

our work. (P7)

Many of the participants spoke about mutual respect and understanding between students.
Empathetic responses to others that are experiencing similar challenges can be a huge support.
Participant 2 describes the importance of having others with similar experiences:

We had study groups and study sleep overs, and we really did our degree

together, so she really was a huge support and it's nice to have someone there

that's going through what you going through, understands the stress but push

and motivate each other to do well. We also had a study group of four people,

and they were also a huge help, we would inspire and motivate each other, so

you not doing it on your own. (P2)

Another participant shares similar feelings:

I mean I had a very close-knit group in second year, we supported and

motivated each other. Three of us all worked together, and it was, it was just

such a relief to realise others felt like I did, and I understood just how they

were feeling. We were there to support each other, you know? (P1)

5.2.1.3 Code 3: Accurately express emotions

As mentioned, during the interviews, participants spoke of many emotions they have

experienced, both pleasant and unpleasant, and the impact on their physical states and

cognition. Therefore, this indicated their ability to express how they are feeling in certain

instances, expressing feelings of *frustration, stress, excitement,* or *overwhelm.* The emotions that they have expressed linked with the circumstances explained, indicating an accurate expression of emotions to the researchers.

From the view of the participants, they explain how they express their emotions relatively easily, especially with friends, as indicated by Participant 3:

> I'm a very expressive person and I feel I am able to talk about my feelings
>
> with people easily – especially my friends. (P3)

Participants also mention their awareness working on the ability to honestly express the way they feel, for instance:

> I try to be very honest with my feelings. It definitely is a challenge for me – it
>
> doesn't come easily. (P6)

Participants also mention instances of feeling able to express themselves easily such as when they aren't in agreement with something, for example, Participant 8 explains:

No look, I think I'm quite good at being honest and saying if I don't agree with something or don't like something. (P8)

Another participant explained:

> I'm pretty straight forward most of the time. I like to be honest. If something
>
> is bothering me, I will tell you.

They went on to add:

> Like I say I can be straightforward, but I still am aware of other's feelings. (P10)

It became evident that the way in which participants express themselves may also be dependent on the situation, and in some cases, an area that presented itself as somewhat of a challenge for some participants. Some participants found certain emotions challenging to accurately express to others, as well as their needs related to them. However, these participants went on to explain that they would be more willing to do so with someone close to them.

One participant stated:

> I personally don't really like talking about myself, but I will confide in someone I trust if I want to share my feelings, but I won't particularly go to any random person, um, or speak to anyone in my class I won't necessarily share my feelings with them. But maybe closer friends from outside the varsity environment. (P1)

Another participant states:

> If I'm upset with someone, I'm not good at communicating that with them. I do have family and a sister that I am very close to and a boyfriend so I can just go vent and let my day off on them. I do express my emotions better with them. (P4)

5.2.1.4 Code 4: Discriminate between emotions

In general terms of discriminating between feelings, all participants were able to describe different emotions and know the difference between different emotions they were experiencing, such as knowing when they were *proud,* or *stressed* or *overwhelmed.* However, this aspect of the branch specifically mentions being able to distinguish between truthful and untrue statements or expression of emotion. This is an area that did not reach saturation. Even

through thorough discussion and questioning of participants there were not elements of discrimination between honest and dishonest emotions that were evident.

However, in relation to this study, this may indicate that it is an ability that may not be an important contributor for success in tertiary education.

Some participants acknowledged awareness of certain expectations versus the realistic outcomes. Introspection and awareness of specific emotions can allow one to be more aware of accurate and inaccurate emotions. For example, Participant 8 reflects on their unrealistic expectations:

> I think I kind of was just so excited to have left school and thought this was
>
> going to be one big party [laughs]. Ja, I'm a bit embarrassed about it now. (P8)

5.2.1.5 Theme 1 reflection

Participants' ability to identify emotions in oneself and others (codes 1 and 2) provided critical information on their emotional intelligence. At a basic level, to identify and acknowledge the emotion is often a vital first step in making sense of those emotions and being self-aware, before utilising emotions effectively to assist them in their studies. Being aware of emotions in oneself and others provided them with important information to be able to address integral aspects of tertiary education. Feelings such as enjoyment and pride, can motivate one further towards success, whereas negative emotions can be just as important to address to manage them effectively, such as stress and anxiety. Feelings of empathy and mutual understandings can assist in building good interpersonal relationships.

Participants also were generally able to communicate and share certain emotions with others. This can be significant to creating a support network to assist each other during their studies. It is also evident that this may be dependent on the person and the situation, but it was

particularly clear that participants were especially comfortable sharing their feelings with people they trust and are close to. This also created cohesion, support, and mutual respect for others that assisted in motivating them during their tertiary journey.

There was also evidence of participants' ability to discriminate between emotions (code 4) as well as accurate and inaccurate expressions (code 3), however, discrimination between honest and dishonest expressions did not reach saturation in this study, which may indicate that this may not be important contributor to their study success. Using the information gathered in Theme 1, the abilities used in the perception, appraisal, and expression of emotion assisted students to utilise emotions proactively as well as successfully problem solve. These will be examined more closely in the next chapter.

5.2.2 Theme 2 – Emotional facilitation of thinking

The second theme's focus is on using emotions and emotional information to aid in various cognitive behaviours like reasoning, decision-making and problem-solving (Mayer & Salovey, 1997; Salovey et al., 2003). Four codes were used here to examine the data – emotions to prioritise thinking (code 5), generate emotions to facilitate judgement and memory (code 6), use mood changes to change perspective (code 7), and use emotional states to facilitate problem solving (code 8).

5.2.2.1 Code 5: Use emotions to prioritise thinking

This aspect examines the use of emotions to direct thinking to important information (Mayer & Salovey, 1997). Many participants described instances of prioritising different emotions for different needs and contexts within their tertiary education, which allowed this code to reach saturation. This is an ability that seemed to develop across time, according to most of the participants, and certain emotions allow individuals to direct attention to information that is of importance. Participants describe using emotions such as *enjoyment* and *pride*, or

disappointment and *stress* to actually guide thought and behaviour in a positive direction. This can be a valuable skill in the retention of students. EI has a positive impact on student retention and by using their emotions to facilitate certain thought processes, this can aid in useful behaviours, such as impulse control, hope, optimism, self-confidence, and adaptability (Alsharari & Alshurideh, 2021).

This participant describes how their love of a subject assisted in directing their learning:

> Psychology was my favourite subject, I really enjoyed it. It helped me to reflect on myself too. Because I enjoyed it so much it didn't seem like a chore to learn, it was just so interesting and came almost naturally. (P2)

Another participant explains how facing feelings of disappointment left a lasting impression for the future:

> The only supp I ever got at varsity, was in first year for sociology. I was very disappointed in myself. I found it boring, but I got a fright when I saw that mark, so I learnt hard and managed to pass. But I suppose I learnt from it because I never got a supp or failed anything again. (P6)

This participant was aware that they did not enjoy particular subject, so this directed them to the fact that they had to put in extra work to achieve the results they wanted:

> I found it challenging and I realised that it was not something I enjoyed, so I had to put in the extra effort if I wanted to do well. (P2)

5.2.2.2 Code 6: Generate emotions to facilitate judgement and memory

Building on from the previous code, where similarly, emotions are used to prioritise thinking, in this code emotions can be used to assist in judgment and memory regarding those feelings.

The cognitive functions of perception, attention, learning, memory, reasoning, and problem-solving are all significantly influenced by emotion (Tyng et al., 2017). This code reached saturation. For instance, emotions such as *pride* and *joy* at a certain achievement can be remembered, and impact decisions for the future or as in a previous example remembering feelings of *disappointment* can also impact future judgments.

Participant 3 describes how remembering feelings of pride motivated them further in their studies:

> When I go onto a portal and I'm like please be a pass, and it's a pass and a
>
> distinction, then you like oh my gosh, and you feel proud, then that motivates
>
> you for next time. (P3)

Another participant describes a similar instance of how seeing their success reminded them of what they were able to achieve and motivates them further:

> So then actually applying myself in 2nd and 3rd year and seeing what I'm
>
> actually capable of achieving, it felt good, so it motivated me more, so those
>
> years were definitely a highlight for me. (P4)

Another participant described how they use their emotions before making judgements:

> Sometimes I like to think about things before I act on it or make a decision. I
>
> like to use my gut feelings or evaluate for myself for a while about what I
>
> should do before doing something. I just have to see if it feels right. (P6)

5.2.2.3 Code 7: Use mood changes to alter perspective

As mentioned, the abilities in Theme 2 illustrate how emotions can affect our cognition, and this code further examines how emotions influence how we view things and even aid in

considering other perspectives. This is an area that reached saturation, as the participants discussed ways that their emotions changed and in doing so created different ways that they approached or viewed something. Numerous participants mentioned these changes in mood, especially in the change from first year to later years in their studies. Some common examples are the changing from feeling *disappointed, frustrated* and *anxious* to *confident, proud* and *focused.* Many participants spoke about changing their mindset from laziness and procrastination to becoming more hardworking and focused. Examining these aspects closer, one may not directly link aspects such as underperformance and laziness to emotions at first, however, the underlying feelings of apathy, overwhelm, disappointment, and being unfocused may present themselves in an individual through procrastination, disinterest, and general poor performance in their work.

This participant explains how their perspective changed from first year:

> When I was in first year, I was all over the place and in second year I thought, this isn't working, ah, let me just try get myself more organised. From there, I promise you, even my dad said – I was a completely different person. I was working and getting stuff done and felt motivated and so ja, I, but that definitely wasn't from first year. (P3)

Another participant shows a change of perspective by saying:

> It was probably halfway through first year when I realised how hard you had to work, and this wasn't just about having fun. (P8)

Another participant provides an account of how they changed their perspective from first year, away from purely having fun to realising the importance of work:

Don't get caught up in the first-year excitement of this independence cause

that's what nearly caught me out. You've got to have just a good work ethic,

be focused, you've got to attend lectures, you've got to go to class, and um,

time management, you have to manage your time. (P1)

5.2.2.4 Code 8: Use emotional states to facilitate problem solving

Another focus of this branch is how emotion can be used for effective problem-solving. As in

the previous code, certain emotions can influence elements of cognition, where the same is

applicable to problem-solving. Certain emotions may encourage a certain approach to problems

that arise (Camacho-Morles et al., 2021; Tyng et al., 2017). For example, all students spoke

about stress of some sort, many reaching points of feeling overwhelmed and anxious. However,

in order to successfully navigate their tertiary education, they have had to effectively problem

solve (Tyng et al., 2017). For example, working to a deadline under challenging circumstances

or to overcome certain negative emotions like stress, or to use positive emotional states to

accomplish certain difficult tasks through motivation and enthusiasm. Certain techniques used

to manage these emotions will be discussed later in the chapter.

This participant reflects on how they navigated their negative emotional states, including

anxiety over their workload, by reflecting on how to overcome such emotions. In this case, by

becoming more organised:

I had to examine where I could improve, sometimes it felt like I didn't know

where to start and this made me feel even more anxious. By becoming more

organised, like having a planner it really helped me. (P2)

Another participant mentioned a similar state and how they prevented reaching the point of

being overwhelmed:

I learnt to take things one step at a time. Not to get overwhelmed. If I just

broke things down - like what I need to do that day, that week. It helped me.

(P7)

This participant describes how they harnessed negative emotions to steer them in a positive

direction:

Now at varsity, no one is going to do it for you. You have to accept

responsibility and help yourself. It can be scary at first. But you can't let

yourself get overwhelmed. You have to plan, dedicate yourself and prepare

every step of the way. (P7)

This participant describes how experiencing positive emotions motivated them to realise they

can get through the challenges:

My marks slowly started to improve, which made me happy and motivated me

to put in even more work. So that was quite cool when I realised, hey I can do

this! (P3)

As mentioned in Theme 1, code 2, once identifying certain emotions in others, some

participants then used these emotional states to facilitate problem-solving, such as dealing with

a contemptuous situation between classmates. For example, the participant that described a

difficult relationship with a fellow student went on to discuss how she handled her jealousy:

I think dealt with it by trying to be the mature person. I asked her to talk about

it one day and I told her I'm not here to compete I'm here to do my degree and

we were fine afterwards. (P2)

5.2.2.5 Theme 2 reflection

The data provides evidence of how participants used their emotions in a variety of ways in order to facilitate thinking. Emotion significantly affects cognitive abilities like perception, attention, learning, memory, reasoning, and problem-solving. Certain positive emotions can aid in prioritising thinking (code 5), such as the love for a subject creates interest or how disappointment can aid in determination. Many participants mentioned possible negative emotions such as anxiety, stress, and feeling overwhelmed in relation to their studies, particularly in the first year. However, participants described overcoming certain negative emotions and challenges through planning and preparation. Experiencing these emotions created awareness for the future and facilitated using certain techniques such as better organisation and preparation, and aid in motivation. This also illustrates that students can learn from experience and even cause a change in perspective (code 7). Participants used certain emotional states to facilitate judgement, memory and problem-solving. These can be both positive, as in feeling happiness in seeing results improve, or negative, as experiencing anxiety and working out ways to cope effectively (codes 6 and 8). Methods of how this was achieved will be discussed in more detail under Theme 4.

5.2.3 Theme 3 – Understanding and analysing emotions

This branch ranges from the basic skill of labelling emotions and identifying relationships between them, through to the more complex ability of understanding emotions and how they blend and transition over time. Four codes were used: label emotions and recognise relations between them (code 9), interpret meanings of emotions and relationships (code 10), interpreting complex and mixed emotions (code 11), understanding transitions between emotions (code 12).

5.2.3.1 Code 9: Label emotions and recognise relations between them

This code includes the ability to label emotions, with accurate words as well as recognising the relationship between the labels of certain emotions and the emotions themselves (Mayer & Salovey, 1997). Labelling emotions reached saturation as all participants named many emotions during their interview (this also overlaps with the code of 'identifying emotions'). As mentioned previously, these can be arranged into general 'sets' of emotions, the major distinction being positive and negative. As well as labelling emotions, this ability also includes recognising relations between the words. For example, a participant mentioning their 'love' of a subject implies enjoyment and pleasure, which may encourage and motivate a participant to success. A student that expresses their 'dislike' of a subject implies they do not enjoy it. This participant describes the negative effect of 'dislike' of a subject for them:

> I actually realised I thoroughly disliked these modules and could not wait for
> them to be over. I found first year psychology extremely difficult. I developed
> a mental block, which made studying for exams even more challenging. (P4)

Once labelled, and the relationship between emotions are identified, the next code examines the interpretation of these relations and the meanings attached to them.

5.2.3.2 Code 10: Interpret meanings of emotions and their relationships

Leading on from the previous code of labelling and recognising relations between emotions, is interpreting the meanings that the emotions convey and relationships between them. This code reached saturation in participants interpreting meanings attached to certain emotions, such as what it means to be anxious or frustrated or what it means to be excited or proud. Again, going back to the example of a student *'enjoying'* their favourite subject, they understand that they then find it easier and more pleasurable to learn. Certain emotions may have a unique meaning to individuals, for example the participant previously mentioned for disliking a subject, meant

to them, that they had to work harder whereas another individual it may actually prevent them from working. Where a participant speaks of feeling *'overwhelmed'* this may imply feelings of uncertainty, difficulties, and/or stress. For example, this participant explains how experiencing feelings of stress and anxiety during the semester leads them to becoming overwhelmed and therefore unable to function effectively:

> This is a very stressful time, and you have to be aware of it not to get swept up in the anxiety. I am not a last-minute type of person; I get totally overwhelmed and I learnt I cannot function like that, so I had to make sure I had ample preparation time and give myself enough time to learn and prepare. (P6)

This participant expresses understanding what happens when they experience nervousness and anxiety in an exam situation and how this prevents them from working to their full potential:

> Under stress my brain freezes, and in exam situations, the nerves and anxiety around it stops me from being able to achieve the results that I know I am capable of. (P5)

5.2.3.3 Code 11: Interpret complex and mixed emotions

This code includes the understanding of complex feelings such as simultaneous emotions, or blends or combinations of feelings (Mayer & Salovey, 1997). Numerous participants acknowledged a mixture of emotions during their experience, particularly during the adjustment to university in first year. For example, feeling emotions such as excitement and enjoyment but at the same time experiencing uncertainty and fear.

One participant shared:

> So, it really was a mixture of emotions in the beginning. It was exciting but a bit scary, to be out of school and you feel grown up you know? But at the

same time, I was nervous, and it felt like you didn't know what you were doing at first [laughs]. I definitely found the first year was the most challenging, very daunting. It could get a bit overwhelming at times, with all the new things and trying to remember it all. But after a few months, you adjust, and get into a new routine, then it's not so bad. (P9)

One participant explains how they took pleasure from their time at varsity but also realised they cannot be apathetic:

But I also didn't want to fail, you know? So, after that I think I learnt my lesson. I worked much harder. I still enjoyed my varsity time, but I was a lot more structured and made time for my work too. (P8)

Most participants contemplated the transition from school to varsity and the often, complex feelings that arose during this time. For instance, this participant expresses their joy at being out of school and studying something they are interested in, while at the same time realising the challenges it involves. The participant said:

Varsity was really fun and life changing, it was much different from high school. I got to study something that I really loved. It was great having the choice rather than being told what to learn. But it was really challenging and stretched me and I learnt more about myself. (P2)

5.2.3.4 Code 12: Understanding transitions between emotions

An especially sophisticated component of this branch is to recognise transitions between emotions (Mayer & Salovey, 1997). This could include changing from excited to scared and back again. These changes in emotion could also occur over a period of time. Many participants described how certain emotions transitioned during their years at university. Common

references were made to the transition in first year of feelings of overwhelm, anxiety and fear to becoming more comfortable, confident and generally more positive. A student described here how her emotions transitioned over time from fear to confidence:

> I do remember feeling totally overwhelmed and intimidated in first year classes when a lecturer would ask us a question. By second year, I made sure I sat in the front row and loved volunteering to answer questions, as it was the most productive way for me to learn. Time was really all it took to build confidence and find my voice. (P5)

An explanation of how a participant grew in confidence since her first year is reflected in this example:

> In first year so everything was still a bit new and this was very daunting for me. I would get so nervous and stressed out about everything. I've definitely built my confidence up since then. (P7)

Another participant describes her shift from how she felt in first year, doing presentations and speaking in class, to now at the end of her degree:

> I'm not so anxious and scared now to do presentations and things. I feel more confident, especially I find if I have prepared and done the work, there's nothing to be scared of. (P7)

5.2.3.5 Theme 3 reflection

Participants showed awareness of their emotions by being able to label them and recognise relations between them (code 9), such as knowing when they are feeling 'stressed' or 'anxious.' This then leads onto the understanding and meanings that emotions convey about the relations between them (code 10), such as stress and anxiety could possibly lead to feelings of being

overwhelmed, which could have negative effects. This awareness and understanding of such feelings, is important to then move onto find coping techniques and management tools. EI at this level also is shown in interpreting of the complexity of emotions (code 11) and how emotions can blend together and even be contradictory. This came through in responses of the participants such as balancing the 'fun' of university life with the hard work that is needed. This was also evident in the participants making the adjustment to tertiary education in first year, with the excitement and enjoyment on the one hand, with the 'stress' and 'overwhelm' at the change on the other. However, the awareness of these complex emotions led students to accept them or change them and move towards emotions that can benefit them in their academic endeavours.   Lastly, the ability to recognise transitions among emotions (code 12) was examined. The transition from uncertain emotions experienced by students, particularly in first year, to then becoming confident in their abilities, was mentioned by numerous participants.

5.2.4 Theme 4 – Managing emotions

The main theme of this branch is that of a person's ability to regulate and manage emotions effectively to grow intellectually and emotionally (Mayer & Salovey, 1997). Within the fourth theme, five codes were formed, namely: openness to emotions, both pleasant and unpleasant (code 13), ability to engage or detach from emotions (code 14), monitor and reflect on emotions (code 15), managing emotions in self (code 16), and managing emotions in others (code 17).

5.2.4.1 Code 13: Open to emotions (pleasant and unpleasant)

The first element of this theme involves being able to stay open to feelings, those that are pleasant and unpleasant in order to process information effectively (Mayer & Salovey, 1997). Individuals should be open and aware of emotions to decide on effective courses of action and come to be skilled at participating in behaviours that create the desired emotions (Salovey, Woolery & Mayer, 2003). This ability is evident in being open to both positive and negative emotions identified in the interviews such as knowing when something is *enjoyable* or *exciting,*

or awareness of feelings of *confidence* or *pride.* Being open to these emotions allows an individual to engage or utilise these feelings effectively, such as in motivation or in inspiration. Negative emotions such as *stress, overwhelm, insecurity* and *fear* were also common feelings mentioned. The ability of the participants to openly acknowledge and discuss these emotions may create awareness and enable the person to find a solution or coping strategy. These elements are illustrated in the following description of this participant's tertiary experience:

> It's been quite a ride! It's had its ups and downs, but I've loved the adventure.
> Every day is different, and you never know what's going to happen. But it's
> been such an awesome learning experience. (P1)

This participant expresses pure joy when describing their tertiary experience:

> I've loved it, honestly. I have no regrets. (P4)

This participant describes their personal growth:

> It's been amazing being able to see what I'm capable of doing. Like it is
> challenging but so rewarding. (P3)

Those that display openness to emotions may be more sensitive to emotional events and can experience most emotions more strongly than average. This can lead to frustration and an overload of emotion leaving one feeling overwhelmed in certain cases (Nekljudova, 2019).

Negative emotions such as this that did come through and were mainly in reference to first year challenges, such as:

> I do remember feeling totally overwhelmed and intimidated in first year. (P5)
> The adjustment to varsity from school was hard when everything was so new
> and unknown and scary. (P7)

The most challenging thing was first year, coming into this new environment, living on your own, it can be scary. I felt a bit lost and insecure; it took time to, you know, um, adjust. (P1)

5.2.4.2 Code 14: Engage with or detach from emotions

This element involves critically engaging with or detaching from emotions depending on its perceived utility and determine whether an emotion is suitable or useful in a situation (Mayer & Salovey, 1997). All participants showed openness to feelings and subsequent awareness of their emotions. This then allowed them to either engage and utilise those emotions that were either useful to them or disengage from those that proved counterproductive. For example, emotions such as *pride* and *enjoyment* were emotions that participants engaged with in a positive way, that motivated them further. Participants also acknowledged negative emotions, like *stress, anxiety*, and feelings of being *overwhelmed* and ways that they could eradicate them. These participants give insight into detaching themselves from certain emotions:

I really try to control my emotions and like, when I feel stressed or overwhelmed, I firstly just try and breathe. I will try remove myself for a while, maybe spend time by myself or take a walk or something. I find this helps. (P9)

Well, it takes a lot for me to lose my temper. I get rather moody or like, I'd rather just remove myself from the situation if I feel those emotions coming. (P8)

Once I can take a step back and put the situation into perspective and think about what happened – it is easier to explain my feelings involved. (P5)

I detach myself with things, like go for a walk or often I will just go for a walk

on the promenade, or I take myself away from the situation. (P4)

5.2.4.3 Code 15: Monitor and reflect on emotions

This ability allows one to thoughtfully monitor emotions in relation to oneself and others (Mayer & Salovey, 1997). Some examples of this ability also overlap with those given in the previous element. Through the engagement or detachment of emotions, one may also in effect be monitoring one's emotions, such as evaluating levels of anxiety or gauging how overwhelmed one is feeling. When an individual can keep track of their moods and emotions they can then work out if they are effective or not (Salovey, Woolery & Mayer, 2003). This participant describes how they try to monitor certain emotions to prevent it effecting their productivity:

I try to be a positive person. If I start feeling to stressed or overwhelmed, I'm

not very productive. I kind of shut down. So, I really try to not get to that

stage. (P7)

Another participant explains a similar experience:

I try not to procrastinate because later if I jump the gun and I don't read all the

details when I'm doing an assignment, I get nervous and anxious about

finishing in time and then I end up having to redo the whole thing. (P3)

5.2.4.4 Code 16: Manage emotions in self

This element involves more advanced levels of emotional regulation, being able to manage emotions in the self and others by managing negative emotions such as *stress* and *anxiety* and developing pleasant ones like *enjoyment* and *confidence.* Most participants spoke of many

instances where they have had to take control of their emotions and the awareness that they need to do so, and this code easily reached saturation. One participant stated:

> If, it's a topic that really does mess with my emotions and it's something that I feel strongly about, and someone is going against that, I try to be in control of my feelings and what I say so I don't regret it later. (P1)

Another participant spoke of when she was going through a difficult time and how she had to manage her emotions to not interfere with her work:

> I broke up with my boyfriend from high school during 2nd year, so it was very difficult emotionally. I felt sad and such a range of emotions, cause at the same time I knew I was free to live my varsity years. I had to consciously keep control of my emotions in order to focus and do the work that was required of me to pass. (P6)

An important element that arose from this data is the strategies participants used in order to manage their emotions. This also is relevant to other codes in this theme such as the ability to monitor and reflect on emotions, and to engage, extend or disengage from certain emotions, however examples will be discussed here. The participants discussed certain methods that assisted them to manage their emotions more effectively. Common examples of this were exercise, sport, and other activities to aid in relaxation. Some examples of exercise and sport from participants include:

> I really think sport helps a lot with that. You can take some of your frustration out in a healthy way, it helps with the stress of life. It also teaches you lessons like you can't win all the time and how to lose. (P10)

I go to the gym or a run, like if I'm feeling stressed. I generally feel I can calm myself down. (P8)

I gym a lot. Yes, it really does help a lot with my, um, stress levels, and it's just something nice to do, that I enjoy. (P1)

Some participants spoke of other ways that help them manage their feelings:

I write a lot. I feel it is a release for me. I've always had a journal, so it's like second nature to me to put my feelings down in words. I find that really helps my stress. Also just writing and planning what I have to do for the week in my planner. I feel like if I know what I have to achieve, it's like a goal, you know? Then I don't get so overwhelmed or realise I forgot something. I also like to walk or go out with friends. And of course, shopping. (P7)

I just otherwise have a cup of tea, read a book, just subconsciously think about things but preoccupy myself. (P4)

This participant explains what happens when he feels stress and anxiety coming on:

And then I listen to music. I do a lot of dancing and I listening to music a lot of the time. Ja, I dance and listen to music, that's my main activities that I find therapeutic and calm me down. (P2)

Seeking support from others is another important aspect of managing emotions in oneself (Caruso, Mayer & Salovey, 2002). This is another aspect that became obvious during analysis, that the participants had a good support network and reached out for help when they needed it. Speaking to family and friends was a common occurrence. As one participant stated:

> I do have family and a sister that I am very close to and a boyfriend so I can
> just go vent and let my day off on them. (P4)

And another:

> I chat to my mates over a beer as well of course. I'm also close with my folks.
> I'd say I have a good support network. (P1)

The importance of asking for assistance from others when they needed it was mentioned by this participant:

> I had a really hard time learning two of my modules, they were way too much
> information for me, I felt overwhelmed. So, I handled that by asking people
> for help. I reached out to my lecturers to get help with the parts I was battling
> with. Sometimes I felt shy to ask but I realised they were there to help me, so I
> just did it. (P2)

Another participant explained:

> I had to calm myself down and go through it like, carefully, I asked my mates
> and the lecturer helped me too. I realised it wasn't as bad as I thought. (P8)

5.2.4.5 Code 17: Manage emotions in others

There was not a large amount of evidence indicating how students managed the emotions of others, and therefore did not reach saturation. During questioning the focus fell more on the managing of emotions in the individual. However, some participants formed support networks that aided in managing their emotions as well as of others. By forming study groups and supportive networks this assisted the individual students that were interviewed as well as their peers. This is illustrated in the following examples:

We also had a study group that was a great support and we all helped each

other. (P2)

and

I had a very close-knit group in second and third year, we supported and

motivated each other. Three of us all worked together so we kind of each do a

section of a learning unit and module and split it up, so I mean we, our

interactions with the people I worked with were very good and very positive.

(P1)

5.2.4.6 Theme 4 reflection

This theme 'managing emotions' came through strongly through each of these codes (abilities).

Participants displayed openness to emotions, both positive and negative (code 13) and were

able to then either engage with these emotions if useful or disengage with them if not (code

14). Participants discussed how they monitor and reflect on their emotions (code 15).

Managing emotions in the self (code 16) looked at strategies participants found effective to

assist in controlling their emotions. Participants employed strategies such as exercise, writing

and speaking to others to regulate their moods and deal with feeling such as stress and anxiety.

Participants reported the importance of support from others to assist them, whether it was

family, friends and/or lecturers, and engaging in these social support networks proved effective

for them. These strategies proved successful in giving students the ability to persevere and

continue in times of difficulty. Being effective in managing emotions of others was also

demonstrated (code 17) however, not enough data was collected in this area. Utilisation of

effective strategies and support networks may also have proved effective in their adjustment to

university and persist towards academic success.

5.3 Conclusion

This chapter presented the findings of this study regarding the EI abilities used by tertiary students and how they have applied them in order to successfully complete their studies. Findings were interpreted by using Mayer and Salovey's Four Branch Model of Emotional Intelligence (1997) as a guide, in which four themes and seventeen codes were created. Participants were able to give rich descriptions and examples from each branch of the model to assist in illustrating how EI abilities were used. A discussion on these results will be provided in the next chapter.

CHAPTER 6: SUMMARY OF FINDINGS

6.1 Introduction

This chapter provides a discussion on the findings gained during the research. By closer examining these findings we hope to gain a better understanding of the EI abilities used by tertiary students who have successfully completed their studies within regulation time and how these EI abilities were utilised. Mayer and Salovey's Four Branch Model of Emotional Intelligence (1997) was used as a guideline in this study. Seventeen codes were created using this model, representing key areas of EI that make up the four branches of this model. The four branches of the model were used as the four main themes under which the data was examined.

6.2 Theme 1 - Perception, appraisal and expression of emotions

Perception, appraisal, and expression of emotions are basic processing skills of EI. EI is not possible without these abilities. Without these skills, a person would learn very little about feelings, and therefore about oneself and others around them (Mayer et al., 2016). All participants were able to identify emotions in their physical and psychological states. Being able to identify emotions in the self (Code 1) is the most basic EI skill, as well as in others (Code 2). Recognising and articulating one's feelings and thoughts, is the initial step towards integrating emotional information for further use (Mayer et al., 2001; 2012). Participants of the study recalled a variety of both positive and negative emotions. Positive affect is defined as, "any subjective feeling experienced as pleasant" (Shiota et al., 2021). Their level of arousal in terms of both physiological and cognitive activation can vary. Such emotions are correlated to increased focus, commitment, awareness, motivation, determination, and academic performance (Hayat et al., 2020; Pekrun et al., 2019). For example, students experiencing feelings of enjoyment and pride are what Pekrun (2014) refers to as activating positive emotions – those that can stimulate physiological arousal in an individual. These can play a role in motivation, self-regulation and perseverance in their studies. On the other hand, negative

emotions were also identified by participants, for example, feeling stressed, overwhelmed, and anxious. Negative emotions can also vary in their physiological and cognitive effects, and can be a significant underlying cause of attrition and poor academic results (Pekrun et al., 2017; 2019). However, negative emotions can't be completely avoided in learning and can in some instances be used productively and actually lead to positive outcomes (Pekrun, 2014 Hayat et al., 2020). For example, a certain amount of anxiety can motivate a student and encourage on-task focus, however intense feelings of anxiety could have a negative effect leading to withdrawal and relinquishing effort (Picton et al., 2018; Hayat et al., 2020).

Participants in the study also reflected on identifying emotions in others (Code 2). This can be an important skill when dealing with people on a daily basis, such as fellow students and lecturers. Being aware of the emotions in others helps develop good interpersonal relationships (Salovey & Mayer, 1990) that can provide an important supportive network for a student during their tertiary years. Particularly in the first year of study, the way in which students adjust academically, socially, and emotionally depends on their interactions with others and their perceived social support (Hidajat et al., 2020). For example, participants stated feeling mutual support, inspiration and motivation from fellow students, especially those that had formed close friendship and study groups. Identifying emotions in others is also important in developing empathy, which is identified as a key component of emotional intelligence (Salovey & Mayer, 1990). This can, for example, be evident when trying understanding what other students are going through and reaching out to support and motivate them. Being able to identify emotions in others allows one to make sense of emotional messages and better understand others in relation to the self (Mayer & Salovey, 1997). In the context of tertiary education, the relevance of this is that students are in constant contact with other students, lecturers, other members of the university, as well as their parents and family members.

Appropriately expressing emotions and needs associated with them (Code 3) represents more complex abilities of EI within Theme 1 (Brackett et al., 2011). Being able to accurately express emotions can admittedly be challenging for some. However, participants in the study felt they were more likely to do so with someone with whom the felt comfortable. Other participants were comfortable expressing their emotions when required and, again, with people they felt understood and supported them. This is understandable as was reported in a study conducted by Barrett, Robin, Pietromonaco, and Eyssell (1998), in which the authors investigated the strength of relationships with emotion expression. They discovered a substantial association between people's emotional expression and how close their relationships were to the other person. Therefore, as in the case with participants in the current study, people can be selective in expressing emotions to others (Salovey et al., 2003). These interactions with 'trusted others' can be significant in creating good interpersonal relationships and support networks (Tom et al., 2020). As mentioned by participants in the study sharing and expressing emotions with people they felt understood them, helped them feel supported, respected, and motivated in their studies.

Finally, this theme concerns the EI ability to discriminate between emotions (Code 4), including the ability to evaluate the authenticity of emotions expressed by others (Brackett et al., 2013). Using accurate information processing, individuals can categorise different emotions and mood states and use this information to act accordingly (Salovey, et al., 1999). Introspection and awareness of specific emotions can allow for the improved analysis of situations and greater awareness of accurate and inaccurate emotions (Silvia & Gendolla, 2001). This not only helps students to communicate better with others, but also helps them to tackle academic issues with greater self-confidence. The better a student believes they are able to handle a given situation, the more in control they are of their studies and academic success (Picton et al., 2018). However, this element in the original model of Mayer and Salovey

specifically refers to being able to distinguish between correct and incorrect, or truthful and dishonest emotions. This is an area that did not reach saturation in the study. Even through questioning, no elements of discrimination between honest and dishonest emotions were evident. This may indicate that this area is not a particularly relevant ability in the success of students at university.

6.3 Theme 2 - Emotional facilitation of thinking

Emotional facilitation of thinking involves emotions that assist in intellectual processing, facilitate cognitive activities and problem solving and aid in prioritising tasks, planning and decision making (Mayer & Salovey, 1997; Drigas & Papoutsi, 2018). As stated by Meinhardt and Pekrun (2003, cited in Hayat et al., 2020), learning is constantly affected by emotions and emotions impact concentration, processing, storing, and retrieving information. The first element of this theme involves using emotions to direct thinking to important information and using them in a productive way (Code 5) (Mayer & Salovey, 1997; Mayer et al., 2012). This is a crucial skill for students to utilise in order to prioritise their studies and assist them in the planning, motivation, and dedication to their work (Picton et al., 2018). Emotionally intelligent persons can utilise the motivational qualities of emotion to promote learning, therefore self-motivation is an important aspect of EI (Drigas & Papoutsi, 2018; Salovey et al., 2003). Students demonstrated this ability in their studies, for example, emotions such as 'enjoyment' and 'pride' can bolster a student in their motivation to achieve, or on the other hand 'disappointment' and 'fear' may also spur on an individual to work harder. Emotions can be utilised to direct attention to relevant tasks and prepare and sustain focus to important events, for example, curiosity and motivation can promote learning (Tyng et al., 2017). This indicates that emotions can greatly impact student cognition, motivation and ultimately their performance (Pekrun et al., 2002; Tyng et al., 2017). Of mention was the adjustment during first year, and for many, the realisation of despite how challenging this time was, they were

able to persevere. Research conducted by Holliman et al. (2019) and Collie et al. (2017) concluded that the ability of university students' to adjust, particularly in first year, was found to positively predict academic achievement persistence, planning, and task management. Participants harnessed certain emotions to motivate and drive them in their studies, indicating EI behaviour. The fact that the participants all completed their degree and within three years indicates that they were successful at this.

More advanced abilities in this theme involve generating emotions to aid in judgement and memory processes (Code 6). Levine (1997) proposed in his appraisal theories that people experience emotions when assessing whether situations are in line with their goals, needs, or values. For example, feeling 'proud' or 'disappointed' in a test result. Specific types of appraisals generate particular emotional reactions. These appraisals then in turn, can influence memory, motivation and subsequently, a particular course of action (Drigas & Papoutsi, 2018; Tyng et al., 2017). For example, a student may remember more in a class they are enjoying than one they find boring. Or a student will remember the one time they came close to failing as a significantly negative experience. This may prove to provide the motivation to avoid this feeling reoccurring, and not let the same situation repeat itself. By remembering past emotions, this can aid in self-motivation, as one can know whether to pursue similar instances in the future or to prevent them (Levine et al., 2001). Highly motivated students often display improved academic performance than less motivated students (Seli et al., 2016).

Using changes in moods to consider a wider range of perspectives (Code 7) is a more complex ability that falls under this theme. Different emotional states can be utilised by individuals to consider a wide range of possible actions (Brackett et al., 2011; Tyng et al., 2017). People rely more on general knowledge, stereotypes, or heuristics when they are 'happy' and experiencing positive emotions (Levine & Pizarro, 2004), for example if one 'loves' a subject working on it

may come more naturally and effortlessly. Csikszentmihalyi (2013) states that happiness fosters success across various fields of human functioning. Erez & Isen (2003) posits that positive emotions are a source of human strength. Positive emotions correlate positively with effective cognitive process, organisation and motivation. These are elements that can contribute positively to tertiary success (Hayat et al., 2018).

Utilising these different emotional states is also applicable to problem-solving (Code 8). Using EI an individual may also be able to use emotional states to address certain problems or difficulties. Positive emotional states facilitates more creative, flexible and effective problem-solving (Drigas & Papoutsi, 2018; Salami, 2010). For example, a student may remind himself of his successes before tackling a difficult series of assessments and use this self-induced positive mood to boost his confidence to persevere and find different ways to do so (Salovey et al., 2003). On the other hand, research shows that when an individual experiences negative emotions, they tend to employ effortful processing and evaluate information more thoroughly and systematically (Levine & Pizarro, 2004). For example, a student may demonstrate EI by being aware that they may be 'stressed' or that they are not fond of a specific subject, and therefore may need to extend more effort in order to pass the module. Students also reported becoming more organised and careful in their planning and approach to their work and how this assisted them in moving in a more positive direction. To successfully navigate tertiary education, students have to effectively problem solve to not get to the point of experiencing certain emotions such as becoming overwhelmed, and to accomplish certain difficult tasks through motivation and enthusiasm (Hayat et al., 2018).

6.4 Theme 3 - Understanding and analysing emotions

Understanding emotions entails, at a basic level, labelling emotions, as well as being able to understand the relationships between different emotions and the transitions between them (Code 9) (Mayer & Salovey, 1997). This theme, and the corresponding codes, proved

particularly useful for students in their adjustment to tertiary education. This involves 'emotional awareness', which is the capability to observe, identify, and attempt to understand emotions (Boden & Thompson, 2015). This emotional information can be utilised to provide additional insight and develop student performance and learning in a positive direction rather than giving up (Linnenbrink-Garcia et al., 2016). Participants showed awareness of their emotions and being able to think accurately about their emotions, and knowing what can lead to various emotions, such as knowing when they are feeling stressed or anxious, or knowing when they needed to focus and engage. Importantly, recognising the relations between certain emotions and the meaning behind these interactions is an important EI skill (Salovey et al., 1999). For example, feeling 'anxious' or 'stressed' can lead to being 'overwhelmed' if not effectively handled. This involves the second element of this theme (code 10), to not only identify the emotions, but to interpret them accurately as a result. Individuals must recognise what emotions convey about relationships in order to understand the emotions (Garnefski & Kraaij, 2018). For example, students recognising feelings of 'disappointment' or 'pride' can act as further motivation to become successful when interpreted by the individual as being positive or negative.

The theme of increased complexity involves is understanding that emotions can combine, blend and interact in complex ways (Salovey et al., 2003) (code 11). The first year of university in particular, is reported to being an emotional time for students (Picton et al., 2018). Using EI, a student may be able to 'juggle' these different emotions in order to adjust to their new enviroment. For example, students need to balancing the 'fun' of university life with hard work, or they may experience feeling 'excited' and 'joyful' on the one hand, and 'nervous' and 'anxious' at the change on the other. However, the awarenesss of these complex emotions can help students accept or change them, and move towards emotions that can assist in their

academic endeavours, such as using them as motivation or to aid in better preparation (Hidajat et al., 2020).

The last theme is ability to recognise transitions among emotions (code 12). References were made to feelings of 'overwhelm', 'anxiety', 'nervousness' and 'fear', specifically in the first year of study, to shift to become more adjusted, confident, and generally experience more positive emotions. It can also add to the richness of understanding certain emotional transitions, such as lack of self-esteem leading to failure or moving from 'stressed' to 'totally overwhelmed', and how such negative emotions can be managed in order to continue and move forward successfully (Tyng et al., 2017). This will be discussed in the next theme.

6.5 Theme 4 – Managing emotions

Managing emotions is an area that is commonly recognised as a major part of EI (Mayer et al., 2016) and is an area that came through strongly in the study. Each of the codes easily reached saturation here, as this concerned managing emotions in the self. The only code that did not reach saturation was 'manging emotions in others' (code 17).

The first aspect of this theme is the ability of individuals to be open to the experience of emotions, both pleasant and unpleasant (Code 13) (Salovey et al., 1999). Openness to emotions is recognised by many researchers as a particularly challenging aspect (Nekljudova, 2019). Openness involves appreciating certain emotions and being more sensitive to emotional occurrences, however, high openness to emotions can also be associated with feelings of anxiety (Nekljudova, 2019). When experiencing emotions more intensely, those open to emotions need to manage them effectively in order not to be overwhelmed by them (discussed in code 16). People displaying openness to emotions tend to look for opportunities for individual growth and reflect on their life experiences (Nekljudova, 2019). Those that display openness are often curious, innovative, creative, and enjoy a variety of experiences (Deyoung

et al., 2014). Students displaying openness may be more intellectually curious with a desire for knowledge and may experience enjoyment in the different aspects of their tertiary environment, for example seeing it as an 'adventure' and a 'challenge' and using experiences as personal growth opportunities to aid to success in their studies.

Managing emotions also includes monitoring one's reactions to events and engaging with helpful emotions and disengaging with those that are not (Code 14). Individuals using this EI skills are adept at choosing to engage in lucrative activities or at avoiding unpleasant ones (Drigas & Papoutsi, 2018). Individuals can engage in behaviours that elicit the desired emotions in themselves (Salovey et al., 1999). This can vary, depending on the context and expectations, however, students may, for example, utilise positive emotions such as 'enjoyment' or feeling 'proud' in their success to aid in motivation or to seek out activities that they typically find rewarding (Hidajat et al., 2020). This also includes awareness of certain emotions that may be counterproductive, and being able to 'step back' and evaluate responses and control certain emotions when needed (Drigas & Papoutsi, 2018). For example, students mentioned the importance of removing themselves from certain situations when feeling certain emotions coming on such as anger, stress, and frustration. Specific techniques were also mentioned to detach and manage emotions that will be discussed later in the theme.

Closely linked to the skill of engaging or disengaging from emotions is the ability to monitor these emotions and reflect on them. Paying attention to moods and emotions is an important EI skill in order to evaluate and reflect on them (Salovey et al., 2003). This requires a degree of self-reflection for individuals to gain knowledge of the cause, and experience of emotions (Byzova & Perikova, 2019). This can in turn assist individuals to theorise how and why one is feeling a certain way and if the emotions are provoked by specific situations. This allows for successful emotional regulation and positive general well-being (Salovey, et al., 1999). Examples of this were evident in the research, such as students describing how they attempted

to monitor certain emotions in order to prevent them effecting their productivity. It is important for tertiary students to use this EI ability to keep track of their moods and emotions so they can then evaluate if they are using them effectively or not.

At the more advanced levels of this theme is being able to manage emotions in oneself and others (Codes 16 and 17). Participants displayed many elements of managing emotions in the self (Code 16), easily reaching saturation. This was evident in their ability to control, regulate and alter their emotions if necessary, and importantly, engage in strategies they found effective to do this. Self-management allows for the regulation of reactions and prevents possible impulsive emotions and behaviours (Drigas & Papoutsi, 2018). In tertiary education, students are generally moving from a period of adolescence into early adulthood, where EI skills are important for regulating their emotions and behaviour (Karibeeran, 2019). Research indicates that people who make an effort to improve their moods have less unpleasant bodily symptoms, less melancholy, and less social anxiety. They are reported to experience more life satisfaction, optimism, and have positive relationships with family friends and others (Salovey et al., 1995). Participants in the study employed a variety of strategies to assist in managing emotions, such as exercise, writing and speaking to others to regulate their moods, and deal with feelings such as stress and anxiety. EI plays an important role in coping with challenges. Those that can build supportive networks of people in their lives are also reportedly best able to cope in such difficult times. Social support can reduce anxiety, and aid in coping with difficulties and educational challenges (Hidajat et al., 2020). Participants reported the importance of support from others to assist them whether it is family, friends and/or lecturers, where engaging in these support networks proved effective for them. Utilisation of these effective strategies and support networks may also have proved effective in retention and their adjustment to university (Tom et al., 2020).

Lastly, managing emotions in others (Code 17) was an area that did not reach saturation. This may be that the focus of the questions was placed on the success of the individual and their experiences. However, this may also point to the possibility that managing emotions in others may not be that important for an individual's study success. Another aspect of this ability (Code 17) is to assist others to enhance or repair their moods (Salovey et al., 2003). Research suggests those that possess the ability to assist others to manage their emotions are better able to act pro-socially and create and keep solid social networks (Salovey et al., 2003). For instance, assisting others enhance their moods is a valuable skill in good interpersonal relationships. This is evident in the current study where students formed study groups and support networks that assisted each other in their tertiary studies and aided in their success.

6.6 Conclusion

This chapter further examined the findings gained during the research as to what EI abilities were used by tertiary students who have successfully completed their studies, and how these EI abilities were utilised. The final chapter of this research presents an outline of implications, limitations, and recommendations and suggestions for future studies.

CHAPTER 7: CONCLUSION

7.1 Introduction

Poor pass rates and high dropout rates are an ongoing problem globally and within South African tertiary institutions (Ajoodha et al., 2020). This is particularly true in the first year of tuition with the added complexity of adjusting to tertiary education after school (CHE, 2018). This study aimed to explore what EI abilities may assist students' in successfully negotiating their adjustment to tertiary education, as well as their subsequent completion of their degree in the allocated time. EI refers to the ability to accurately identify emotions, use emotions to improve thinking, comprehend and classify emotions, and control one's own and other people's emotions (Mayer & Salovey, 1997). The results of this study revealed the many EI abilities that have been utilised by successful students during their university studies. These include identifying, expressing and appraising emotions, using the emotions to facilitate thoughts and cognitions, understanding and analysing emotions, and finally, successfully managing their emotions. These EI abilities proved to aid in the adjustment, performance, and retention of students in tertiary education.

7.2 Summary of the study

Students from a private tertiary institution in South Africa that had completed their degrees successfully in three years were interviewed. The Mayer and Salovey's Four-Branch Model of Emotional Intelligence and their ability-based model of EI (Mayer & Salovey, 1997) was the conceptual model that guided this study. The model was used after data collection during content analysis, to identify relevant themes and the abilities linked to EI. Seventeen codes were created, that fell into four themes, based on the four branches of Mayer and Salovey's Model (1997). The model was used during content analysis to group similar data, based on the themes from the Mayer and Salovey's Four-Branch Model.

The main research question that aimed to be answered was as to what EI abilities were used by tertiary students who have successfully completed their studies within regulation time and how they utilised these abilities. All the aspects of the Mayer and Salovey (2017) model, being the four themes and seventeen codes, were demonstrated by the participants. The findings of this research are consistent with numerous investigations that have revealed that there is a positive correlation between emotional intelligence and academic achievement, behaviours and attitudes that lead to success (Salami, 2010; Salami & Ogundokun, 2009; Tagliavia, et al., 2006; Wong et al., 2001). There were some codes that were, however, not saturated. For instance, Code 17 – managing emotions in others. This could indicate that this may not be an important skill in the success of tertiary students, whereas Code 16 – managing emotions in self, came through strongly in the data and indicates an important ability for students in tertiary education.

Another key question in this research was examining the ways in which EI has assisted students in adjusting to university life. It has been reported that there is a positive relationship between student adjustment and EI (Bar-On, 2001; Parker et al., 2004; Salami, 2011) and students with higher levels of EI and social competencies are more likely to graduate (Parker et al., 2004). This came through in the findings of the studies. Those who could perceive, understand and manage their emotions were seemingly better at handling any emotional distress that arose during their studies. Managing emotions such as stress and anxiety may prevent burnout and eventual drop out. Using EI skills also supported the facilitation of thinking such as judgement, problem-solving and memory, all of which assist in adapting to the demands of tertiary education.

How tertiary students utilised different EI abilities and how these skills can assist students with their tertiary endeavours, were other key questions guiding the research. This became evident through each of the seventeen codes (abilities) that were identified in the data, falling into the

four main themes of EI. This also allowed us to look at how EI has impacted the student's tertiary studies and ultimately their academic achievement in a positive manner. These will be briefly outlined below:

Theme 1: Perception, appraisal and expression of emotion

Students were able to accurately identify emotions in the self and others, both positive and negative. These positive emotions can then be activated and can stimulate physiological arousal in an individual. These can play a role in motivation, self-regulation, and perseverance in their studies. They are also better equipped to deal with negative emotions that can disrupt learning. Students were able to express their emotions and needs adequately, especially with people they trusted, which is important in creating good interpersonal relationships and support networks.

Theme 2: Emotional facilitation of thinking

Students also utilised their EI abilities to facilitate their thinking, cognitive activities, and problem-solving and aid in prioritising tasks, planning and decision making. These all being crucial for navigating tertiary education successfully. These students also utilised the motivational qualities of emotion to promote learning, such as in driving a student to achieve, or spurring on an individual to work harder. This is particularly pertinent in the adjustment during first year and for many, the realisation of despite how challenging this time was, they were able to persevere by utilising these abilities.

Theme 3: Understanding and analysing emotions

Students showed the ability to understand and analyse emotions. This involves being emotionally aware and able to observe, identify, and attempt to understand emotions (Boden & Thompson, 2015). This emotional information can then be used to provide additional awareness and develop student performance and learning (Linnenbrink-Garcia et al., 2016). This is an important ability displayed by students in 'knowing themselves', as well as the

meanings behind certain emotions they were experiencing. Through this awareness, they were able to harness the positive ones and recognise possible outcomes of the negative ones, for example, moving on after making a mistake or experiencing disappointment.

Theme 4: Managing emotions

The participating students were successful at paying close attention to their emotions, monitoring and managing them, particularly in stressful situations. They also were able to maintain a positive outlook despite setbacks. This ability also includes engaging with useful emotions and being able to disengage with others that either are not beneficial or may need further evaluation. All participants described a variety of methods to manage their emotions, with the most popular being forms of exercise, as well as utilising people they were close to in their lives as support.

7.3 Contributions of the study

The research in this study has contributed to further understanding of EI abilities. Although the concept of EI has gained credibility and popularity in recent decades, there it is still an area that can benefit from further research and awareness of the concept and its benefits. Few previous studies have specifically focused on EI and tertiary educational success as well as abilities that may aid in adjustment to university. Throughout this study, it has been argued that emotions influence all aspects of learning and achievement. Emotions impact students' attention, motivation, how they approach their learning, and their self-regulation (Pekrun, 2014). EI involves understanding the meaning behind emotions and their relationships, and using them to reason and problem-solve (Mayer et al., 2000). In this study, we gained information on how students use emotions to their advantage and, of particular interest, to aid in their tertiary education success was central to this study.

It was demonstrated that students were able to identify emotions in their selves and others and accurately express their emotions when necessary. This can assist in building relationships and receiving assistance and support where necessary. Students used their emotions to facilitate their cognitive abilities such as judgement, memory, and problem-solving. The study demonstrated that students showed an ability to understand their emotions and were able to analyse the meanings of those feelings. They were also able to engage or disengage from emotions where necessary and successfully manage them.

The study revealed rich descriptions and examples from the participants to illustrate each branch of the model to assist in showing how EI abilities were used in tertiary education. By analysing the various abilities in the research, EI can be used as a tool, and if harnessed can contribute to academic success, for example, being mindful and focusing on positive emotions that can aid in motivation and perseverance or monitoring one's negative emotions effectivity to prevent burn out. Similarly, through awareness of their emotions, people could successfully manage them through various means, such as through exercise, or detaching from unhelpful emotions.

The abilities involved in understanding and managing their emotions were particularly relevant in the adjustment to university. With the recognition of emotions, students were then able to appropriately work towards understanding them and the meanings behind them. For example, realising when they are feeling stressed and anxious, in order to address these feelings before becoming overwhelmed, which could lead to 'giving up', failure, or dropping out. On the other hand, it also involves understanding mixed emotions, such as excitement and fun of first year, with anxiety and fear of the unknown. This also leads to the importance of managing emotions appropriately, which proved a particularly relevant and essential tool in both adjustment and successful completion of tertiary education.

University is a critical time in a person's life, where there is a transition from adolescence to young adulthood. There is a need during this time to nurture EI abilities that can play a role in regulating students emotions and behaviour (Karibeeran, 2019), and this study illustrates this. A better understanding of EI abilities could also provide university staff and lecturers insight into the skills that are beneficial to students in their studies. They can then collaborate effectively with students and assist in developing and harnessing these abilities with them. Support and intervention programmes that include EI skills is a possible area for future research.

7.4 Limitations of the study

Without quantifiable statistical analysis, it is not possible to determine whether or not all the students that have been successful in their tertiary studies have high levels of EI. Even though their responses have been analysed qualitatively to demonstrate high levels of EI, some may argue that this has not been tested with psychometric measures of assessment. Therefore, in addition to a study such as this, it may be of value to follow on with a measure of intelligence to support the findings, for example the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) (Mayer et al., 2012).

Mayer and Salovey's (1997) Four-Branch model of Emotional Intelligence may also be considered too narrow in focus. Although the literature has shown that EI is an important aspect to consider in terms of success for students, it is possible that different factors may also be at play. The approach of Mayer and Salovey, and subsequently this study, focused on ability EI, which is the view of EI as a standard form of intelligence. It is acknowledged in this study that there may be gaps in certain important constructs of EI, that being aspects of trait EI, which includes, for example, personality traits.

It is also acknowledged that the participants of this study were humanities students and some of the EI abilities may overlap with certain academic content and general expectations of the students. For example, using emotive expression in writing, harnessing emotions for creativity and engaging or detaching from emotions for psychology students. Students that require more logical and practical thought for their studies may have different experiences and utilise different tools. Further studies across faculties would be beneficial.

7.5 Recommendations for future research

As previously mentioned, support programmes that include EI skills is a possible area for future research. Research shows that many aspects of EI can be improved. However, further research is needed to support the notion that EI interventions improve considerably learning and work (Kotsou et al., 2019). Development of EI and emotion regulation skills could be offered to first year students and be addressed in such programmes. Introducing students to EI concepts and the benefit of utilising these skills is an area that may deserve further attention. More awareness can be created around EI in the tertiary environment and how emotions can be used as tools to achieve goals. This may include workshops and training of both lecturers, staff as well as students themselves. There would also be benefit in preparing learners before entering tertiary education. Therefore, EI workshops, education and training would be of great benefit in primary schools in preparation for the future, as well as yielding the benefits for their development and schooling.

In addition, further research is required to understand the extent to which EI can be taught and learned at any age. It is the belief of the researcher that EI can certainly be improved through training and is not necessarily dependent upon one's innate ability. However, it is unclear how successfully one can learn such skills later in life. Possibly, basic awareness of EI and its related skills is best introduced at a young age. Education on EI at a school level may be beneficial to investigate further, to better prepare students in the adjustment to university. Furthermore,

exactly *how* we can teach and nurture EI and assist one to intelligently use the emotional abilities we have, is an area that deserved further attention.

7.6 Conclusion

This qualitative study explored the EI abilities of students who have successfully completed their tertiary education within the regulated time and how students have utilised these abilities to successfully complete their studies. The research allowed further understanding of the EI abilities used and investigate how they applied these strategies during their studies. The research also examined the role of EI in assisting students to adjust to university successfully. Over the last few decades, there has been a growing interest in EI. This study has highlighted the importance of EI and the vital role it can play in tertiary education. The benefits of EI are vast and can be utilised to achieve personal and intellectual growth. EI was also evident in the successful adjustment of the student to university and throughout their journey towards achieving completion of their qualification.

REFERENCE LIST

Adams, W. C. (2015). Conducting Semi-Structured Interviews. In W. Blackwell (Ed.), *Handbook of Practical Program Evaluation* (4th ed.). https://doi.org/10.1002/9781119171386.ch19

Ajoodha, R., Jadhav, A., & Dukhan, S. (2020). Forecasting Learner Attrition for Student Success at a South African University. *ACM International Conference Proceeding Series*, 19–28. https://doi.org/10.1145/3410886.3410973

Alharahsheh, H. H., & Pius, A. (2020). A Review of key paradigms: Positivism VS interpretivism. *Global Academic Journal of Humanities and Social Sciences*, *2*(3), 39–43.

Alsharari, N. M., & Alshurideh, M. T. (2021). Student retention in higher education: the role of creativity, emotional intelligence and learner autonomy. *International Journal of Educational Management*, *35*(1), 233–247. https://doi.org/10.1108/IJEM-12-2019-0421

Alyahyan, E., & Düştegör, D. (2020). Predicting academic success in higher education: Literature review and best practices. *International Journal of Educational Technology in Higher Education*, *17*(1). https://doi.org/10.1186/s41239-020-0177-7

American Psychological Association. (2017). *Ethical principles of psychologists and code of conduct*. http://www.apa.org/ethics/code/index.html

Astin, A. W. (1984) Student involvement: A developmental theory for higher education. *Journal of College Student Personnel, (25),* 297-308.

Awang, M. M., Kutty, F. M., & Ahmad, A. R. (2014). Perceived social support and well being: First-year student experience in university. *International Education Studies*, *7*(13), 261–270. https://doi.org/10.5539/ies.v7n13p261

Bantjes, J., Saal, W., Gericke, F., Lochner, C., Roos, J., Auerbach, R. P., Mortier, P., Bruffaerts, R., Kessler, R. C., & Stein, D. (2021). Mental health and academic failure among first-year university students in South Africa. *South African Journal of Psychology*, *51*(3), 396–408. https://doi.org/10.1177/0081246320963204

Bar-On, R. (1997). The BarOn emotional quotient inventory (BarOn EQ-i). *Toronto, ON: Multi-Health Systems Inc*.

Bar-On, R. (2001). No Title. In J. Ciarrochi, J. Forgas & J. D. Meyer (Eds.), *Emotional intelligence in everyday life: A scientific inquiry. New York:* (pp. 82–92). Psychology Press.

Bar-On, R. (2010). Emotional intelligence: An integral part of Positive Psychology. *South African Journal of Psychology*, *40*(1), 54–62. https://doi.org/10.1177/008124631004000106

Bar-On, Reuven. (2005). The impact of emotional intelligence on subjective well-being. *Perspectives in Education*, *23*(2), 41–62.

Bar-On, Reuven. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, *18*(1), 13–25.

Berenson, R., Boyles, G., Boyles, G., & Weaver, A. (2008). Emotional intelligence as a predictor for success in online learning. *International Review of Research in Open and Distance Learning*, *9*(2), 1–17.

Boden, M. T., & Thompson, R. J. (2015). Facets of emotional awareness and associations with emotion regulation and depression. *Emotion*, *15*(3), 399–410. https://doi.org/10.1037/emo0000057

Bonet, G., & Walters, B. R. (2016). High Impact Practices: Student engagement and retention. *City University of New York (CUNY) Academic Works*, *15*(2).

Bowden, J. L. H., Tickle, L., & Naumann, K. (2021). The four pillars of tertiary student engagement and success: a holistic measurement approach. *Studies in Higher Education*, *46*(6), 1207–1224. https://doi.org/10.1080/03075079.2019.1672647

Boyatzis, R., Goleman, D., & Rhee, K. (2000). Clustering competence in emotional intelligence: Insights from the Emotional Competence Inventory (ECI). *Handbook of Emotional Intelligence*, *99*(6), 343-362.

Brackett, M. A., Bertoli, M., Elbertson, N., Bausseron, E., Castillo, R., & Salovey, P. (2013). Reconceptualizing the cognition – emotion link. *Emotional Intelligence*, 365–379.

Brackett, M. A., Mayer, J. D., & Warner, R. M. (2004). Emotional intelligence and its relation to everyday behaviour. *Personality and Individual Differences*, *36*, 1387–1402. https://doi.org/10.1016/S0191-8869(03)00236-8

Brackett, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional intelligence: Implications for personal, social, academic, and workplace success. *Social and Personality Psychology Compass*, *5*(1), 88–103. https://doi.org/10.1111/j.1751-9004.2010.00334.x

Brackett, M. A., & Salovey, P. (2006). Measuring emotional intelligence with the Mayer-Salovery-Caruso Emotional Intelligence Test (MSCEIT). *Psicothema*, *18*.

Brackett, M., & Katulak, N. (2007). Emotional Intelligence in the Classroom: Skill-Based Training for Teachers and Students. In J. Ciarrochi, J & Mayer (Ed.), *Applying emotional intelligence: A practitioner's guide* (pp. 1–27). Psychology Press.

Brandt, W. C. (2020). Measuring Student Success Skills: A Review of the Literature on Self-

Directed Learning. 21st Century Success Skills. *National Center for the Improvement of Educational Assessment.*

Byzova Valentina, M., & Perikova Ekaterina, I. (2019). Identifying emotional intelligence and metacognitive awareness among university students. *International Conference on Research in Psychology*, *March 2019*. https://doi.org/10.33422/icrpconf.2019.03.137

Camacho-Morles, J., Slemp, G. R., Pekrun, R., Loderer, K., Hou, H., & Oades, L. G. (2021). Activity Achievement Emotions and Academic Performance: A Meta-analysis. In *Educational Psychology Review, 3*(3). https://doi.org/10.1007/s10648-020-09585-3

Carter, S. (2015). *Emotional Intelligence: A Qualitative Study of the Development of*. Colorado State University.

Chan, D. W. (2002). Emotional Intelligence: Implications for Educational Practice in Schools. *Educational Research Journal*, *17*(2), 183-196.

Council on Higher Education (CHE). (2018). Vital Stats Public Higher Education 2016. In *Council on Higher Education, 93*(9). https://www.che.ac.za/news-and-announcements/vitalstats-2016-public-higher-education

Council on Higher Education (CHE). (2013). A proposal for undergraduate curriculum reform in South Africa: The case for a flexible curriculum structure. *Report of the Task Team on Undergraduate Curriculum Structure*.

Cherniss, C., Goleman, D.; Emmerling, R., Cowan, K., & Adler, M. (1998). Bringing emotional intelligence to the workplace. *A Technical Report of the Consortium for Research on Emotional Intelligence in Organizations*, 1–34. https://doi.org/http://www.eiconsortium.org/reports/technical_report.html

Cherniss, C., Extein, M., Goleman, D., & Weissberg, R. P. (2006). Emotional Intelligence: What Does the Research Really Indicate? *Educational Psychologist*, *41*(4), 239–245. https://doi.org/10.1207/s15326985ep4104_4

Chinowsky, P., & Brown, H. (2008). The development of successful intelligence in construction education. *Proceedings of the 20th Annual Conference of the Association of Researchers in Construction Management, 1-3 September 2004. Heriot Watt University, Edinburgh. Colston, R. D.*, *1*(September), 525-532.

Christians, C. G. (2005). Ethics and politics in qualitative research. In *Handbook of qualitative research* (3rd ed., pp. 139–164). Sage Publications, Inc.

Cobb, C., & Meyer, J. (2000). Educational policy on emotional intelligence: Does it make sense? *Educational Psychology Review*, *12*(2). https://doi.org/10.1023/A

Collie, R.J., Holliman, A.J., & Martin, A. J. (2017). Adaptability, engagement and academic achievement at university. *Educational Psychology*, *37*(5), 632–647. https://doi.org/http://dx.doi.org/10.1080/01443410.2016.1231296

Credé, M., & Niehorster, S. (2012). Adjustment to college as measured by the Student Adaptation to College questionnaire: A quantitative review of its structure and relationships with correlates and consequences. *Educational Psychology Review*, *24*(1), 133–165. https://doi.org/10.1007/s10648-011-9184-5

Creswell, J. W. (2007). *Research Design* (3rd ed.). Sage Publications, Inc.

Creswell J. W., & Creswell J. D. (2019). *Research design : Qualitative, Quantitative and Mixed Methods Approaches.* (5th ed.). SAGE Publications Ltd.

Crosling, G; Heagney, M & Thomas, L. (2009). Improving student retention in higher

education. *Australian Universities Review*, *51*(2), 9–18.

Csikszentmihalyi, M. (2013). *Flow: The psychology of optimal experience.* Random House.

Currie, L; Pisarik, C; Ginter, E; & Glauser, A. (2012). Life-skills as a predictor of academic success: An exploratory study. *Psychological Reports*, *111*(1), 157–164. https://doi.org/10.2466/11.04.17.PR0.111.4.157-164

De Klerk, D., Spark, L., Jones, A., & Maleswena, T. (2017). Paving the road to success: Reflecting critically on year one of an undergraduate student support programme at a large South African university. *Journal of Student Affairs in Africa*, *5*(1), 1–13. https://doi.org/10.14426/jsaa.v5i1.2478

D'Errico, F., Paciello, M., De Carolis, B., Vattanid, A., Palestra, G., & Anzivino, G. (2018). Cognitive emotions in E-learning processes and their potential relationship with students' academic adjustment. *International Journal of Emotional Education*, *10*(1), 89–111.

de Vos, A.S., Strydom, H., Fouché C.B., & Delport, C. S. (2011). *Research at grass roots : For the social sciences and human service professions* (4th ed.). Van Schaik.

Denzin, N. K., & Lincoln, Y. S. (2005). *Handbook of qualitative research.* (3rd ed.). Sage.

Department of Higher Education and Training (DHET). (2019). *2000 To 2017 First Time Entering Undergraduate Cohort Studies for Public (March).*

Deyoung, C. G., Quilty, L. C., Peterson, J. B., & Gray, J. R. (2014). Openness to experience, intellect, and cognitive ability. *Journal of Personality Assessment*, *96*(1), 46–52. https://doi.org/10.1080/00223891.2013.806327

Dowling, M. (2007). From Husserl to van Manen. A review of different phenomenological approaches. *International Journal of Nursing Studies*, *44*(1), 131–142.

https://doi.org/10.1016/j.ijnurstu.2005.11.026

Drigas, A. S., & Papoutsi, C. (2018). A new layered model on emotional intelligence. *Behavioral Sciences*, *8*(5), 1–17. https://doi.org/10.3390/bs8050045

Drigas, A., & Papoutsi, C. (2020). The Need for Emotional Intelligence Training Education in Critical and Stressful Situations: The Case of Covid-19. *International Journal of Recent Contributions Eng. Sci. IT, 8*(3), 20-36.

du Plooy-Cilliers, F., Davis, C., & Bezuidenhout, R. (2014). *Research Matters*. Juta & Company.

Dubois, D., & Brooks, J. (2015). Individual and Environmental Predictors of Adjustment During the First Year of College. *Journal of College Student Development*, *36*(February), 347–360.

Eisenberg, N., Fabes, R., Guthrie, I., & Reiser, M. (2000). Dispositional Emotionality and Regulation: Their Role in Predicting Quality of Social Functioning. *Journal of Personality and Social Psychology*, *78*(1), 136–157. DOI10.1037/0022-3514.78.1.136

Elias, H., Mahyuddin, R., & Noordin, N. (2007). Academic adjustment among second year students in Malaysian universities. *International Journal of Interdisciplinary Social Sciences, 4(3), 237-252.*, *4*(3), 237–252.

Erez, A., & Isen, A. (2003). The influence of positive affect on the components of expectancy motivation. *The Journal of Applied Psychology*, *87*.

Esmael, A., Ebrahim, J., & Misganew, E. (2018). Adjustment Problem among First Year University Students in Ethiopia: Across Sectional Survey. *Journal of Psychiatry*, *21*(5). https://doi.org/10.4172/2378-5756.1000455

Estrada, M., Monferrer, D., Rodríguez, A., & Moliner, M. Á. (2021). Does emotional intelligence influence academic performance? The role of compassion and engagement in education for sustainable development. *Sustainability, 13*(4), 1721.

Etikan, I., Musa, S. ., & Alkassim, R. . (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.11

Eubanks, D. (2021). Assessing for student success. *Intersection: A Journal at the Intersection of Assessment and Learning, 2*(2).

Feldmann, M., Aper, J., & Meredith, S. T. (2011). Co-curricular assessment scale development. *The Journal of General Education*, *60*(1), 16–42.

Fernández-Berrocal, P., & Extremera, N. (2006). Emotional intelligence: A theoretical and empirical review of its first 15 years of history. *Psicothema*, *18*(1), 7–12. https://doi.org/10.1016/j.paid.2005.04.006

Fernández, M. F. P., Araújo, A. M., Vacas, C. T., Almeida, L. S., & González, M. S. R. (2017). Predictores del ajuste de los estudiantes durante la transición a la Universidad en España. *Psicothema*, *29*(1), 67–72. https://doi.org/10.7334/psicothema2016.40

Ferrándiz, C; Ferrando, M; Bermejo, R; Prieto, L. (2005). *Emotional Intelligence: An Empirical Work. 1997*, 1–23.

Frechette, J., Bitzas, V., Aubry, M., Kilpatrick, K., & Lavoie-Tremblay, M. (2020). Capturing Lived Experience: Methodological Considerations for Interpretive Phenomenological Inquiry. *International Journal of Qualitative Methods, 19.* https://doi.org/10.1177/160940692090725

Friedlander, L. J., Reid, G. J., Shupak, N., & Cribbie, R. (2007). Social support, self-esteem, and stress as predictors of adjustment to university among first-year undergraduates. *Journal of College Student Development*, *48*(3), 259–274. https://doi.org/10.1353/csd.2007.0024

Furlong, M.A., Whipple, G., St Jean, J., & Simental, A. S. (2003). Multiple contexts of school engagement: Moving toward a unifying framework for educational research and practice. *The California School Psychologist*, *8*, 99–113.

Gabriel, Y., & Griffiths, D.S. (2002). Emotion, learning and organizing. *The Learning Organization*, *9*(5), 214–221. https://doi.org/10.1108/09696470210442169

Gall, T., Evans, D., & Bellerose, S. (2000). Transition to First-Year University : Patterns of Change in Adjustment Across Life Domains and Time. *Journal of Social and Clinical Psychology*, *19*(4), 544–567. https://doi.org/10.1521/jscp.2000.19.4.544

Gardner, H. (1993). *Frames of mind: The Theory of multiple intelligences*. Basic Books.

Garnefski, N., & Kraaij, V. (2018). Specificity of relations between adolescents' cognitive emotion regulation strategies and symptoms of depression and anxiety. *Cognition and Emotion*, *32*(7), 1401–1408. https://doi.org/10.1080/02699931.2016.1232698

Gerdes, H., & Mallinckrodt, B. (1994). Emotional , Social , and Academic Adjustment of College Students : A Longitudinal Study of Retention. *Journal of Counseling and Development*, *3*(72), 281. https://doi.org/10.1002/j.1556-6676.1994.tb00935.x

Gil-Olarte Márquez, P., Palomera Martín, R., & Brackett, M. (2006). Relating emotional intelligence to social competence and academic achievement in high school students. *Psicothema*, *18 Suppl*, 118–123. https://doi.org/10.4103/2395-2296.152218

Goleman, D., & Cherniss, C. (2001). *The emotionally intelligent workplace: How to select for measure and improve emotional intelligence in individuals, groups, and organizations.* Jossey-Bass.

Goleman, D. (1995). *Emotional Intelligence*. Bantam Books.

Goleman, D. (2001). An EI-Based Theory of Performance. In *The emotionally intelligent workplace.* (pp. 27–44). https://doi.org/10.1017/CBO9781107415324.004

Hagen, L. (2012). *Experiential Emotional Intelligence Education : Understanding its value, and improving its accessibility to young people. Laurah Hagen, Submitted in partial fulfillment of the requirements for the degree of Master of Arts from Prescott College In Experie* (May). Precott College.

Haktanir, A., Watson, J.C., Ermis-Demirtas, H., Karaman, M.A., Freeman, P.D., Kumaran, A., & Streeter, A. (2021). Resilience, academic self-concept, and college adjustment among first-year students. *Journal of College Student Retention: Research, Theory and Practice*, *23*(1), 161–178. https://doi.org/10.1177/1521025118810666

Hamoud, A.K., Hashim, A.S., & Awadh, W.A. (2018). Predicting student performance in higher education institutions using decision tree analysis. *International Journal of Interactive Multimedia and Artificial Intelligence*, *5*(2), 26. https://doi.org/10.9781/ijimai.2018.02.004

Hayat, A.A., Salehi, A., & Kojuri, J. (2018). Medical student's academic performance: The role of academic emotions and motivation. *Journal of Advances in Medical Education & Professionalism.*, *6*(4), 168–175.

Hayat, A. A., Shateri, K., Amini, M., & Shokrpour, N. (2020). Relationships between academic self-efficacy, learning-related emotions, and metacognitive learning strategies with

academic performance in medical students: A structural equation model. *BMC Medical Education*, *20*(1), 1–11. https://doi.org/10.1186/s12909-020-01995-9

Hidajat, H.G., Hanurawan, F., Chusniyah, T., & Rahmawati, H. (2020). Why I'm bored in learning. Exploration of students' academic motivation. *International Journal of Instruction*, *13*(3), 119–136. https://doi.org/10.29333/iji.2020.1339a

Holliman, A.J., Sheriston, L., Martin, A.J., Collie, R. J., & Sayer, D. (2019). Adaptability: does students' adjustment to university predict their mid-course academic achievement and satisfaction? *Journal of Further and Higher Education*, *43*(10), 1444–1455. https://doi.org/10.1080/0309877X.2018.1491957

Horstmanshof, L., & Zimitat, C. (2007). Future time orientation predicts academic engagement among first-year university students. *British Journal of Educational Psychology, 77*(3), 703-718.

Izard, C. E. (2001). Emotional intelligence or adaptive emotions? *Emotion*, *1*(3), 249–257.

Jagers, R. J., Rivas-Drake, D., & Williams, B. (2019). Transformative social and emotional learning (SEL): Toward SEL in service of educational equity and excellence. *Educational Psychologist, 54*(3), 162-184.

Järvinen, M., & Mik-Meyer, N. (Eds.). (2020). *Qualitative analysis: eight approaches for the social sciences.* Sage.

Johnson, J. L., Adkins, D., & Chauvin, S. (2020). A review of the quality indicators of rigor in qualitative research. *American journal of pharmaceutical education, 84*(1).

Kanesan, P., & Fauzan, N. (2019). Models of emotional intelligence: A review. *Journal of Social Sciences and Humanities*, *16*(7), 1–9.

https://doi.org/10.1017/cbo9780511807947.019

Kant, R. (2019). Emotional intelligence: A study on university students. *Journal of Education and Learning (EduLearn), 13*(4), 441-446.

Kantanis, T. (2000). The role of social transition in students' adjustment to the first-year of university. *Journal of Institutional Research*, *9*(1), 100–110.

Karibeeran, S. (2019). Emotional intelligence among adolescents. *Humanities and Social Sciences*, *7*(3), 121. https://doi.org/10.11648/j.hss.20190703.15

Kleinheksel, A.J., Rockich-Winston, N., Tawfik, H., & Wyatt, T.R. (2020). Qualitative research in pharmacy education: Demystifying content analysis. *American Journal of Pharmaceutical Education*, *84*(1), 127–137. https://doi.org/10.5688/ajpe8417113

Koonin, M. (2014). Validity and reliability. In R. du Plooy-Cilliers, F; Davis, C; and Bezuidenhout (Ed.), *Research Matters* (pp. 252–262). Juta & Company.

Kort, B., Reilly, R., & Picard, R. (2001). An affective model of interplay between emotions and learning: Reengineering educational pedagogy-building a learning companion. *In Advanced Learning Technologies, 2001. Proceedings. IEEE International Conference on (Pg.43-46).*, 1–4.

Kotsou, I., Mikolajczak, M., Heeren, A., Grégoire, J., & Leys, C. (2019). Improving emotional intelligence: A systematic review of existing work and future challenges. *Emotion Review, 11*(2), 151-165.

Krishnan, H., & Awang, S. R. (2020). Role Of Emotional Intelligence In Teaching. *Jurnal Kemanusiaan*, *18*(2), 87–92.

Kuh, G. D., Kinzie, J. L., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2006). *What matters*

to student success: A review of the literature (8). Washington, DC: National Postsecondary Education Cooperative.

Le Grange, L. (2011). (Re)thinking (trans)formation in South African (higher) education. *Perspectives in Education*, *29*(2), 1–9.

Levine, L. J., Prohaska, V., Burgess, S. L., Rice, J. A., & Laulhere, T. M. (2001). Remembering past emotions: The role of current appraisals. *Cognition and Emotion*, *15*(4), 393–417. https://doi.org/10.1080/02699930125955

Levine, L. J., & Pizarro, D. A. (2004). Emotion and memory research: A grumpy overview. *Social Cognition*, *22*(5), 530–554. https://doi.org/10.1521/soco.22.5.530.50767

Levitt, H. M., Motulsky, S. L., Wertz, F. J., Morrow, S. L., & Ponterotto, J. G. (2017). Recommendations for designing and reviewing qualitative research in psychology: Promoting methodological integrity. *Qualitative Psychology*, *4*(1), 2–22. https://doi.org/10.1037/qup0000082

Liau, A. K., Liau, A. W. L., & Teoh, G. B. S. (2003). *The Case for Emotional Literacy: The influence of emotional intelligence on problem behaviours in Malaysian secondary school students*. *32*(1). https://doi.org/10.1080/0305724022000073338

Libbey, H. (2004). Measuring student relationships to school: Attachment, bonding, connectedness, and engagement. *Journal of School Health*, *74*, 274–283.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Sage.

Linnenbrink-Garcia, L., Patall, E. A., & Pekrun, R. (2016). Adaptive motivation and emotion in education: Research and principles for instructional design. *Policy Insights from the Behavioral and Brain Sciences*, *3*(2), 228–236.

https://doi.org/10.1177/2372732216644450

Longhurst, R. (2009). Interviews: In-Depth, Semi-Structured. In *International Encyclopedia of Human Geography*. https://doi.org/10.1016/B978-008044910-4.00458-2

Lopes, P. N., Brackett, M .A., Nezlek, J. B., Schutz, A., Sellin I., & Salovey, P. (2004). Emotional Intelligence and Social Interaction. *Personality and Social Psychology Bulletin*, *30*(8), 1018–1034. https://doi.org/10.1177/0146167204264762

Low, G., Lomax, A., Jackson, M., & Nelson, D. (2004). Emotional intelligence: A new student development model. *In National Conference of the American College Personnel Association, Philadelphia, Pennsylvania.*

Lyubomirsky, S. (2001). Why are some people happier than others? The role of cognitive and motivational processes in well-being. *American Psychologist*, *56*(3), 239–249. https://doi.org/10.1037/0003-066X.56.3.239

MacCann, C., Jiang, Y., Brown, L. E., Double, K. S., Bucich, M., & Minbashian, A. (2020). Emotional intelligence predicts academic performance: A meta-analysis. *Psychological Bulletin*, *146*(2), 150–186. https://doi.org/10.1037/bul0000219

Madson, R. C., Perrone, P. B., Goldstein, S. E., & Lee, C. Y. S. (2022). Self-Efficacy, Perceived Stress, and Individual Adjustment among College-Attending Emerging Adults. *Youth, 2*(4), 668-680.

Maggs-Rapport, F. (2000). Combining methodological approaches in research : ethnography and interpretive phenomenology. *Journal of Advanved Nursing*, *31*(1), 219–225. https://doi.org/10.1046/j.1365-2648.2000.01243.x

Mandernach, B. J. (2015). Assessment of Student Engagement in Higher Education : A

Synthesis of Literature and Assessment Tools. *International Journal of Learning, Teaching & Educational Research*, *12*(2), 1–14.

Matthews, G., Zeidner, M., & Roberts, R. (2002). *Emotional Intelligence: Science and Myth*. MIT Press. https://doi.org/10.1176/appi.ps.55.4.458

Matthews, G., Roberts, R. D., & Zeidner, M. (2004). Seven Myths About Emotional Intelligence. *Psychological Inquiry*, *15*(3), 179–196. https://doi.org/10.1207/s15327965pli1503_01

Mayer, J. D., & Salovey, P. (1997). *Emotional development and emotional intelligence: Educational implications*. Basic Books.

Mayer, J. D., Gaschke, Y. N., Braverman, D. L., & Evans, T. W. (1992). Mood-congruent judgment is a general effect. *Journal of Personality and Social Psychology*, *63*(1).

Mayer, J. D, Caruso, D. R., & Salovey, P. (2000). Emotional Intelligence meets standards for an intelligence. *Intelligence*, *27*(4).

Mayer, J. D, Salovey, P, Caruso, D. R., & Cherkasskiy, L. (2012). Emotional Intelligence. In S. B. Sternberg & R. J. Kaufman (Ed.), *Cambridge Handbook of Intelligence*. Cambridge University Press. https://doi.org/10.1097/01.NAJ.0000525856.75439.4a

Mayer, J. D., & Caruso, D. (2012). The Growing Significance of Hot Intelligences. *American Psychologist*, *67*(6), 502–503. https://doi.org/10.1037/a0026699

Mayer, J. D., Salovey, P., Caruso, D., & Cherkasskiy, L. (2011). Emotional Intelligence. In S. B. Sternberg & R. J. Kaufman (Ed.), *The Cambridge handbook of intelligence. Cambridge University Press.* Cambridge University Press.

Mayer, J. D. (2006). A new field guide to emotional intelligence. In J. Ciarrochi, J. Forgas &

J. D. Mayer (Ed.), *Emotional intelligence in everyday life.* (2nd ed.) (pp. 3–26). Psychology Press.

Mayer, J. D., Caruso, D. R., & Salovey, P. (2016). The Ability Model of Emotional Intelligence: Principles and Updates. *Emotion Review*, *8*(4), 290–300. https://doi.org/10.1177/1754073916639667

Mayer, J. D., Roberts, R. D., & Barsade, S. G. (2008). Human Abilities: Emotional Intelligence. *Annual Review of Psychology*, *59*(1), 507–536. https://doi.org/10.1146/annurev.psych.59.103006.093646

Mayer, J. D., Salovey, P., & Caruso, D. (2004). Emotional Intelligence: Theory,Findings, and Implications. *Psychological Inquiry*, *15*(3), 197–215.

Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2001). Emotional intelligence as a standard intelligence. *Emotion*, *1*(3), 232–242. https://doi.org/10.1037/1528-3542.1.3.232

Mayer, J. D., & Salovey, P. (1990). What Is Emotional Intelligence? Contents. In S. P. and S. D.J. (Ed.), *Emotional intelligence: Imagination, cognition and personality* (Vol. 9, Issue 3, pp. 185–211). Basic Books.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2008). Emotional Intelligence. New ability or eclectic traits? *American Psychologist*, *63*(6), 503–517. https://doi.org/10.1037/0003-066X.63.6.503

Mays, N., & Pope, C. (1995). Rigour and qualitative research. *BMJ*, *311*(July).

McCubbin, I. (2003). *An Examination of Criticisms made of Tinto ' s 1975 Student Integration Model of Attrition*. *February*, 1–12.

Mezmir, E. A. (2020). Qualitative data analysis: An overview of data reduction, data display,

and interpretation. *Research on humanities and social sciences,* 10(21), 15-27.

Moeller, R. W., Seehuus, M., & Peisch, V. (2020). Emotional Intelligence, belongingness, and mental health in college students. *Frontiers in Psychology*, *11*(January), 1–10. https://doi.org/10.3389/fpsyg.2020.00093

Mohzan, M. A. M., Hassan, N., & Halil, N. A. (2013). The influence of emotional intelligence on academic achievement. *Procedia - Social and Behavioral Sciences*, *90*, 303–312. https://doi.org/10.1016/j.sbspro.2013.07.095

Morales-Rodríguez, F. M., & Pérez-Mármol, J. M. (2019). The role of anxiety, coping strategies, and emotional intelligence on general perceived self-efficacy in university students. *Frontiers in psychology, 10,* 1689.

Morrison & Silverman. (2012). Retention theories, models, and concepts. In A. Seidman (Ed.), *College Student Retention : Formula for Student Success* (2nd ed.) (pp. 61–81). Rowman & Littlefield.

Mouton, N., Louw, G. P., & Strydom, G. L. (2013). Present-day dillemas and challenges of the South African tertiary system. *International Business & Economics Research Journal (IBER)*, *12*(3), 285. https://doi.org/10.19030/iber.v12i3.7672

Nagata, DK., Kohn-Wood, L., & Suzuki, L. (2012). *Qualitative Strategies for Ethnocultural Research.* American Psychological Association.

Nekljudova, S. (2019). Six aspects of openness to experience. *Journal of Psychology and Clinical Psychiatry*, *10*(2), 78–81. https://doi.org/10.15406/jpcpy.2019.10.00632

Nel, C., Troskie-de Bruin, C., & Bitzer, E. (2009). Students' transition from school to university: Possibilities for a pre-university intervention. *South African Journal of Higher*

Education, *23*(5), 974–991. https://doi.org/10.4314/sajhe.v23i5.48811

Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, *8*(2), 90–97. https://doi.org/10.1007/s40037-019-0509-2

Newmann, F. M., Wehlage, G. G., & Lamborn, S. D. (1992). The significance and sources of student engagement. In Student engagement and achievement in American secondary schools, *Office of Educational Research and Improvement (ED), Washington, DC.* 1, 11-39.

Noble, H. & Smith, J. (2014) Qualitative data analysis: a practical example. *Evidence-Based Nursing, 17,* 2-3.

O'Connor, P. J., Hill, A., Kaya, M., & Martin, B. (2019). The measurement of emotional intelligence: A critical review of the literature and recommendations for researchers and practitioners. *Frontiers in psychology, 10,* 1116.

O'Keeffe, P. (2013). A sense of belonging: Improving student retention. *College Student Journal*, *47*(4), 605–613.

Olmos-Vega, F. M., Stalmeijer, R. E., Varpio, L., & Kahlke, R. (2023). A practical guide to reflexivity in qualitative research: AMEE Guide No. 149. *Medical teacher,* 45(3), 241-251.

Orb, A., Eisenhauer, L., & Wynaden, D. (2001). Ethics in qualitative research. *Journal of Nursing Scholarship*, *33*(1), 93–96. https://doi.org/10.1111/j.1547-5069.2001.00093.x

Padgett, D. (2008). *Qualitative Methods in Social Work Research.* Sage Publications, Inc.

Panayiotou, M., Humphrey, N., & Wigelsworth, M. (2019). An empirical basis for linking

social and emotional learning to academic performance. *Contemporary Educational Psychology*, *56*(January), 193–204. https://doi.org/10.1016/j.cedpsych.2019.01.009

Parker, J. D. A., Saklofske, D. H., Wood, L. M., & Collin, T. (2009). The role of emotional intelligence in education. In *Assessing emotional intelligence: Theory, research, and applications.* (pp. 239–255). Springer. https://doi.org/10.1007/978-0-387-88370-0

Parker, J. D. A, Saklofske, D., & Keefer, K. (2017). Giftedness and academic success in college and university. *Gifted Education International*, *33*(2), 183–194. https://doi.org/10.1177/0261429416668872

Parker, J. D. A., Hogan, M. J., Eastabrook, J. M., Oke, A., & Wood, L. M. (2006). Emotional intelligence and student retention: Predicting the successful transition from high school to university. *Personality and Individual Differences*, *41*(7), 1329–1336. https://doi.org/10.1016/j.paid.2006.04.022

Parker, J. D. A., Duffy, J. M., Wood, L. M., Bond, B. J., & Hogan, M. J. (2005). Academic achievement and emotional intelligence: Predicting the successful transition from high school to university. *Journal of The First-Year Experience*, *17*(1).

Parker, J. D. A., Summerfeldt, L. J., Hogan, M. J., & Majeski, S. A. (2004). Emotional intelligence and academic success: Examining the transition from high school to university. *Personality and Individual Differences*, *36*(1), 163–172. https://doi.org/10.1016/S0191-8869(03)00076-X

Pekrun, R., Lichtenfeld, S., Marsh, H. W., Murayama, K., & Goetz, T. (2017). Achievement emotions and academic performance: Longitudinal models of reciprocal effects. *Child Development*, *88*(5), 1653–1670. https://doi.org/https://doi.org/10.1111/cdev.12704

Pekrun, R., Murayama, K., Marsh, H. W., Goetz, T., & Frenzel, A. C. (2019). Happy fish in

little ponds: Testing a reference group model of achievement and emotion. *Journal of Personality and Social Psychology*, *117*(1), 166–185. https://doi.org/https://doi.org/10.1037/pspp0000230

Pekrun, R. (2014). Emotions and learning. *Educational Practices Series*, *24*(1), 1-31.

Pekrun, R., Frenzel, A. C., Goetz, T., & Perry, R. P. (2007). *The Control-Value Theory of Achievement Emotions: An Integrative Approach to Emotions in Education*. Academic Press.

Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational Psychologist*, *37*(2), 91–105. https://doi.org/10.1207/S15326985EP3702_4

Petersen, I., Louw, J., & Dumont, K. (2014). *Adjustment to university and academic performance among disadvantaged students in South Africa*. *January 2009*. https://doi.org/10.1080/01443410802521066

Petrides, K. V., & Furnham, A. (2000). On the dimensional structure of emotional intelligence. *Personality and Individual Differences*, *29*(2), 313–320. https://doi.org/10.1016/S0191-8869(99)00195-6

Petrides, K. V., Frederickson, N., & Furnham, A. (2004). The role of trait emotional intelligence in academic performance and deviant behavior at school. *Personality and Individual Differences*, *36*(2), 277–293. https://doi.org/10.1016/S0191-8869(03)00084-9

Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality*, *15*(6), 425–448. https://doi.org/10.1002/per.416

Petrides, K. V., & Furnham, A. (2003). Trait emotional intelligence: Behavioural Validation in Two Studies of Emotion Recognition and Reactivity to Mood Induction. *European Journal of Personality*, *17*(1), 39–57. https://doi.org/10.1002/per.466

Picton, C., Kahu, E. R., & Nelson, K. (2018). 'Hardworking, determined and happy': First-year students' understanding and experience of success. *Higher Education Research and Development*, *37*(6), 1260–1273. https://doi.org/10.1080/07294360.2018.1478803

Qualter, P., Gardner, K. J., Pope, D. J., Hutchinson, J. M., & Whiteley, H. (2012). Ability emotional intelligence, trait emotional intelligence, and academic success in British secondary schools: A 5 year longitudinal study. *Learning and Individual Differences*, *22*(1).

Ramsay, S., Jones, E., & Barker, M. (2007). Relationship between adjustment and support types: Young and mature-aged local and international first year university students. *Higher education, 54*, 247-265.

Reilly, P. (2021). Promoting positive emotions among university EFL learners. *Language Learning in Higher Education*, *11*(1), 153–173. https://doi.org/10.1515/cercles-2021-2013

Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (Eds.). (2013). *Qualitative research practice: A guide for social science students and researchers.* Sage.

Rolls, E. T. (1990). A theory of emotion, and its application to understanding the neural basis of emotion. *Cognition & Emotion, 4*(3), 161-190.

Rossman, G.B., & Rallis, S. F. (2003). *Learning in the Field: An Introduction to Qualitative Research* (2nd ed.). Sage.

Salami, S. O. (2010). Emotional intelligence, self-efficacy, psychological well-being and students attitudes : Implications for quality education. *European Journal of Educational Studies*, *2*(3).

Salami, S. O. (2011). Psychosocial Predictors of Adjustment Among First Year College of Education Students. *US-China Education Review*, *8*(2), 1548–6613.

Salami, S. O., & Ogundokun, M. O. (2009). Emotional intelligence and academic self-efficacy as predictors of academic performance among senior secondary school students in Oyo state, Nigeria. *Society for Educational Research and Development. July.*

Salovey, P., Bedell, B., Detweiler, J. B., & Mayer, J. D. (1999). Coping Intelligently: Emotional Intelligence and the coping process. In C. Snyder (Ed.), *Coping: The psychology of what works* (pp. 141–164). Oxford University Press.

Salovey, P., Woolery, A., & Mayer, J. D. (2003). Emotional Intelligence: Conceptualization and Measurement. In G. J. O. Fletcher & M. S. Clark (Eds.), *Blackwell Handbook of Social Psychology: Interpersonal Processes* (pp. 279–303). https://doi.org/10.1111/b.9780631212294.2002.x

Salovey, P., Mayer, J. D., Goldman, S. L., Turvey, C., & Palfai, T. P. (1995). Emotional attention, clarity, and repair: Exploring emotional intelligence using the Trait Meta-Mood Scale. In J. Pennebaker (Ed.), *Emotion, Disclosure, and Health* (pp. 125–154). American Psychological Association. https://doi.org/https://psycnet.apa.org/doi/10.1037/10182-006

Salovey, P., & Grewal, D. (2005). The Science of Emotional Intelligence. *Current Directions in Psychological Science*, *14*(6), 281–285.

Salovey, P., & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition and*

Personality., *9*(3), 185–211. https://doi.org/10.1016/S0962-1849(05)80058-7

Salovey, P., Mayer, J. D., Caruso, D., & Lopes, P. N. (2003). Measuring emotional intelligence as a set of abilities with the Mayer-Salovey-Caruso Emotional Intelligence Test. In *Positive psychological assessment: A handbook of models and measures* (pp. 251–265). https://doi.org/10.1037/10612-016

Saunders, M., Lewis, P., & Thornhill, A. (2019). Chapter 4: Understanding research philosophy and approaches to theory development. In *Research Methods for Business Students* (January).

Schreiner, L. A. (2010). The "thriving quotient": A new vision for student success. *About Campus*, *15*(2), 2–10. https://doi.org/10.1002/abc.20016

Schutte, N. S., Malouff, J. M., Bobik, C., Coston, T. D., Greeson, C., Jedlicka, C., ... & Wendorf, G. (2001). Emotional intelligence and interpersonal relations. *The Journal of social psychology, 141*(4), 523-536.

Scott, C. L., & Ivala, E. N. (2019). *Transformation of Higher Education Institutions in Post-Apartheid South Africa.* Routledge. https://doi.org/10.4324/9781351014236

Scott, I., Yeld, N., & Hendry, J. (Eds.). (2007). *Higher education monitor: A case for improving teaching and learning in South African higher education* (Vol. 6). Pretoria: Council on Higher Education.

Scott, I. (2018). Designing the South African Higher Education System for Student Success. *Journal of Student Affairs in Africa*, *6*(1), 1–17.

Seli, P., Wammes, J. D., Risko, E. F., & Smilek, D. (2016). On the relation between motivation and retention in educational contexts: The role of intentional and unintentional mind

wandering. *Psychonomic Bulletin and Review*, *23*(4), 1280–1287. https://doi.org/10.3758/s13423-015-0979-0

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, *22*(2), 63–75. https://doi.org/10.3233/EFI-2004-22201

Shiota, M. N., Sauter, D. A., & Desmet, P. M. (2021). What are 'positive' affect and emotion? *Current Opinion in Behavioral Sciences*, *39*, 142–146. https://doi.org/10.1016/j.cobeha.2021.03.007

Silvia, P. J., & Gendolla, G. H. E. (2001). On Introspection and Self-Perception: Does Self-Focused Attention Enable Accurate Self-Knowledge? *Review of General Psychology*, *5*(3), 241–269. https://doi.org/10.1037/1089-2680.5.3.241

Skinner, E. A & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology, (85)*4, 571-581.

Smart, J., Feldman, K., & Ethington, C. (2006). *Holland's Theory and Patterns of College Student Success* (Issue July).

Sternberg, R. (1985). *Beyond I.Q*. Cambridge University Press.

Stys, Y., & Brown, S. L. (2013). A Review of the Emotional Intelligence Literature and Implications for Corrections. *Journal of Chemical Information and Modeling*, *53*(9), 1689–1699. https://doi.org/10.1017/CBO9781107415324.004

Thorndike, E. L. (1920). Intelligence and its uses. *The Harpers Monthly*, *XI*, 227–235.

Tinajero, C., Martínez-López, Z., Rodríguez, M. S., Guisande, M. A., & Páramo, M. F. (2015). Gender and socioeconomic status differences in university students' perception of social

support. *European Journal of Psychology of Education*, *30*(2), 227–244. https://doi.org/10.1007/s10212-014-0234-5

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd (ed.). University of Chicago Press.

Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *Journal of Higher Education.*, *68*(6), 599–623.

Tinto, V., & Pusser, B. (2006). Moving from theory to action: Building a model of institutional action for student success. *National Postsecondary Education Cooperative*, *1*, 51.

Tom, R., Nel, K., Dlamini, D., & Zogli, L. (2020). Adjustment experiences of first-year students in South Africa. *Academy of Educational Leadership Journal*, *24*(2), 1–10.

Tuffour, I. (2017). A Critical Overview of Interpretative Phenomenological Analysis: A Contemporary Qualitative Research Approach. *Journal of Healthcare Communications*, *2*(04), 1–5. https://doi.org/10.4172/2472-1654.100093

Tyng, C. M., Amin, H. U., Saad, M. N. M., & Malik, A. S. (2017). The influences of emotion on learning and memory. *Frontiers in Psychology*, *8*(August). https://doi.org/10.3389/fpsyg.2017.01454

van Zyl, A; Gravett, S; de Bruin, G. (2012). To what extent do pre-entry attributes predict first year student academic performance in the South African context ? *South African Journal of Higher Education*, *26*(5), 1095–1111.

Wagner, C; Kawulich, B; and Garner, M. (2012). *Doing Social Research*. McGraw-Hill Education.

Walsh-portillo, J. G. (2011). *The role of emotional intelligence in college students' success*.

Florida International University.

Wangeri, T., Kimani, E., & Mutweleli, S. M. (2012). Transitional challenges facing university first year students in Kenyan public universities: A case of Kenyatta University. *Interdisciplinary Review of Economics and Management*, *2*(1), 41–50.

Webb, C. A., Schwab, Z. J., Weber, M., DelDonno, S., Kipman, M., Weiner, M. R., & Killgore, W. D. S. (2013). Convergent and divergent validity of integrative versus mixed model measures of emotional intelligence. *Intelligence*, *41*(3), 149–156. https://doi.org/10.1016/j.intell.2013.01.004

Wechsler, D. (1944). *The Measurement of Adult Intelligence* (3rd ed.). Williams & Wilkins Co.

Weinberger, L. A. (2002). Emotional Intelligence: Its Connection to HRD Theory and Practice. *Human Resource Development Review*, *1*(2), 215–243. https://doi.org/10.1177/15384302001002005

Weissberg, R. P. (2019). Promoting the social and emotional learning of millions of school children. *Perspectives on Psychological Science, 14*(1), 65-69.

Wellman, J., & Ewell, P. (2007). *Enhancing student success in education: Summary report of the NPEC initiative and National Symposium on Postsecondary Student* (May).

Wijekoon, C. N., Amaratunge, H., de Silva, Y., Senanayake, S., Jayawardane, P., & Senarath, U. (2017). Emotional intelligence and academic performance of medical undergraduates: a cross-sectional study in a selected university in Sri Lanka. *BMC medical education, 17*(1), 1-11.

Wong, C. S., Wong, P. M., & Chau, S. L. (2001). Emotional intelligence, students' attitude

towards life and the attainment of education goals: An exploratory study in Hong Kong. *New Horizons in Education- the Journal of Education, Hong Kong Teachers Association*, *44*, 1–11.

Zeidner M., Matthews, G., & Roberts, R. (2009). *What we should know about emotional intelligence: How it affects learning, work, relationships and our mental health. 120*. MIT Press.

Zeidner, M., Matthews, G., & Roberts, R. D. (2004). Emotional intelligence in the workspace: A critical review. *Applied Psychology: An International Review*, *53*(3), 371–399. https://doi.org/10.1111/j.1464-0597.2004.00176.x

Zeidner, M., Matthews, G., Roberts, R. D., & MacCann, C. (2003). Development of emotional intelligence: Towards a multi-level investment model. *Human Development*, *46*(2–3), 69–96. https://doi.org/10.1159/000068580

Zins, J. E., & Elias, M. J. (2007). Social and emotional learning: Promoting the development of all students. *Journal of Educational and Psychological consultation, 17*(2-3), 233-255.

APPENDIX A

<u>Interview questions</u>

Introductory question(s)

- Please tell me about your tertiary education journey.
  Listen/probe for:
    - Highlights, achievements
    - Challenges, how did you deal with these?

Scenario questions

- Can you think of a time when you faced a major difficulty or obstacle during your studies? How did you handle it?
- Can you think of an instance where you had to make a major decision during your studies? How did you attempt to deal with this?
- Can you think of a time other students were a challenge in your studies? How did you deal with this?
- Tell me about a time when you were asked to do something you had never done before in lecture. How did you react? What did you learn?
- Describe a situation in which you embraced a new system, process, technology, or idea at university that was a major departure from the old way of doing things.
- Recall a time when you were assigned a task outside of your study interest or description. How did you handle the situation? What was the outcome?
- Tell me about the biggest change that you have had to deal with. How did you adapt to that change?
- Tell me about a time when you had to adjust to a lecturers or peer group working style in order to complete a project or achieve your objectives.

<u>General question on emotions</u>

- How easily do you communicate your feelings? For example, do you find it easy or difficult to express your emotions, such as anger and frustration? Can you put these feelings into words?
- How do you deal with your emotions?
- How comfortable are you with dealing with others' emotions?

The Four Branch Model of Emotional Intelligence (based on Mayer & Salovey, 1997)

Theme 1: Perception, appraisal, and expression of emotion

- Code 1: Identify emotion in the self

- Code 2: Identify emotion in others

- Code 3: Accurately express emotion

- Code 4: Discriminate between emotions

Theme 2: Emotional facilitation of thinking

- Code 5: Use emotions to prioritise thinking

- Code 6: Generate emotions to facilitate judgement and memory

- Code 7: Use mood changes to alter perspective

- Code 8: Use emotional states to facilitate problem-solving

Theme 3: Understanding and analysing emotions

- Code 9: Label emotions and recognise relations between them

- Code 10: Interpret the meanings of emotions and their relationships

- Code 11: Interpret complex and mixed emotions

- Code 12: Understand transitions between emotions

Theme 4: Managing emotions

- Code 13: Open to emotions, both pleasant and unpleasant

- Code 14: Engage or detach from emotions

- Code 15: Monitor and reflect on emotions

- Code 16: Manage emotions in self

- Code 17: Manage emotions in others

APPENDIX C

PERC-17059

UNISA | university of south africa

Department of Psychology

Ethical Clearance for M/D students: Research on human participants

The Ethics Committee of the Department of Psychology at Unisa has evaluated this research proposal for a Higher Degree in Psychology in light of appropriate ethical requirements, with special reference to the requirements of the Code of Conduct for Psychologists of the HPCSA and the Unisa Policy on Research Ethics.

Student Name: Kim Kromoser   **Student no.:** 32094302

Supervisor: Dr. H.C. Erasmus   **Affiliation:** Department of Psychology, Unisa

Co-Supervisor: Prof. P. Van der Merwe   **Affiliation:** Department of Psychology, Unisa

Title of Project:

An exploration of how emotional intelligence abilities are utilised by students in tertiary education

The proposal was evaluated for adherence to appropriate ethical standards as required by the Psychology Department of Unisa.

The application was approved by the departmental Ethics Committee on the understanding that any formal procedures that may be required to get permission from the institution(s) from which the participants are to be drawn, and all conditions and procedures regarding access to information for research purposes that may be required by the institution(s), will be met.

Signed: *Date:* 23 October 2017

Prof P Kruger

[For   the   Ethics   Committee Department of Psychology, Unisa]

PARTICIPANT INFORMATION SHEET

UNISA ethics clearance reference number: 17059

March 2018

Dear Prospective Participant

My name is Kim Kromoser and I am doing research for my Master's Degree in Psychology at the University of South Africa. I would like permission from you to participate in this study by taking part in an interview with me. The details of which are outlined below.

RESEARCH TITLE

An exploration of how emotional intelligence abilities are utilised by successful students in tertiary education.

WHAT IS THE PURPOSE OF THE STUDY?

The purpose of this qualitative study is to explore how tertiary students utilise emotional intelligence (EI) abilities during their studies. The aim is therefore to identify the EI abilities utilised and to explore how graduate students have used these abilities in order to successfully complete their studies and graduate in regulation time. The findings of this research could be useful to create awareness and understanding of the emotional intelligence abilities that play a role in academic achievement and how it manifests in practice. In addition it could aid in attempts to improve tertiary retention and throughput.

WHY AM I BEING INVITED TO PARTICIPATE?

As a student that has recently completed your degree in the regulated 3 years of study, I would like to explore your experiences in tertiary education and how you have utilised certain skills and abilities in your academic journey.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves an interview with me that will be audio recorded and later transcribed for analysis. The interview should take no longer than an hour (60 minutes) of your time. Questions specifically relating to your tertiary education, academics, experiences, achievements and challenges may be addressed.

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Please be aware that your participation is voluntary and that there is no penalty or loss of benefit for non-participation. Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist that your name will not be recorder anywhere and that no one, apart from the researcher and identified members of the research team, will know about your involvement in this research OR your name will not be recorded anywhere and no one will be able to connect you to the answers you give. Your answers will be given a code number or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods.

Your answers may be reviewed by people responsible for making sure that research is done properly, including the transcriber, external coder, and members of the Research Ethics Review

Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records. This anonymous data may be used for other purposes, such as a research report, journal articles and/or conference proceedings.

HAS THE STUDY RECEIVED ETHICS APPROVAL?

This study has received written approval from the Research Ethics Review Committee of the Department of Psychology at Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

Should you have concerns about the way in which the research has been conducted, you may contact my supervisor, Helena Erasmus on erasmhc@unisa.ac.za. You may contact the Department of Psychology research ethics chairperson Prof. Piet Kruger on krugep@unisa.ac.za.

Some of the information discussed may be personal and relate to specific challenges or difficulties you have experienced. If at any time you feel like you need to speak to someone please do so or you can contact the Lifeline crisis centre on 031 312 2323.

Thank you for taking time to read this information sheet and for participating in this study.

Regards

Kim Kromoser

Kkromoser@gmail.com

CONSENT TO PARTICIPATE IN THIS STUDY

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the interview.

I will receive a signed copy of the informed consent agreement.

Participant Name & Surname……………………………………… (please print)

Participant Signature………………………………………..Date…………………

Kim Kromoser

Researcher's signature……………………………………..Date…………………