The role of emotional intelligence in the classroom management practice of high school mathematics teachers

Refilwe Molatodi

Submitted in partial fulfilment of the requirements for the Degree of Magister Educationes in the Faculty of Education, University of Pretoria

Supervisor

Dr. M. Mihai

Co-Supervisor

Dr. E. Eberlein

August 2018

DECLARATION

I declare that the dissertation, which I hereby submit for the degree of Magister Educationis at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

ACKNOWLEDGEMENTS

My deep thanks go to:

ETHICS LETTER

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA
Faculty of Education

RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE	CLEARANCE NUMBER: SM 17/02/02
DEGREE AND PROJECT	M.Ed
	The role of emotional intelligence in the classroom management practice of high school mathematics teachers
INVESTIGATOR	Ms Refilwe Molatodi
DEPARTMENT	Science, Mathematics and Technology Education
APPROVAL TO COMMENCE STUDY	12 June /2017
DATE OF CLEARANCE CERTIFICATE	14 August 2018

CHAIRPERSON OF ETHICS COMMITTEE: Prof Liesel Ebersöhn

CC

Ms Bronwynne Swarts
Dr Maryke Mihai
Dr Eric Enerlein

This Ethics Clearance Certificate should be read in conjunction with the Integrated Declaration Form (D08) which specifies details regarding:
- Compliance with approved research protocol,
- No significant changes,
- Informed consent/assent,
- Adverse experience or undue risk,
- Registered title, and
- Data storage requirements.

The author, whose name appears on the title page of this dissertation, has obtained, for the research described in this work, the applicable research ethics approval. The author declares that she has observed the ethical standards required in terms of the University of Pretoria's Code of *ethics for researchers and the Policy guidelines responsible for research.*
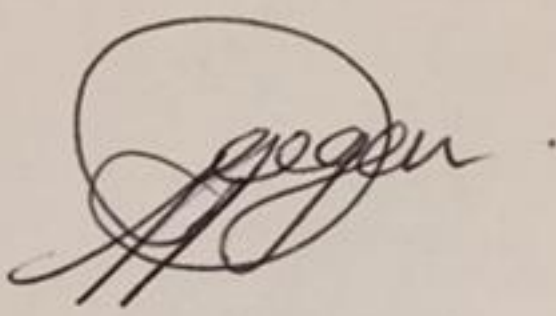
LANGUAGE EDITOR'S DISCLAIMER

Heather Pelger

(HED SA) (QTS -UK)

I do hereby confirm that I have proof-read the dissertation entitled:

The role of emotional intelligence in the classroom management practice of high school mathematics teachers

Presented by:
Refilwe Molatodi
29647917

17 August 2018
00 44 7816 269256

ABSTRACT

The purpose of the study was to investigate the role of emotional intelligence in the classroom teaching practice of high performing high school mathematics teachers. The study was qualitative in design as it aimed at obtaining opinions and behaviours of the teachers in school, given the fact that they are subjected to the classroom situation and at the same time are expected to treat learners with compassion. Data was collected qualitatively by means of semi-structured interviews. I sampled five mathematics teachers from five high schools in Pretoria, Gauteng. Content analysis, which involves analysing qualitative data through summaries and data interpretation, was employed. The findings from the data analysed, revealed that emotional intelligence in the classroom plays a major role in dealing with, or addressing, the day-to-day challenges faced by teachers in the classroom. The findings also revealed that teachers must have certain skills in order to ensure that learners cope with classroom pressure and challenges. Creating or passing on values such as trust, self-respect and confidence to learners, is not an easy task however. There are those learners that can't cope with mathematics and giving them all the necessary support and instilling these kinds of values, was discovered to play a pivotal role to teachers in the classroom practice. Having positive relationships between teacher and learner, may enhance a learner's performance, thereby benefiting not only the learner but also the school and the community.

Keywords: emotional intelligence, classroom management practice, mathematics teachers, qualitative case study

List of Figures

List of Tables

Table of Contents

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

Numerous research studies cited that Emotional Intelligence (EI) can be applied in many disciplines, such as work, education and psychology to mention a few. Foremost, Mayer and Salovey, (1997) elicited EI is the ability of a person to reason, act out and control emotions in a manner which is not harmful to other people and themselves. In addition,

> EI "is the ability to understand own emotions and those of people around"
> Miyagamwala, (2015: 233).

Teachers require the ability to make use of emotions effectively and positively to create classrooms that will contribute positively to learning and teaching. This research aimed to understand the role of emotional intelligence in the classroom management practice of high school mathematics teachers. In this regard, it is highly recognised that teachers have a fundamental role in the success of their classrooms and therefore this affects the overall school (Naqvi, Iqbal & Akhtar, 2016). Low school performance and demotivation occurs possibly due to the lack of understanding and recognising the varying emotions and feelings of others.

> "Emotional intelligence is a self-motivated quality that requires proactive, self-reflective practices and empathizes behaviours based on experiential knowledge" (Abraham & Scaria, 2017: 03).

Teachers well-found with emotional intelligence are strategically able to manage change and manage conflicts (Abraham & Scaria, 2017).

1.2 BACKGROUND OF THE STUDY

The undertaking of this study assumed that EI contributes positively to both the development and achievement of the teacher and learner (Sree & Srinivasan, 2014). It is no secret that teaching is the most emotionally attached stressing profession. Teachers have the same ambition of seeing their students achieve high grades. This however, cannot be possible if a teacher is unable to handle discipline and behaviour problems that arise in classrooms. If there is an application of negative emotions within the classroom, students will be inhibited from learning and performing accordingly (Naqvi, et al. 2016). Curry (2009) expresses agreement that a positive classroom environment is highly linked to students' achievements, as they tend to address the students' needs.

In fact, Jennings and Greenberg (2009) explain that teachers will reap what they sow in the students, by setting examples of behaviours through creating a welcoming, supportive and encouraging environment for students. Be that as it may, studies on EI did not reveal the role of EI specifically on mathematics teachers. Therefore, the assumption of the study is that EI plays a positive role in mathematics classrooms of high performing schools. As the researcher, my aim was to find out the role of EI in mathematics. Mathematics is a subject taken with high regard, which means apart from the classroom management, the administrative duties and the planning, a teacher should still provide positive results at the end of the year. This means more stress. It is therefore imperative to understand how the teachers manage these types of stressors, while at the same time managing other people (parents, colleagues, and students).

Jennings and Greenberg (2009) reinforce that if a teacher fails to regulate their own emotions, the classroom climate and achievement will deteriorate. Socially competent teachers are naturally aware of their own emotions. They need to use these emotions to motivate their students, while at the same time being aware of their own strengths and weaknesses (Jennings & Greenberg, 2009; Naqvi, et al. 2016). Equally important, the teacher's EI will assist in driving the behaviours, attention and personality of students, but on the condition that the teacher is self-aware, supportive and motivated (Brackett & Katalak, 2006).

Naqvi, et al. (2016) state that for any leader to connect successfully with a group of followers to inspire them in sharing the same vision and to encourage them towards achieving their goals, there has to be a vast amount of emotions in play. Teachers will be able to utilize their emotions to build and maintain solid relationships with their students. Teachers will find it hard to connect with students if they cannot decipher student moods and behaviours. An emotionally competent teacher will come up with ways to stabilize disruptive behaviour in the classroom; since disruptive behaviour means no studying will take place. These teachers understood that EI is an integral part of education, as motivated, engaged and enthusiastic students had a higher chance of performing well (Aritzeta, Balluerka, Gorostiaga, Alonso-Arbiol, Haranburu & Gartzia, 2016).

To shed light on this, Mayer, Salovey and Caruso (2004) have tried to find the link between EI and schools. While the teachers had the desire to understand the talents and capabilities of learners, emotional intelligence created a platform for effectiveness within the classroom. Naqvi, et al. (2016:214) added that;

"Teaching requires the ability to handle stressful circumstances of dealing with work stress as well as maintenance of dignity within the classroom".

Schools are made up of different elements that affect school achievement (Mayer et al, 2004). These range from: classroom culture, motivation among the learners and access to resources. The study however focused on EI and the role it plays in the classroom management practice of mathematics teachers. A successful teacher will be able to establish goals and encourage every school member to achieve them (Schmoker & Marzano, 1999). Waters, Marzano and McNulty, (2005) conducted research relating to effective teachers. This focuses on creating great expectations, hiring significant teachers, and creating open communication platforms with parents and the community (Jackson, 2008). EI and academic success have been found to be associated (Downey, Mountstephen, Lloyd, Hansen, & Stough, 2008).

Lauermann (2013) defines a teacher as someone who has a personal responsibility to motivate and influence others; through instructional practices, psychological well-being, and ultimately influencing their students' learning and performance. This is about influencing the activities of an individual or group to carry out given goals. EI is important to a teacher as it focuses on a person's personal qualities, enthusiasm, fairness, warmth, confidence, dedication, creativity, openness, humility and integrity. EI assists in understanding why emotional and intellectual change is necessary. Teachers need to recognise that people are emotional beings, and they should take that into account through their communication when delivering the curriculum (Spicker, 2012). In addition, EI is very important in teaching as it teaches teachers the ability to recognise their own feelings and that of their learners (Goleman, 1995).

Furthermore, Naqvi, et al. (2016:210) add that; "teachers have the key responsibility of ensuring that the information provided to students is properly understood by them. To follow the curriculum, maintain classroom discipline and manage interaction with students".

EI is an intelligence that is thoroughly studied in social sciences, education, psychology, and the business sector (Curry, 2009). A classroom teacher must be flexible and can adjust promptly to a variety of classroom dynamics. Teachers should be proficient in integrating self-identified and social emotional perceptions as parts for school and classroom success. A good teacher is the one that assists learners to learn, they should be role models and embrace the principles of social justice (Marphartia, Legault, Edge & Archer, 2010). Teachers have the capacity to improve students' progress by being committed, enthusiastic and by setting up the classroom to be conducive to learning (Leithwood, 2008).

Golemans emotional intelligence competencies serve as models that make it easier to apply the basic tenets of EI in our lives, how individuals can function better and succeed. According to Goleman, 1998) EI is able to predict job performance and can assist in building and maintaining

positive relationships. EI is divided into four competencies. The competency of emotional self-awareness is the ability to recognise one's feelings and emotions, to distinguish amongst them (what one is feeling and why, to identify what triggered the feelings) (Bar-On, 2006). A teacher's main ability is to communicate so people can learn. Teachers who are self-aware can easily notice what their students think about them. Self-awareness is the conscious understanding and knowledge of your own strengths and weakness (Morin, 2011). Self-awareness according to Goleman (1995) implies that an individual is able to understand their own emotions and how these emotions have an effect on their relationships with others. Furthermore, individuals can identify their strengths and weakness and have clear values that influence their decisions.

The competency of self-management implies that an individual is able to manage their own thoughts, actions and emotions, while also being able to recognise and manage disruptive emotions and thoughts. Social-awareness gives an individual the ability to read other people's emotions and thoughts. A socially aware individual is able to read and understand other people's verbal and non-verbal expressions, they take other people's feelings into consideration. Lastly, relationship-management refers to being able to manage one's own emotions and social relationships. The ability to influence those around you making good decisions and to sense and direct their emotional reactions positively (Goleman, 1995).

1.3 PROBLEM STATEMENT

This research study examined the role of emotional intelligence in the classroom management practice of mathematics teachers in the Gauteng province, South Africa. As much as skills and ability are important, I believe that teachers also require personality that will allow them to deliver curricula and also assist students to further develop their personal basic traits. In the results on a study done by Salim, Nasir, Arip and Mustafa, (2012) there was a positive association between emotional intelligence, job gratification and added progression among learners, that is when the social competency of emotional intelligence becomes important (Curry, 2009). It is the responsibility of teachers to recognise the interests and opinions of learners (Curry, 2009). Teachers might have the right qualifications to be in their positions, but they might not have the right skills or EI to maintain their classrooms. These are the teachers that fail to maintain classroom discipline and they cannot deal with conflict or understand his or her learners' feelings and emotions.

Furthermore, teachers with inadequate levels of EI will not be able to create interesting lessons that are engaging and promote academic development. In addition, teachers are then not able to guide students learning processes; such as helping students understand mathematical concepts.

The teachers will not be flexible enough to adapt and to solve problems. Teachers who are not able to recognise their personal emotional difficulties will not be able to regulate their emotional interactions with students; teachers will lack interpersonal skills needed to build relationships with their students. Due to the above mentioned, classrooms could in turn become unsafe where students will be affected negatively. Without positive teacher-student relationships, classrooms will not be stable or safe, there will be little academic and emotional growth for students, and lack of motivation.

1.4 PURPOSE OF THE STUDY

Education is at the forefront of every nation, country or town. Education is the building block of society and is highly esteemed.

As Nelson Mandela once said;

"*Education is the most powerful weapon we can use to change the world*"

Strauss (2013:4).

Therefore, nations and countries need to find a way that schools can provide what is expected of them; that is effective teaching and learning. Schools are duty-bound to ensure that suitable strategies are in place to assist the teachers to achieve the school goals. This then compels teachers to create classroom situations that are beneficial to both the learner and teacher. A school consists of different constituents that help it to function as effectively as possible. Teachers are the pillars of their own classroom; they should encourage quality learning and acknowledge factors needed for learner satisfaction. Therefore, this study investigates the role of EI in the classroom management of high school mathematics teachers. Through mathematics students are faced with problems that require them to be critical thinkers, it teaches students to be effective communicators and to apply their learned skills into everyday life.

1.5 RATIONALE

The researcher became interested in this study because, based on the literature in the study, there has not been much research done that focuses on emotional intelligence and its influence in the classroom management of mathematics teachers who are teaching in Pretoria schools. As a teacher, I was curious to understand the role of emotional intelligence in the classroom management of mathematics teachers. The interest in the study was based on the notion that in the 21st century there has been extensive globalization which has pushed the importance for students to acquire knowledge and skills that would help them be an essential part of the

economy. Mathematics assists students to prepare themselves for their future success where they can apply concepts and skills to real life situations.

Education is all about changing lives drastically, doing so passionately and willingly; with the hope that one day, you will reap the results of your hard work. A good teacher is the one that will be able to understand his or her own emotional intelligence capacity and to understand what others might be feeling (Dolev & Leshem, 2016). Without an emotionally intelligent teacher in the classroom, there is no direction and no motivation. There is competition, learners lack drive, and they lose focus. Classroom goals are not reached, and no one knows what is expected from them, and there is no order or control (Dolev & Leshem, 2016). In a mathematics classroom, teachers teach students to be mathematical problem solvers, to communicate effectively, apply their mathematics skills in their everyday lives and to become knowledgeable consumers. This study wants to investigate if and how mathematics teachers use EI to manage their classrooms.

EI contains interrelated concepts, self-awareness, self-management, social-awareness, and relationship management. The first quadrant is; that of self-awareness; this is the ability to understand your own emotions and how they can affect one's performance. It gives an individual the sense of clarity and decisiveness (Goleman, Boyatzis, Davidson, Druskat & Kohlrieser, 2017). Self-management, is the ability to control distressing feelings and to constrain urges to react negatively. Social awareness, focuses on the individual's level of empathy, the ability to take into consideration the feelings of other people. The last quadrant is that of relationship management, this is the ability to build and maintain positive relationships with other individuals.

At the end of this study the researcher wanted to find out the role of emotional intelligence in the classroom management practice of high school mathematics teachers. According to Curry, (2009) a classroom teacher should maintain classroom order and avoid chaos by knowing their strengths and weaknesses. Teachers should have the emotional ability to carry out their day to day duties. Furthermore, teachers should be able to control and utilize their emotions in and outside of the classroom, since teachers who are emotionally competent will not make any impulsive decisions even in undesirable situations (Tok, Tok, & Dolapcioglu, 2013).

1.6 RESEARCH QUESTIONS

1.6.1 Main research question

What role does emotional intelligence play in the classroom management practices of mathematics teachers?

1.6.2 Sub-questions

1. What role does self-awareness play in the classroom management practices of mathematics teachers?
2. What role does self-management play in the classroom management practices of mathematics teachers?
3. What role does social awareness play in the classroom management practices of mathematics teachers?
4. What role does relationship management play in the classroom management practices of mathematics teachers?

1.7 LIMITATIONS

The study was based on one research method, which is the qualitative approach. The purpose for selecting a qualitative method, is that I hoped to understand the role of emotional intelligence in the classroom management practice of high school mathematics teachers. This was done by collecting data in the participant's natural settings. The sample was small and therefore the findings cannot be generalizable to other populations.

The study was limited by having interviews about EI that were conducted for the first time. This was done without knowing whether the mathematics teachers' EI had improved since the commencement of their jobs as limited number of schools were used.

1.8 SIGNIFICANCE OF THE STUDY

Responses to the research questions provided understandings into potential areas of development for the classroom management practice for mathematics teachers. I hope that this study may have an effect on school performance, which might assist in supporting the school development in management practice. EI has an immense impact on school and classroom performance in relation to teacher and learner relationship within the classroom environment.

1.9 BENEFITS

This study examined the role of emotional intelligence in the classroom management practice of high school mathematics teachers. This study has the potential to benefit educational institutions, individuals and groups by showing them how to: (Konrad & Gabrijelcic, 2014).

- be able to communicate better, reduce their stress levels and resolve conflict amicably.
- identify and be able to name the emotions that arise from certain events in educational settings.

- be able to build long lasting relationships by recognising the impact of emotions that the students that might affect their cognitive functioning.
- empathise with others to have compassion and understanding and to respond genuinely to other people's concerns and feelings.
- make positive choices and direct behaviours (be useful in classroom management strategies).
- increase the rate of production and progress of teaching and learning.
- increase personal effectiveness and to handle own emotions successfully and to further understand how certain emotions can hinder their own emotional states when providing and designing teaching and learning materials.
- create opportunities to improve thinking skills and creativity (involve students in engaging activities while using varying strategies).

1.10 CONCEPT CLARIFICATION

The following are clarified as they are applied in the study:

- **Classroom management** is a "set of techniques and skills that allow teachers to control students effectively to create positive learning environments for all students" (Sternberg & Williams, 2010:392).
- **Emotional Intelligence** is the capacity to recognise your own feelings and that of others; it is the tool used for motivation, regulating emotions internally and with other people (Mayer & Salovey, 1997).
- **Mathematics** per Miranda (2011:2) is the study of quantity, structure, space and change.
- **Self-awareness** refers "to the capacity of becoming the object of one's own attention. Not only are you attentive but you are able to reflect on the experience of perceiving and processing stimuli" (Morin, 2011:808).
- **Teachers** are professionals who communicate knowledge that will benefit learners to shape, recognize and to attain skills that will be used to tackle challenges in their lives (Senge, 2000: 26).

1.11 CHAPTER SUMMARY

EI competent teachers have a significant positive impact which is conducive to a positive learning and teaching environment, where everyone is free to socialise physically, through sport and extra-curricular activities, and emotionally, creating healthy and sustainable relationships.

According to Reynolds (2011) the EI competencies of teachers, or the lack thereof, is an important factor that can contribute to the success or failure of the school. EI is a set of capabilities that lets teachers do extremely well in working associations and also in the management of his or her classroom (Sutton & Wheatly, 2003). Miranda (2011) explained that there are significant numbers of teachers that fail to support and motivate their learners. She adds the importance of EI in such a situation. EI includes motivation, having empathy, being able to understand that all learners are individuals and therefore display different sets of emotions. It is the responsibility of the teacher to create classrooms that are conducive to learning and teaching by recognising the learner's needs, strengths and weaknesses.

EI is not only about the teachers; it affects their relationship with learners, colleagues, parents and the community at large. It is about the ability to sustain these relationships while also considering their emotions. The teacher ought to be highly positive, motivated and understanding. He or she has a duty to respect and listen to the learner's feelings and opinions to create a classroom that allows the teaching and learning process to develop learners socio- emotionally (Sutton & Wheatly, 2003). This is about recognising their needs and feelings even before they can share them. With the lack of such a teacher there will be less productivity among the learners. Goleman (2005a:36) refers to EI as "character," and continues to explain it as "academic intelligence that offers virtually no preparation for the turmoil or opportunity brought about by life's ups and downs". Teachers are confronted with the overwhelming duty of being considerate and motivating each person as an individual. This can be achieved by teachers who have knowledge of EI and are capable of leading their classes through motivation and respect.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The following chapter describes EI. A teacher's EI level will influence how they motivate and encourage their learners to perform, while enhancing their personal social skills in understanding and accessing their intrapersonal emotions. An emotionally intelligent teacher will have an open policy where she or he can openly discuss emotions in the classroom (Hwang, 2006). Furthermore, teachers should not become barriers for learners to achieve by not being able to acknowledge that learners are different; they have their own views. Teachers should be able to listen to learners as this will help in developing self-awareness (Goleman, 1995); by affecting teaching and learning, the school's atmosphere and the policies that govern the school. It can either create development for teachers or become a barrier to the school's development towards achievement of school goals. Teachers should have skills such as: enthusiasm, fairness, warmth, confidence, dedication, creativity, openness, humility and integrity (Ramana, 2013).

2.2 EMOTIONS AND INTELLIGENCE DEFINED

For one to truly grasp the concept of emotional intelligence, it is important to understand these concepts individually. Emotion is a conscious mental reaction that is experienced as a feeling aroused by a certain event in response to behaviour or physiological reaction (Abraham & Scaria, 2017). Emotions help us to recognise our responses, whether cognitive or behavioural, and direct actions (Abraham & Scaria, 2017).

The capacity of an individual to act accordingly and respond appropriately to events, requires a broad set of abilities, also defined as intelligence. Emotional intelligence is interdependent on both cognition and emotion, because emotional processes assist thinking and decision making (Marlow, 2015). Teachers are constantly faced with the duty of making decisions in their classrooms. However, these are not random decisions, and these are decisions that have a huge impact in the classroom and on students' behaviour and achievement (Marlow, 2015).

2.3 EMOTIONAL INTELLIGENCE (EI)

The term "emotional intelligence" was coined from "social intelligence" by Thorndike in 1920. He defined social intelligence as "the ability of an individual to understand other people. In 1983, Gardner added the "inter and intra personal intelligences" in his theory of multiple intelligences. EI has been researched over the years by psychologists and others alike. The emergence of

emotional intelligence as we know it today has evolved over time. Below is a brief discussion on the development of EI according to Wahyuaddin (2016) and Van Blerk (2013).

Table 1: Development of EI

Date	View on intelligence
1883	Galton identified intelligence as a set of psychophysical abilities and focused on weight discrimination, pitch sensitivity and physical strength.
1900-1969	Research on emotions and intelligence are separated; research on intelligence focuses on producing intelligence tests, while the focus point of researches on emotions is the evolution of emotional reactions and their cultural allocation. In 1912, Stern argued intelligence as the measurement of a learning ability.
1970-1989	Focused on the relationship between emotions and acquisition in researches; Gardner establishes the theory of multiple intelligences.
1990-1993	Mayer and Salovey introduce the notion of emotional intelligence and its characteristics by using Gardner's multiple intelligences to develop the four competencies of emotional intelligence as: (a) identifying emotions, (b) using emotions, (c) understanding emotions and (d) regulating emotions (Fatt, 2002). They defined EI as a form of social intelligence that monitors one's own and other people's emotions, where they can understand what type of emotion they are feeling and how to guide the thinking and actions.
1997	The notion of emotional intelligence becomes popular due to Goleman's (1995) book, "The Emotional Intelligence", which defined emotional intelligence as "the capacity for recognising our own

		feelings and other people's feelings, using these feelings for motivation and learning on how to manage the emotions in our interpersonal relationships. Goleman's concept of EI was based on five competencies: (a) self-awareness, (b) self-regulation, (c) internal motivation, (d) empathy and (e) social skills. Goleman argued that EI was not only a cognitive intelligence. EI behaviours would also attribute to an individual having EI skills.
	1998	Elaboration of the notion, creating and refining measurements, the expansion of the areas of adaptation.

Adapted from: Wahyuaddin (2016) van Blerk (2013).

Through my data analysis, the research showed that there is a strong link between EI and teaching, and we cannot ignore that emotions play a very big part in the classroom of teachers, particularly when it comes to motivating and being role models to learners. This can only take place if teachers have the emotional component of self-regulation whereby they are able to manage disruptive emotions by thinking clearly and continue being attentive during contact times (Team FME, 2014). These teachers can easily understand their learners and provide the necessary support required by the learner. EI and teaching are equally related to emotions, since teachers are humans and therefore bring emotions daily into their work places, and they also have to deal with the emotions of their learners. Self-awareness is vital to a teacher because they need to recognise their own emotions, why they are having such emotions and the effect of such emotions on them and their learners. Emotions direct many psychological subsystems as well as physiological reactions, cognitions, and conscious awareness (Mayer & Salovey, 1990). They influence a person's changing relationships. Teachers that are conscious of their individual emotions and manage them, by simply monitoring themselves and ensuring confidence and high opinions of others, can be role models. In addition, teachers that recognise other people's emotions and hopes can be a basis of inspiration (Barling, Slater & Kelloway, 2000).

Trabun (2002:10) defined EI as the;

"internal events that co-ordinate many psychological subsystems including physiological responses, cognitions, and conscious awareness".

Vierimaa (2013:14) adds that "EI is about problem-solving skills where successful teachers require both the intellectual competencies to meet cognitive challenges and the emotional capabilities to inspire and empathise with others".

Vierimaa (2013) explains that EI is being able to reason with emotions and to motivate thinking. This creates a circle where the teacher's emotions could influence the learners. Teachers can focus on their skill to appropriately distinguish emotions; produce emotions to support thinking, to understand emotions and to thoughtfully control emotions for emotional development (Mayer, Salovey, & Caruso, 2004). EI is the capacity of the individual to act purposefully as described by Bar-On (2006) and to carry out abstract thoughts, the ability to learn and to adapt to the environment (Mayer, Salovey, & Caruso, 2004).

EI is described as a person's ability to access intrapersonal understandings, interpersonal skills, become familiarised to challenging circumstances, to deal with stress, as well as an extent of complete mood (Bardach, 2008). The ability to recognise the meanings of people's emotions and relationships, to reason and have problem-solving skills; EI means being able to perceive emotions, assimilate emotions which are related to feelings, understand the information of those emotions and manage them (Mayer & Salovey, 1997). Similarly, Joseph, Jin, Newman, and O'Boyle (2015) add that EI enables and individual to carry out accurate reasoning about emotions.

Mayer and Salovey's 1997 model of EI creates a link between EI and empathy in the workplace. Rendering Salovey and Mayer's 1990 definition of EI, they view it as the ability to reason about emotions and their enhancement to thinking. It relates to perceiving emotions and teaches an individual how to access and generate their own emotions to assist in thought. It views EI as a set of mental abilities that are present in changeable situations in human behaviour and these factors play a major role in the classroom management (CM) of teachers. Awareness and promotion of EI is often viewed as an investment in human capital because we spend so much time with other individuals (Mayer & Salovey, 1997). The following table 2, is important in EI as it uses a medium where an individual can express themselves, it involves a reflective perspective on the ability of self-expression (Salovey, Brackett & Mayer, 2007). The model is organised in high order abilities that individuals develop and master when they mature (Mayer & Salovey, 1997). If a teacher has a low level or lacks EI, they will often fail in creating successful relationships and maintaining them; so the EI four-branch model comes in handy as a mediation tool.

The model represents the extent to which the ability is added within an individual's personality and major psychological subsystems. Each level is comprised of separate emotional abilities.

Table 2: The EI Four-branch model

Perception and expression of emotion
This level is the most basic and involves the identification and expression of emotions in one's physical states, feelings, and thought in addition to recognizing emotional expression in other people.
Assimilating emotion in thought
The ability allows people to weigh emotions against one another and allows emotion to direct and prioritize attention. At this level, emotions also aid in memorization by tying specific emotions with specific events.
Understanding and analysing emotion
This level addresses how people can label emotions; recognize why they occur, and how to reason with the complexity of emotions and simultaneous feelings. In addition, there is an ability to understand relationships associated with shifts of emotion.
Reflective regulation of emotion
This is the highest level of emotional intelligence, it deals with the ability to stay open to feelings and reflectively observe and regulate emotions that promote emotional and intellectual growth.

Mayer and Salovey, (1990).

Based on the foregoing review of the concept of EI, the following definition of the concept is proposed for use in understanding EI in this particular study: EI is an emotional construct that assists in the identification, processing and regulation of emotions (positive and negative). EI, works by facilitating emotional behaviours of individuals and assists them to create positive and beneficial interpersonal relationships with others. For teachers, EI promotes individual success; teachers with high levels of EI are assumed to have control over their students' behaviours and have clear expectations in place to help students achieve. These teachers are able to support, relate and create beneficial relationships with their students. By doing this, students will relate better to their teacher; by feeling more motivated and strive for high academic achievement.

2.4 TEACHERS AND EI

Research conducted based on emotional intelligence has confirmed that teachers' emotional intelligence competencies have a great impact on their effectiveness (Hassan, Som, Hamid, & Azmaniza, 2015).

The ability to regulate your own and other people's emotion is defined as having the skill of emotional intelligence (Brackett, Rivers & Salovey, 2011). Studies have attributed many kinds of success to people having a high level of emotional intelligence. In this study, the aim was to understand the role of EI in the classroom management practices of high school mathematics teachers. Teachers deal with different students, who experience different emotions, who have diverse problems socially, emotionally and even family problems. It is up to the teacher to balance their own emotions together with the students; this will start by using the relevant emotional skills to take control of the classroom for learning to take place (Hussun, 2016). In many instances, emotions can create disruptive classrooms (student's outburst, arguments, failure to follow rules and simply students who cannot control their emotions). It is therefore important that teachers recognise that each student is different and that they might have different views and opinions about certain issues. To control such occurrences, respect should be the basis of any classroom (Foster, 2011).

Additionally, emotions impact an individual's life by assisting with which choices and decisions they should take, they help a person manage their relationship with others. A perceptive individual can read other people's body language, they decode their non-verbal cues and make sense of them (Furnham & Petrova, 2010). The same with teachers, they read students' facial expressions to understand them. To correctly identify the non-verbal cues of students, teachers will motivate them to communicate openly, as the emotional state of both the students and teacher will often direct the outcome of students' progress (Watts, 2011).

Being a teacher means that you are constantly using your emotions to manage, discipline, motivate, assure, keep promises and adapt to different situations daily. This is about the skill to adapt and be flexible in any situation; by keeping check of learner's emotions and behaviours to balance their emotional and social competencies. In this way, learners are lead and governed positively (Goleman, 2015). We are not all born with all the levels of EI; it is vital that teachers know his or her strengths and weaknesses and how to regulate their feelings by considering EI.

Chhabra (2010) states that the importance of including the use of a teacher's emotional intelligence in the classroom, means that the teacher is self-aware and in touch with his/ her feelings and how these feelings can influence their behaviours; especially in the classroom. This

is being able to understand how students process their own feelings and behaviours, through this the teacher can then be able to contain the attitudes and behavioural responses of their own students (Chhabra, 2010). A leader who is self-aware knows his or her strengths and weaknesses, has a good self-concept, and is in tune with his or her own feelings. Self-management provides an individual with emotional self-control, facilitates honesty; which an effective teacher should possess to have a classroom practice that strives to achieve higher, encourages optimism, and provides the drive towards accomplishment.

"*The socially aware leader* senses o*thers' emotions and reflects that understanding"* (Russell, 2008:83).

Teachers should be trusted by their students, because students that have a trusting relationship with their teacher are more prone to open communication and openly discussing their emotions and managing disruptive behaviours. To elaborate further, teachers should acknowledge the diversity of students (Russell, 2008).

Self-aware teachers are in a better position,

"to reflect on their own emotions before making any decisions that might affect their job effectiveness" (Chhabra, 2010:3).

Self-regulation is the ability to face disruptive emotions consciously by making the right choices (Orme, 2001). Teaching is not an easy job at all, many emotions take place in a short space of time and one needs to have the right skills to control such emotions effectively. If a teacher fails to regulate their emotions this could affect the classroom atmosphere negatively. Not being able to regulate disruptive emotions will cause emotional exhaustion and to respond to such, teachers should create relationships that can be nurtured (Chhabra, 2010).

Unarguably, the most important aspect of a teacher is to motivate his or her students to achieve better. Being passionate about your job as a teacher means putting yourself in the position of the students. For example, imagine you are learning a totally new concept for the first time, it would be better to understand the new concept with someone that motivates you, supports you and puts in more effort by encouraging you without being judgemental (Jennings & Greenberg, 2009). This type of teacher will have enthusiastic students in the classroom, who enjoy their lessons and can achieve the high standards set by the teacher (Chhabra, 2010). In a diverse classroom, a teacher should learn to be empathetic, authoritative, proactive (Jennings and Greenberg, 2009), by creating caring relationships to motivate students to improve their performance. In such a classroom, there is openness and flexibility. A teacher can develop empathetic skills by

encouraging communication where students are free to share their own views and ideas without the fear of judgement (Sutte, 2016).

With open communication, there is understanding in the management of students that creates an environment that is conducive to learning in the classroom. Regular feedback, taking notice of verbal and non-verbal communication between the teacher and students is very important (Chhabra, 2010) as students will see this as a form of appreciation and validation.

2.5 TEACHERS USING EI IN THE CLASSROOM

The roles of a teacher are very complex and they add up every day when teachers enter the classroom. Teachers should be able to understand their students' diversified needs in the classroom. Just as in any workplace or environment with a group of people, there should be simple, clear and well-established rules (Brophy & Putnam, 1978). Rules are not there to suppress people, but they are there to keep peace and order. According to Tok, Tok, & Dolapcioglu (2013) EI works better in a student-centred classroom, as it fosters an academic development of students when they do what they enjoy the most. A well-established classroom means that there is order, respect, motivation and peace. As explained above, emotional intelligence is the internal drive that regulates and controls emotions. An emotionally intelligent teacher creates a classroom environment that is filled with respect, responsibility, honesty, trust, motivation. It is important to also keep in mind that the teacher's emotional state will decide on which values are present in the classroom. One of the domains EI stresses, is that of creating bonds, this is necessary for teachers because through bonds they can understand other people- in this case their students- by providing feedback, through open communication strategies (verbal and non-verbal) (Tok et al. 2013).

In a classroom where there is respect, both the students and teacher would have created rules that regulate part of their behaviour. This respect should go both ways, and the teacher should respect and treat each student as an individual; mainly because empathy plays a big part within the EI construct (Chhabra, 2010). Teachers should also manage their emotions by taking responsibility for their behaviours. Students not only learn what they hear, but also what they see. As a teacher, you are a role model and your behaviour is the first thing that your students look at. Honesty is another integral part of being a good teacher, you can own up to your mistakes, you can be honest when you are faced with a question for which you do not have an answer. (Chhabra, 2010). The above-mentioned skills of an emotionally intelligent teacher are important for teachers to help improve students' learning. Instead of punishing them, they are concerned with what emotions may have caused the student's disruptive behaviour and are not quick in

punishing the student (Tok et al. 2013). In emotional intelligence theory, without the skill of self-management, a teacher will not have a productive classroom; they have will no respect from their students and they also do not have any respect for their students (Chhabra, 2010).

2.6 WHAT IS CLASSROOM MANAGEMENT (CM)?

A pleasant classroom is every teacher's desire, and effective teachers know that to achieve this, there should be clear rules and expectations set to manage students' behaviour (Jackson, Simoncini, & Davidson, 2013). This could be in terms of space and classroom climate. All this will ultimately lead to the classroom that will have high achieving students or failing students. However not every teacher will have such a classroom, and no effective teaching can take place in a poorly managed classroom (Jones & Jones, 2012). It does not mean that the teacher is not qualified enough, but that maybe there are some factors missing. Confidence and knowledge of curricula by the teacher proves most beneficial in CM (Jackson et al., 2013). CM contributes highly in producing high achieving students through teachers' EI skills in the classroom that will affect academic performance positively (Pas, Cash, O'Brennan, Debnam, & Bradshaw, 2015). CM refers to the setting of clear expectations that will pave the way for academic success.

In addition, these expectations teach students appropriate behaviour. Classroom management aims to establish a positive classroom where an effective teacher will create positive, encouraging relationships with the students. Evertson and Weinstein (2006) refer to classroom management as the activities teachers employ to make a classroom climate that promotes both academic and social-emotional learning of students in a safe environment. This is where rules are discussed by both the teacher and students. Teachers usually do not rule, as they understand that communication is vital and helps in creating rapport. Students perform better in an environment that caters for them in all forms; emotionally, physically and socially (Korpershoek, Harms, de Boer, van Kuijk & Doolaard, 2014).

A setting that has clear expectations set out for students that affect and create opportunities for academic instruction and achievement is defined as classroom management (Friedman, 2006). Clear rules and expectations for students can limit disruptive behaviours, as the management is proactive rather than reactive. Pas, Cash, O'Brennan, Debnam and Bradshaw (2015) add that for a classroom to be positively managed the proactive teacher should create a disciplined classroom; they need to constantly interact and appreciate students. This will minimise conflicts, because a classroom that has an open communication policy has less conflicts. The teacher can listen to each student's concerns, appreciates their efforts and uses different methods of rewards in the classroom (Pas et al., 2015) instead of punitive measures.

Table 3: Skills for teachers

Essential Skills	Description
1. Establishing expectations	If a classroom is to function effectively, there must be rules that are in place. These rules enforce positive behaviours from all the students.
2. Giving instructions	For students to achieve they need to know what is expected from them when and how.
3. Waiting and scanning	Before a teacher can react to anything, whether it is disruptive or good behaviour, they need to access what is happening and regulate their emotion to fit the behaviour.
4. Cueing with parallel acknowledgment	Not all students will behave well, and a good teacher will need to use tactics that will encourage other students to be motivated by a well performing student. This could be a teacher praising another student in front of others.
5. Encouraging body language	Interaction with students is very important, it makes them feel that they are valued, and they are bringing something positive to the classroom. A teacher needs to sustain this by using their non-verbal communication skills such as; nodding, moving closer to students and smiling during lessons. This also opens room for a safe environment.
6. Descriptive encouraging	If students act positively, a teacher can praise them in relation to their behaviour. This will model the correct behaviour for all students.
7. Selective attending	Taking time and not acting when you notice bad behaviour.
8. Redirecting to the learning	Prompt on task behaviour.
9. Giving a choice	Students need to know that a certain behaviour will be accompanied by a consequence.
10. Following through	Consistency is central to an effective classroom. What you do today you should do tomorrow. How

| | you deal with the behaviour of one student, should be the same for all students. |

Adapted from: Jackson, Simoncini and Davidson, 2013.

Students react more to what they see rather than what they hear, that is more reason to model good behaviours for students, by managing and regulating their emotions; especially when there is conflict or some misbehaving students that are disruptive (Walter & Marcel, 2013, Jennings & Greenberg, 2009). Teachers should bear in mind that classroom management is not about the total control of students (McCaslin & Good, 1996). Students ought to be independent and actively participate in classroom activities. Classrooms should encourage productivity and enthusiasm among students (Jennings & Greenberg, 2009)

Being a teacher is an emotionally stressful profession, mainly contributed to by the fact that you are an influence on young people that are still figuring out who they are, learning how to express themselves through verbal and non-verbal communication and through their complex emotions (Goodwin, 2016). Adding to this, is that as a teacher, you are also entitled to your own overwhelming emotions as well as your students' complex ever changing emotions.

Taking it in your stride to overcome this, needs a very important competency such as emotional intelligence. Among other factors mentioned above, (Poole & Evertson, 2013) add that teachers also deal with cultural diversity. For a teacher to conquer such a classroom, they need to have and create open policies of communication, regulation of their verbal and non-verbal communications, as students can quickly react. Engagement of students should be a priority for a teacher with high achievement standards (Marzano & Marzano 2003, Goodwin, 2016). Teachers need to be knowledgeable to promote academics that are in line with the school's curricula while inciting interests among the students (Goodwin, 2016). With poor classroom management, teachers will feel stressed, demotivated and less satisfied with their job (Friedman, 2006).

A study by Akar, Erden, Tor, and Sahin, (2010) reported that in classroom management the following are very important: (a) the physical setting, (b) curricula planning, (c) motivation, (d) rules and (e) routines. This will help the teacher aim for the type of students they desire to have.

Classroom management evolved from a few theories. I will discuss a few briefly. The mentioned theories below, are considered relevant to my study as they communicate about classroom management, emotions, teachers, and how they deliver curriculum and teachers using their own emotional abilities to help students behave in a positive manner through modelled behaviours.

BEHAVIOURISM – THE SKINNER MODEL 1954:

Generally identified as the traditional model of classroom management, it was first introduced by Skinner, based on the idea that learning is a purpose of transformation in obvious behaviour (Hussun, 2016). To achieve these changes; there should be changes in the environment. He stated that changes in a person's behaviour were usually triggered by responses to the person's environment. The theory was about reinforcement, to strengthen a desired response; this may perhaps be about grades or even rewards. Positively reinforced behaviour will occur yet again. A learner should receive constant feedback (Hussun, 2016). The Skinner model however makes no reference to mental events or emotional process. Emotional intelligence states that teachers should be able to communicate with their students and encourage them. The behaviourism model asserts that through positive feedback and praise, positive behaviour is likely to occur. Through this model a teacher will adopt an approach that is more choice based for students. The teacher has high expectations for the students and portrays a caring attitude towards the students.

CHOICE THEORY – WILLIAM GLASSER 1998:

In 1998, Glasser, alleged that humans need only to behave to gratify the basic human needs (survival, love and belonging, power, freedom and fun). Glasser gave importance to belonging, as all students in a classroom ought to be in a sustaining place so they can all reach their full potential. The choice theory impacted a lot on how teachers delivered curricula, emphasised that teachers ought to perceive themselves as managers of their classrooms, whereas with the emotional intelligence, teachers should accommodate students and let them share their views and opinions freely. Application of the choice theory in classrooms, provides teachers with the ability to encourage students and to build positive relationships while emphasising the ability of students to produce quality wok and being able to evaluate themselves in terms of goal achievement.

Managers aim towards working effectively and therefore have a higher rate of creating effective students, teachers satisfy the student's needs (Frye, Bennet & Caldwell, 2006). Teachers who apply the choice theory in their classrooms would be motivated by the idea of achieving their own needs; which in this case would be to see their student succeed. By doing this, more learning takes place rather than constant disruptive behaviours, through the creation of friendly-learning classrooms, so that students feel safe, skilled and enjoy their classroom environment. In this theory students are accustomed to rewards rather than

punishments, teachers strive for quality teaching and encourage students until they are competent (Hussun, 2016).

Emotional intelligence asserts that an emotionally intelligent individual will be able to recognise their own emotions and those of others, so with the choice method, teachers can observe students' behaviour and then work in meeting their needs, especially if the students demonstrates disruptive or troublesome behaviour. Furthermore, for teachers to create learner-friendly classrooms, they would have to be able to communicate and have relationships with their students so that when disruptive behaviours arise, they can explain to students how their behaviour is not acceptable and hear from the students if they have an alternative "positive" instead. The basis of the choice theory is that everyone, including students have a need to fulfil; whether it be food, love, freedom, power, or just belonging. It is the teacher's responsibility to take note of this and address it meaningfully. Teachers and students will be able to support, listen, respect, encourage and trust each other.

POSITIVE DISCIPLINE MODEL - FREDRICK JONES 2000:

Fredrick's theory is based on the notion that teachers help students learn to develop self-control. Appropriate behaviour is modelled and controlled by the teacher. The teacher will use appropriate body language, incentives and efficiently assisting pupils, teachers help students control themselves (Dunbar, 2004). The model works on the following assumptions:

- Children should be controlled to behave appropriately
- Control of learners through non-verbal movements
- The involvement of the administration and parents to gain control over students (Jones, 2000).

Jones (2000) asserts that punishing students will not solve discipline problems, rather teachers incorporate cooperation among students. To minimise disruptions in the classroom, a teacher should consider the following; a neat and tidy classroom, no overcrowding, there is enough space between learners, tables for the teacher to work, the teacher can easily see the students, teaching and learning materials are readily available, students all face the front of the classroom and can see the board and lastly, the teacher should be consistent in correcting negative behaviour or rewarding students (Jones & Jones, 2015).

The table below displays CM strategies that assist teachers in attaining positive classroom climates where teaching and learning takes place and where the teacher interacts and is emotionally supportive to his or her students. Classroom management intervention not only assist

the teacher to manage the class but also to create an environment for students that is conducive for learning and therefore it is imperative that students and teachers have shared expectations. Through the interventions below, teachers are able to deal with problems by using empathy and provide assertive behaviour in the classroom. Through teacher-student relationship interventions, teachers are able to build their interpersonal relationships by focusing on the students' emotional and academic stance.

Teacher behaviour-focused intervention, like the positive discipline model, asserts that a teacher's classroom should be a place where positive interactions are cultivated and punitive measures are minimized, as the latter could promote a decline in achievement and interactions. When teachers focus on behaviours of students, they tend to work on improving disruptive behaviour. Through this they address disruptive behaviour as soon as it happens, they provide positive options of behaviour for the student, they encourage participation and positive attitudes towards school work by praising and giving feedback (Evertson & Weinstein, 2006). Such action can increase teacher-student relationships and improve teacher's classroom management. The benefit of such a model in a classroom is that it helps in improving the students' behaviour where students can make choices and take responsibility of their behaviour.

Table 4: Classroom management interventions

Teacher behaviour-focused intervention
This helps in keeping order, sustaining rules and the use of disciplinary actions. This changes the teacher's behaviour to use preventative and reactive interventions.
Teacher-student-relationship focused interventions
This works to improve the interactions between the teacher and students, to create caring and supportive relationships.
Students' behaviour focused interventions
The interventions aim at improving the students' behaviour, such as self-control. It includes the use of preventative and reactive measures of discipline.
Students' social emotional development focused interventions
This focuses on enhancing the student's feelings, empathy and developing their social skills.

Adapted from Korpershoek, Harms, de Boer, van Kuijk and Doolaard (2014).

2.7 EMOTIONAL INTELLIGENCE AND CLASSROOM MANAGEMENT

EI serves as a positive contributor to positive student-teacher relationships, a teacher that can recognise that each student is an individual and they have specific emotional needs (Jennings & Greenberg, 2009). In the early 1990's Mayer and Salovey coined EI as the ability to understand emotions; why one experiences certain emotions and how to effectively regulate these emotions. EI is the ability to identify with emotions personally and identify with other people's emotions, their evolvement, cause and how they are different to every day emotions (Joseph & Newman, 2010). The study aims to understand the role of EI and classroom management in mathematic classrooms of teachers.

Emotionally intelligent teachers are known to be highly effective, creative, empathetic, caring and supportive, they convey a lot of enthusiasm and confidence in their job. Such teachers can create safe, positive and physical learning environments in their classrooms (Galler, 2015). Teachers utilise their emotional skills such as empathy and motivation to develop interpersonal relationships with their students. In this way students will feel safe and free making way for effective teaching and learning to take place (Tok et al., 2013). Over time teachers will use their motivational skills to access the feelings of their students to create bonds and sustain them (Brackett & Katalak, 2006). In addition to the above mentioned, Jennings and Greenberg (2009) assert that emotionally intelligent teachers have sufficient self-awareness to recognise their weakness and strengths in controlling and managing their emotions.

EI contributes positively in the classroom because teachers are more proactive, instead of always resorting to punitive and coercive measures (Jennings & Greenberg, 2009). Teachers are able to support students by emotionally expressing themselves verbally to promote enthusiasm and satisfaction in learning (Singh & Jha, 2012, Jennings & Greenberg, 2009). Emotionally intelligent teachers have moved from punitive measures to more authoritative and proactive methods of teaching. These methods assist in the formation of rules, encourage cooperation, develop supportive relationships, and promote academic engagement and student dedication towards school work (Jennings & Greenberg, 2009). In such a classroom, a teacher knows how to help students tap into their social, emotional and academic success while being responsible for their actions (Peters, 2012, Jones & Jones, 2012, Evertson & Weinstein, 2006). Teachers with EI create democratic learning environments that are empathetic to students' needs and background, they help students find solutions to problems, they engage students in learning; physically, socially and emotionally, to avoid negative behavioural responses (Wahyuaddin, 2016).

Students that are motivated and creative, can learn and make mistakes without the fear of prejudice. It might not be easy for a teacher to master such skills, but with emotional intelligence and being aware of who they are, knowing their strengths and weakness they can easily juggle their classrooms. However, classroom management links to school rules. It is very important to take note that the teacher is not the only person that can manage their classroom, even though they might be emotionally intelligent. Peters (2012) stresses that a positive classroom is maintained through trust and cultivating respect for all students. A good teacher knows that other stakeholders are very important in a child's education; ranging from the principal to parents and other people in the community. Parents need to know how their children are performing in school, and they can only have access to such information if the teacher has open communication.

Emotionally intelligent teachers encourage their students positively, so they can do their best, socially, emotionally and academically. They recognise that their students come from diverse backgrounds and therefore they are not the same. Teachers can instil confidence in their students, they use rewards as consequences. They do not enforce punitive measures, instead they aim to understand why the students behave in a certain manner, and this is because emotionally intelligent teachers understand that behaviours occur due to a certain arousal of an emotion. These classrooms focus on engaging activities that include all students (Peters, 2012). Stability in a classroom means that negative behaviour is prevented over remediation (Brophy & Putnam, 1978).

2.8 EI AND CM AS PREDICTORS FOR STUDENTS' SUCCESS

EI as a model for influencing students' success has not been studied thoroughly. Wahyuaddin (2016) asserts that teachers should be masters of their pedagogy, social and personal traits. They ought to be able to implement innovative teaching curricula at school. Equally the teacher's and student's success are affected by internal and external factors. Having students for the first time in a new class can be overwhelming. Not knowing which behaviours you are going to encounter needs more than strength. It needs teachers that understand their own weaknesses and strengths, can recognise and control their emotions, model good behaviours, are caring, supportive and motivating to students (Ramana, 2013). This can create a manageable classroom environment with less disruptions. As stated above, with the emotional skill of empathy, a teacher can understand their students' differences and to what extent they can achieve. Instead of imposing themselves on the students they try and learn from the students, therefore it makes it easier to teach when there is understanding on both sides (Brackett & Katalak, 2006).

A well-managed classroom is about positivity, support and the fostering of a safe environment. As emotionally intelligent teachers prefer quality, they are usually prepared, have a vast knowledge and understanding of curricula and enjoy teaching, as they have mastered the skill of social interactions (Jennings & Greenberg, 2009). Through this behaviour, they can influence their students through non-verbal gestures that show excitement when teaching. Students' connections are very important, for example; the teacher is introducing a new theme in the classroom today, and some of the students do not understand this new theme. However, because of the relationship that they have with the teacher, they can ask questions. This is easily manageable where a teacher has created emotional relations with the students (Rust, 2014). In an opposite classroom where there is no communication, students will not be able to ask questions as they will be afraid of the teacher; it is this that will cause failure for both the students and the teacher. Success can be achieved through teachers that motivate, allow students to connect with them by discussing previous work without the fear of being ridiculed. Teachers' affirmations for their students encourages success by making students aware that if they put in more effort and keep trying until they get it right, eventually they will reap positive rewards (Frye, Bennet & Caldwell, 2006).

In addition, according to Stanulis and Ames, (2009), since teachers are mentors, motivators and have influence on their students among other roles, they should support their students in learning. Students should be provided with rigorous tasks and be motivated to keep trying until they get it right. Effective teachers should have planned varying activities that will keep students engaged throughout the day. What is important for teachers, is to master all their subject curricula. They can do this by constantly planning and amending their lessons. Staying in a classroom with learners for a whole day means there will be disruptions, and it is the teacher's responsibility to always look out for the silent behaviours, such as the non-verbal communication occurring in the classroom. Successful teachers create successful students through motivation and balance between direct instructions and strong demanding tasks. Most importantly they give students an opportunity to voice their ideas (Stanulis & Ames, 2009).

2.9 THEORETICAL FRAMEWORK

A theoretical framework is a philosophical basis on which the research is based and links the theoretical and practical aspects. It has implications on decisions made in the research process. Theory is defined as a loose collection of related assumptions or concepts that position thinking or research (Bogdan & Biklen, 1982). Therefore, a theoretical framework in a qualitative study holds meaning in educational research; for researchers to use it systematically as a detailed and testable establishment of recommendations about the empirical world (Bogdan & Biklen, 1982).

Theory can be seen as a way in which one may view the world that they live in; it is the basic assumptions people hold. These are ideas about what causes the world to operate (Bogdan & Biklen, 1982).

According to Goleman's EI model (1995), emotional-social intelligence is a cross-section of organized emotional and societal capabilities and enablers that regulate how efficiently we can express ourselves, understand others and communicate with them, moreover being able to deal with day-to-day difficulties (Goleman, Boyatzis & Mckee, 2002). EI is the mixture of different linked dimensions such as intrapersonal abilities, utilised for identifying and acknowledging one's emotional state; interpersonal abilities, used for interpreting the feelings or non-verbal communication of other individuals; flexibility, developed to regulate one's feelings and actions to varying circumstances; and the control of their anxiety capabilities, used for differing an instinct (Bar On, 1997, 2000). On the other hand, Goleman, Boyatzis and Mckee (2002) mentioned EI as a set of skills that ensure that individuals are prosperous in life and are in good shape physically and psychologically. For them, these abilities make up the individual's emotional and social dimensions of intelligence. Bar-On (2006) distinguished between emotional and social intelligence by suggesting that, conflicting to cognitive and emotional intelligence, it predicts an individual's achievement better since it indicates how knowledge is used in the current circumstance (Bar On, 2000). The theoretical framework of this study will focus on Goleman's five components of EI. Goleman's model is suitable for the study as it explains the EI competencies.
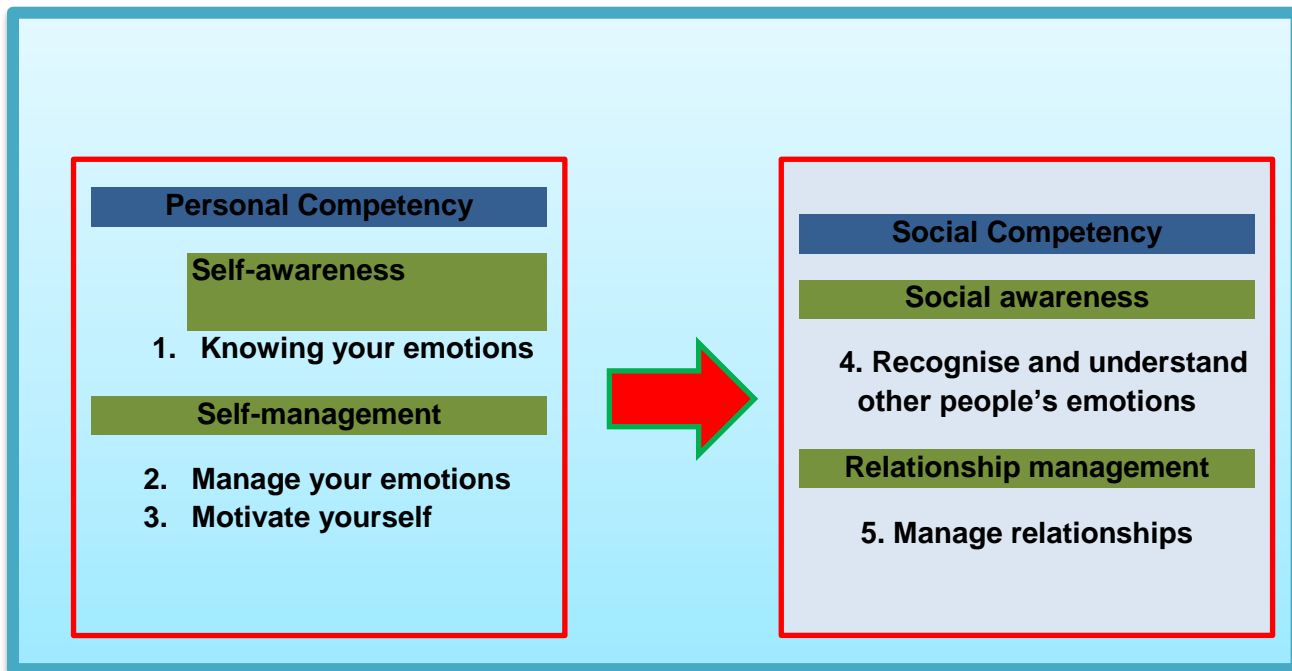
Figure 1: Goleman's Five Competencies of EI. Goleman (1998).

The above figure represents the application of EI into the workplace according to Goleman. The figure is divided into four domains. These domains consist of two quadrants that encompass personal awareness and social awareness. Each of these quadrants has competencies that add up to nineteen. Each of these domains and their competencies will be discussed briefly below. The first domain, personal competence, focuses on three of the five domains being; self-awareness (1. Identify your emotions and self-management) (2. Cope with your emotions) (3. Motivate yourself).

Emotional self-awareness is the ability to recognise one's feelings and emotions, to distinguish amongst them (what one is feeling and why, to identify what triggered the feelings (Bar-On, 2006). Emotionally intelligent people who are emotionally aware of their feelings can differentiate between personal moods and what drives their emotions at that point and time. This is the ability to know how you feel and being able to evaluate your personal emotional condition (Goleman, Boyatzis & Mckee, 2002).

COMPETENCIES OF SELF-AWARENESS:

1. self-awareness,
2. accurate self-assessment and
3. self-confidence

An emotionally intelligent teacher who is self-aware understands emotions they are feeling and is better equipped to not make hasty decisions or resolve conflicts in an inappropriate manner (Goleman, 2004). A self-aware teacher knows their own emotions, strengths, weaknesses, values and goals; they understand how their emotions can impact on other people while using them to make decisions (Goleman, 2004). These teachers can link situations and their emotions to how they should or should not react in a certain situation. They understand that their emotions can affect their performance at work. They use their skills of being aware of their emotions to guide their values and goals.

Accurate self-assessment means that the teacher is conscious of his or her strong points and weaknesses. Teachers always find an opportunity to learn from their experiences, accept feedback and there is continuous self-development (Vyas, 2015). The last competency is about self-confidence, this means the teacher is certain about his or her self-worth and capabilities. These teachers can communicate even when their views are not easily accepted. They stay true to what they believe is right. These teachers are able to guide their drives to meet an internal standard of excellence (Cherniss, Goleman & Emmerling, 1998). Self-confident teachers are able to ignite motivation and passion among the learners; they can bring about ideas and get others to believe in them.

COMPETENCIES FOR SELF-MANAGEMENT:

> 4. Emotional self-control
>
> 5. Transparency
>
> 6. Adaptability
>
> 7. Achievement
>
> 8. Initiative
>
> 9. Optimism

Emotional self-control implies that a teacher understands, controls and regulates emotions. They can distinguish between disruptive and positive emotions; think clearly before reacting to any given situation (Stark, 2011). Transparency is displaying predictable behaviour consistently. A teacher should be able to handle defeat and value feedback from others. Honesty is the base of a teacher by being transparent in treating all learners with humility and respect (Stark, 2011). They are approachable, good communicators, discuss important information with their learners and welcome any opinion. Such teachers are easily accessible and constantly provide support to their learners. A transparent teacher leads their classroom with the hope of achieving great results by building solid relationships based on integrity, as they are reliable and committed to serving and supporting their learners (Stark, 2011).

Adaptability means that as a teacher you are well equipped in handling changes and flexible in how you view events. Adaptability is about testing reality to understand one's feelings and emotions. It is associated with flexibility; this deals with the person's ability to adjust to new thinking situations (Cherniss et al. 1998). Achievement arises from the desire for success. A teacher has goals and visons that they want the class to achieve (Vyas, 2015). It leads teachers to have initiative in seizing any opportunity presented to them. They seize opportunities immediately; they go far beyond what is expected of them. Optimism is the ability to have a positive outlook on life even when things are not going so well. An optimistic teacher can motivate the learners and help them believe that they can achieve all that they set their minds to. It is the desire to want to achieve more in life and making sure that they influence other learners around them positively (Vyas, 2015). Thus, teachers should be able to talk about feelings in the classroom.

The area of social competency focuses on two areas, namely societal awareness and societal skills. They focus on managing relationships with others as well as recognising own emotions. In addition, social awareness deals with being able to differentiate and understand emotions experienced by those around you and being able to empathise with them (Team FME, 2014).

Social awareness means that as a teacher you have an ability to manage relationships and build networks. This is where you can create common ground and build rapport, which is very important because leaners need to know that they can trust you. This means sharing their opinions and ideas freely without the fear of being rejected or discriminated against. The social responsibility of an individual means that they can build and maintain positive relationships. This is the ability to engage positively with others, encourage and support them (Team FME, 2014).

COMPETENCIES OF SOCIAL AWARENESS:

10. Empathy

11. Organizational awareness

12. Service

Empathy is the ability to understand and acknowledge the feelings of others. According to Vierimaa (2013) empathy means that an individual is observant and regards other people's feelings. Teachers will shape their empathy with learners while also helping them to develop their personal satisfaction. Teachers will be able to identify concerns that affect a learner's performance. With these ability teachers can provide opportunities for leaners to improve their performance and classroom satisfaction (Kase, 2008). Empathy involves a process of being able to communicate to others their value and importance, through non-verbal and verbal communication (Potter, 2011). With this ability, one understands the duties and demands that staff members come across that helps them to be team players (Team FME, 2014).

Organizational awareness implies that as a teacher you can understand that the learners need to succeed and understand the learners' needs to direct their progress in the classroom. It is the teacher's responsibility to motivate the learners, keep their emotions in check to address any unpleasant situation that can arise in the classroom (Team FME, 2014). Service is where the teacher recognises the learners' needs. Services means that you understand exactly what is expected. This is directed to the communication, especially with the students, to move them towards fulfilling their educational expectations. By building rapport, teachers are able to provide

their services to students and instil responsibility. Teachers need to consider the educational needs of students (Team FME, 2014).

The last domain is that of relationship management. This refers to being aware of your own emotions and those of others to improve relationships. This is where a teacher can identify, analyse and manage relationships through communication, by providing positive feedback and motivating learners. A teacher with a high EI competency can communicate goals and visions clearly, deal with conflict, persuade and lead learners by knowing what to say and how to say it (Chapman, 2016). A good communicator will be able to listen, consult and involve others in the decision-making processes (Chapman, 2016). Within communication, a good teacher can develop the learners, understand their point of view; making it easy to tune into other people's emotions. This information will assist the teachers to influence learners to achieve goals and visions they have set (MTD Training, 2016).

Relationship management emphasises that a teacher should be accountable for designing educational experiences that will enhance learners' needs; the ability to inspire and guide learners. Teachers should develop their learners in ways that strengthen their abilities. (Cherniss et al. 1998).

COMPETENCIES OF RELATIONSHIP MANAGEMENT:

13. Inspirational leadership

14. Influence

15. Developing others

16. Change catalyst

17. Conflict management

18. Building bonds

19. Teamwork and collaboration

Inspirational teachers can guide and motivate their leaners with a common vision. Inspiration is defined as: stimulating and creating a sense of direction and purpose. This involves a teaching environment filled with excitement and high energy (National Research Council Canada, 2015). A teacher with this type of ability induces the need and desire from the learners to make every effort towards a convincing vision of the future that embraces the school's values, missions and

visions (National Research Council Canada, 2015). Influence means that as a teacher you can use some means of persuasion to achieve the classroom goals. This is a significant aspect regarding teaching because every teacher desires to see his or her learners succeed. To add to the above-mentioned, a teacher that can resolve conflict creates a peaceful environment that is filled with trust between the learners (MTD Training, 2016).

A teacher ought to be an individual that develops learners by regularly providing positive feedback and guiding them. This is about open, honest, compassionate feedback (MTD Training, 2016). Teachers should also inspire learners to understand how their emotions link to what and how they think. Being emotionally aware of one's emotions means that an individual can identify their strengths and limits, they have reflective learning experiences, show a sense of humour and display confidence, they are sure about their self-worth and capabilities (MTD Training, 2016).

A change catalyst is someone that is forward-thinking and is open to change knowing that it is a way of improving themselves and helping others develop their strengths (MTD Training, 2016). This is a teacher that recognises and accepts change and removes all barriers that might delay the process of learning and change within the classroom. In any school conflicts will arise, therefore it takes a very great teacher to be able to handle and resolve such conflicts without making any other party feel inferior (Team FME, 2014). An emotionally intelligent teacher understands that as humans we interpret situations differently and that is the reason why a great teacher aims to create conflict resolutions that have a desired result for both parties involved (Team FME, 2014).

Conflict management means having the ability to resolve disagreements amicably. A teacher that can resolve conflict ultimately puts an end to any more damage that might be caused to the school (Goleman, Boyatzis & McKee, 2002). A good teacher should be able to inspire and create resonance that has vision; they influence others while acknowledging the necessity for change and can overcome barriers to change. A good teacher can resolve conflict, manage it, and bring conflicting opinions and principles together to find a common stance, they will create collegiality, model respect, be helpful and accessible to the people they are working with (Goleman, Boyatzis & McKee, 2002).

Teachers should strive to build bonds; this is where strong relations are built based on trust and loyalty with the learners. These teachers can listen and pay attention, they understand and appreciate and value their learners (Hopkin, 2011). Goleman (2000) describes building bonds as a way of maintaining various relationships positively. The teacher focuses on developing

awareness that raises classroom goals and purpose. Learners' needs are a priority to teachers (Sergiovanni, 1990).

Teamwork and collaboration is the ability of a teacher to consistently engage with learners and involve them in important matters. This includes communication and constant feedback. By doing this, automatically the teacher has gained rapport and trust from his or her learners, making them feel important (Team FME, 2014). It helps avoid unnecessary conflicts and disagreements. This kind of competency allows the teachers to increase cooperation and everyone can assist each other through team work. A teacher should be transparent and maintain standards of honesty and integrity by managing their own emotions and responsibilities; such teachers are achievement orientated (Team FME, 2014).

The above theoretical framework will serve as a guide in my data collection and data analysis. Through the theoretical framework, readers will be able to make connections between the research questions and results of the study. The Goleman model of emotional intelligence is applicable to the study as it will direct the researcher to answer the main research question "What role does emotional intelligence play in the classroom management practices of high performing mathematics teachers in Gauteng?" Emotional intelligence is a construct that is linked to high performance in the workplace. There are however, a few studies of emotional intelligence of teachers in schools. Teachers are said to promote high academic performance owing to EI (Rust, 2014). The model will help the researcher in identifying change and effect in phenomena in relation to EI. For students to respond positively to a teacher's high expectations, the teacher should be able to build and maintain positive teacher-student relationships.

Teachers that have high teacher-student relationships are more prone to producing high academic performers. Empathy is a construct within the EI model and teachers can effectively manage anger and resistant students (Rust, 2014). Added to these, teachers need to manage stress, to contain their reactions to students' behaviours and parents' complaints. Emotionally competent teachers are approachable and therefore their students achieve higher (Rust, 2014). In a study conducted by Jennings and Greenberg, (2009), the results revealed that students' relationships with teachers where their feelings were taken into consideration were prone to having a high social, mental and academic competence.

In short, the importance of a teacher in being aware of his or her EI level will impact highly on a positive classroom management practice and good communication skills with the learners. Teachers can learn and understand their learners' emotions, why they are feeling such emotions and they create the skill of conflict resolution. A good understanding of one's EI stance will

increase effectiveness in the classroom environment, where everyone will feel welcome and free to voice his or her opinions (Chapman, 2016). Emotionally intelligent teachers respect a learner's opinions and emotions and they use their cognitive abilities to handle complex situations. Competent teachers further understand that learners and teachers should be able to work together while involving learners in decision making processes to avoid conflict. Chapman (2016) states that good teachers demand emotional strengths and behavioural characteristics. A teacher's behaviour is very important, so are non-tangible ideals such as; inspiration, attitude, decision-making and personal character.

A good teacher is considered a guide to the leaners in the learning process. He or she can create a stimulating classroom environment because they understand the impact they have on their learners by imparting the relevant skills and knowledge that will improve their educational rights, and self-esteem (Brophy, 2006). In addition, teachers should be able to create caring developmental and supportive relationships with their learners. What the teacher portrays in front of the learners, they will adopt, so this must be behaviour that is encouraging and positive (Brophy, 2006). That is the reason a teacher is a role model to their leaners.

Self-awareness is crucial in teachers because it assists them in knowing their own strengths and weaknesses while increasing meaningful academic learning by facilitating social and emotional growth, for both the teacher and learners (Evertson & Weinstein, 2006). This helps them to behave in such a manner that will be reflective from the learner's perspective and will encourage them to learn from such experiences. A teacher with self-assessment skills can provide frank feedback to the leaners while showing a sense of humour and perspective about themselves through their words and actions, and helping with moral growth (Evertson & Weinstein, 2006).

A classroom teacher who is emotionally intelligent creates an environment for high performance within the classroom. The Goleman model supports such teachers by helping them create visions and values shared by the teachers and learners. Cherniss et al. (1998) concludes that emotionally intelligent teachers will have high levels of achievement of learners, together with an effective and supportive structure and culture within the classroom.

2.10 CHAPTER SUMMARY

EI means being able to reason about emotions, process emotions to enhance cognitive processes and to regulate their behaviour (Mayer & Salovey, 1990). According to Bar-On, (2006), EI is a construct of an individual's perceptions to manage and balance stressful situations. In accordance with the study EI is an emotional construct that functions in the facilitating of emotional and cognitive processes that assist thinking and behaviour regulations. EI helps

individuals to manage negative emotions and promotes personal understanding and growth. In accordance with EI, CM serves as an important tool in creating a proficient learning and teaching climate. It also helps shape relationships of teachers with students. As mentioned in the study, CM management helps teachers create classrooms that are managed by respect, discipline, communication and strict rules. These rules are there to maintain order. By incorporating EI in such classrooms the teachers will be able to manage and deal with disruptive behaviours in an emotionally intelligent manner.

Mayer and Salovey's EI models are very ordered and are reliant on other abilities to operate, whilst with Goleman's model, individuals can have one ability while lacking the other; it is more flexible. In addition, Goleman also expanded more on Mayer and Salovey's definitions of EI as it only had four cognitive abilities but Goleman's model has seventeen EI abilities. The applicability of the Goleman model to the study was based on the fact that my participants are different and therefore might not have the same values and attributes. The Goleman model provided enough information to support the views and responses of the participants.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter outlines the research design and methods used to interview mathematics teachers about the role of emotional intelligence in their classroom management strategies. The chapter further discusses the data collection procedures, and data analysing strategies, and is concluded with the explanations of the research norms used by the researcher within the study.

3.2 QUALITATIVE APPROACH

The qualitative approach provides textual descriptions on people's experiences including their feelings and explanations regarding their behaviours, beliefs and opinions. I believe it can expose information that is not easily accessible through other approaches such as questionnaires. This is because people interpret meanings of their actions everyday through feelings and narrations (Schwartz-Shea, & Yanow 2011). Qualitative research provides a holistic understanding of phenomena, rich in contextual data (Ponelis, 2015). Corbin and Strauss (2015) describes qualitative research as 'an instrument that supports a researcher to focus on the behaviour of their participants, by using small sized samples'. Qualitative research was chosen for the study since I explored the role of EI on mathematics teachers' classroom management. Through qualitative research, I was able to understand measures that teachers take to manage their classrooms and encourage students to achieve high grades in mathematics.

Since I was working with EI as a social behaviour concept that influenced daily interaction between teachers and the students, numerical data would have deemed to be insignificant. Schwartz – Shea and Yanow, (2011) added that qualitative research makes meaning through the meanings that individuals create socially, behaviourally and emotionally. This is often referred to as the "verstehen" concept; that means to "understand, perceive, know and to comprehend". Through *verstehen*, the incorporation of EI strengthened the research study. Most researchers bring their own values to the research study, and they work on clarifying these values. The researcher used interpretive and theoretical frameworks that shaped the study (Creswell, 2007).

Qualitative methods can effectively identify other factors such as social norms, socio-economic status, gender roles, ethnicity and religion. It closes gaps in research studied (Mack, Woodsong, McQueen, Guest & Namey, 2005). To completely comprehend the intention and context of human behaviour, qualitative research is significant as it offers the researcher in-depth information.

3.3 RESEARCH PARADIGM

Researchers understand that worldviews are philosophies that are important when one undertakes a research study (Creswell, 2014). A research paradigm is based on "a set of beliefs that guide action" (Creswell, 2013:35). Huitt (2011) defines a paradigm as a way that people make sense and meaning of the world they live in through their interactions with their communities and the people around them (Goldkuhl, 2012). A paradigm helps the researchers and participants make sense of their world by interpreting how their values and beliefs influence their behaviour (McGregor and Murnane, 2010, Creswell, 2014).

For any researcher, it is important to understand research assumptions and beliefs. The reason is because the aim of researchers is to inquire about knowledge, how that knowledge came into existence and what can be done to gain knowledge. Interpretivism means that as the researcher, I have taken an epistemological stance (Creswell, 2009), as I explored the knowledge teachers pass to students. Epistemology helps in developing theories in education, it further seeks to employ and apprehend knowledge. To understand how knowledge is perceived as knowledge, there must be an understanding of truths that are socially constructed by humans in their social context (ontology) (Creswell, 2014).

The interpretivist paradigm was influenced by interpretation of events made by people in their social and cultural experiences, therefore creating knowledge through human interactions (Chowdhury, 2014). In addition, Goldkuhl (2012) states that the interpretive research method assists individuals to recognise their presence, to re-construct them, comprehend them, to evade misrepresenting them, and to utilise them as building blocks in theorising. Interpretivism, according to Vosloo (2014), focuses on finding new interpretations and meanings to the ontological assumptions based on the context being studied; but not overlooking the complexity of humans trying to make sense of situations they encounter. This is done by being able to understand phenomena through the interpretations and meanings people assign to them (Vosloo, 2014). As qualitative case studies are based on human actions and behaviour, interpretive paradigms expand on that because, as a researcher, it will be impossible to understand meanings that are attached to human actions without being able to narrate them (Goldkuhl, 2012).

Interpretivism arouses the consciousness hidden into social interactions and structures, by focusing on human actions to understand the phenomena (Vosloo, 2014) and to add to the above, an emotionally intelligent teacher will promote self confidence amongst the learners and build rapport openly with them. Interpretive methods bring to the surface the perceptions and understandings of behaviour; it explains situations, interactions and actions of individuals since

the contributor's viewpoint remain the priority (Goldkuhl, 2012). The relationship between the researcher and participants is often subjective when a researcher employs the interpretative paradigm within a qualitative study. Much emphasis is put on the ability of the individual to construct meaning. Yohannan (2010) adds that in an interpretive study, theories are refined and not used for judgment purposes or generation of new theories.

In an interpretive study, there is a process of re-constructing the understanding of the societal and historical setting of the area being studied. In interpretive research, there is an assumption that there are no right or wrong theories, but then again there are fascinating and less fascinating methods in observing the world. This is mainly because interpretive research aims at knowledge as understanding. Among one of the interpretive values; Myers and Klein, (2011) focus on the connection amongst researcher and participant; the belief of contact amongst the researcher and themes. It is important to note that this belief deals with the contact amongst the researcher and researched themes through data generation, with the emphasis on participants as interpreters of significant data. My study was aimed at exploring the decisions teachers take to manage their classrooms, how they control and comprehend emotions and behaviours. This was a study that involved the need to understand the experience of teachers in their own classrooms (natural setting) while exploring how emotions (EI) guide their actions with the students (Thahn & Le Thahn, 2015).

An interpretive method can explain the intricate world of lived experience from the opinion of individuals who live it (Schwandt, 2007). This method is reliable with the building of the societal world characterized by contact amongst the researcher and the contributors (Mingers, 2001). With the interpretative method, I was able to understand how mathematics teachers were able to respond to emotional intelligence and the effect of classroom management. The researcher's explanations are a significant fragment in this type of study bringing bias to the front position. I interacted and had dialogue with the participants to thoroughly understand the meanings derived from how they manage their classrooms, and how these meanings affected their interactions with students (Ritchie & Lewis, 2013). Interpretive research ensures that our understanding of reality is expanded merely through societal constructions such as language, common values, documents, tools and added artefacts (Myers & Klein, 2011).

3.4 RESEARCH DESIGN: CASE STUDY

Shields, (2007:12) defines a case study as;

"A research method that allows for in-depth examination of events, phenomena, or other observations that can occur within a real-life context for purposes of investigation, theory development and testing or simply as a tool for learning".

"A case study is an empirical inquiry that investigates a contemporary phenomenon in depth within its real world, especially when the boundaries between phenomenon and context are not clear" (Yin, 2014:13)

With a case study, one can investigate important topics that other research methods fail to cover (Yin, 2004). Case studies are preferred mostly by qualitative researchers as they can divulge significant information which cannot be obtained through methods like surveys or produced through numerical data. Case studies have a definitive feature of being narrative, as it aims to define and understand some complexities and circumstances of real-life contexts of individuals (Yin, 2004). The case study helped me through narrative, real life stories and behaviours as experienced by the participants (Elliot & Timulak, 2005). When undertaking a case study, Flyvbjerd (2006) recommends that the researcher ought to tell the story in all its diversity, including conflicting ideas. Researchers ought to be subjective, as feelings are involved (Ritchie & Lewis, 2003). This case study research was based on in-depth and real-life experiences of the participants, by involving a small number of participants (Yin, 2003). I investigated the practices of teachers in their environment and their daily interactions with students.

Case study research is an interpretive research design that involves describing and interpreting happenings and circumstances that happen in the present (Flyvbjerd, 2006). The researcher was seeking to narrate and interpret the social and professional activities mathematics teachers used in their classrooms. The case study assisted the researcher in describing the events through interviews (Mack, Woodsong, McQueen, Guest & Namey, 2005). Case studies highlight detailed contextual exploration to some degree of a number of events or conditions and their relationships. In education, this is one of the most broadly used qualitative approaches of research (Yin, 2003).

Schwandt (2007) states that case study research enables us to understand difficult issues or objects and can cover experience or add strength to what is already known through previous research. Case studies have no hypothesis, they work on an existing theoretical framework to generate new meaning (Ponelis, 2015).

The interpretive focus and the case study methodology, were thought to be the utmost suitable approach to use since it offers an efficient way of collecting information, analysing information, and reporting the outcomes. It therefore allows a specific problem to be understood in great depth (Yin, 2003), as case studies are bounded by space and time (Miles, 2015). Explicitly, it offers a range of contributor viewpoints by means of multiple data collection techniques (Yin 2003). A case study helped me reveal the unique perceptions of individual participants in their school's settings. The case study design is mostly appropriate in circumstances where it is very challenging to distinguish an occurrence variable from its setting (Yin, 2003). My study was analysed inductively. The inductive approach is broad and can therefore be time-consuming and it is suitably applied where little information is known about the study phenomenon (Burnard, Gill, Stewart, Treasure & Chadwick, 2008). Inductive analysis is the most common approach used to analyse qualitative data.

An inductive process is employed in assisting or challenging theoretical norms, since "meaning" is of crucial concern to the qualitative method (Bogdan & Biklen, 2003). The contributor's viewpoints of their own ideas of manner were the emphasis. Therefore, the outline established in this thesis assists in assessing contributor viewpoints. Outcomes were conferred in relation to current knowledge with the purpose of validating how the current study has contributed to increasing the knowledge base (Bogdan & Biklen, 2003).

3.5 DATA COLLECTION

It is the researcher's responsibility to create logic of the data collected by discovering and understanding it as honestly as possible (Burnard et al., 2008). The researcher collected data with open-ended, semi-structured interviews and field notes of observations during interviews, and analysed the data through interpretation and content analysis. In the study a sample of five mathematics teachers was used to gain further understanding of the role of emotional intelligence in the classroom management practice of high school mathematics teachers.

Before collecting data, the researcher clearly communicated the reasons behind the study. The participants were made aware of the duration of the study and permission was asked from them through signing an informed consent form. The researcher recorded the interviews with a voice recorder. This helped in case something was missed, because a lot of words can be said and lost within the course of the interview when making field notes. Field notes are information put down to remember occurrences at the research setting. They can be notes of behaviours or activities that occurred (Burgess, 1991), and were used to correlate with the data transcribed from the interviews.

3.5.1 Interviews

During the study, only mathematics teachers were interviewed. I conducted five interviews at five different high performing schools. The participants were selected from schools that achieved more than ninety percent in their 2016 matric results. The data was obtained from the Department of Education and these are teachers who were teaching mathematics in their respective schools. The interviews lasted about thirty minutes to an hour each. Interviews are used to understand someone's impressions; attitudes or experiences that can help you learn more about their answers. Interviews were done face-to-face, one on one and in person. The reason behind this was to help the researcher explore the topic broadly and preserve the participant's anonymity and confidentiality. The interviewees were interviewed independently and all the data obtained from the interviews was tape-recorded and later transcribed in the data analysing stage. A semi-structured interview uses 'open-ended questions and probes to yield in-depth responses about people's experiences, perceptions, opinions, feelings and knowledge,' as explained by Patton (1990:113).

Participants were interviewed using semi-structured interviews as they guide the researcher with prompts (Maree, 2007). All interviews were conducted in English, except in an instance where I had to clarify some questions, I then had to use Sepedi. Before the study and interviews took place, all the participants were informed about the purpose of the study and permission was requested by the researcher to voice-record the interviews. The interview schedule (Appendix F) and research questions were developed by the researcher and supervisors.

It is imperative for a researcher to understand the topic of interest that will assist in developing relevant and meaningful semi-structured questions. Cohen and Crabtree, (2006) add that while using open-ended questions could possibly stray from the interview guide, there is still a chance for recognising innovative ways of perceiving and understanding the subject at hand. The use of one single technique assisted me to get in-depth information from my participants. Participants had the opportunity to ask questions when they did not understand what they were being asked. Interviews added information that cannot be attained through other techniques such as surveys. The technique proved a better opportunity to infer the validity of each participant's reply. Semi-structured interviews let participants express their viewpoints in private without a framework set by the researcher (Bolderston, 2012).

3.5.2 Field Notes

Field notes are data recorded of the experiences during the research process (Mack et al. 2005). They were handwritten notes transferred as computer files. Field notes provided a rich description

of everything that happened during interview sessions that would have an impact on the overall findings of the research (Mack et al., 2005). According to Wahyuni (2012), field notes are re-enactments of happenings and discussions that take place during interviews; they also contain information that will add a thick description to the data. No observations of actual teaching were done.

The data was made up of the researcher's experiences acquired during communication with other individuals, and what was observed. Field notes are an interpretation of occurrences, how people behaved and reacted, what was said in conversations between interviews, positions of people and their relationships with each other, their comings and goings, physical signs, your personal responses to what you observed, and all other information and observations required to make the story of the contributors' experience thorough (Mack et al. 2005). Immediately after the interview I analysed the field notes (Mack et al. 2005).

3.6. SAMPLING

Sampling is the systematic process of selecting participants to be examined during the study. The participants were chosen by means of purposive criterion sampling, this method of sampling is used when a researcher wishes to include individuals strategically (Maree, 2007). A sample is defined as a subset of a population, elected by either probability or non-probability methods. I chose this sampling method because I needed teachers that fit a specific criterion which in this case was mathematics teachers at high school level (Palys, 2008).

The sample for the study consisted of five different top high performing schools in mathematics in Tshwane. This selection was based on the amount of distinctions in the 2016 matric results. The teachers were selected through convenience sampling, meaning that the participants were easily and readily accessible to the researcher (Maree, 2007).

The participants of the study were of Sotho, XiTsonga, Afrikaans and Pedi cultures; they were male and female participants who spoke English during the interview but for clarity they used their mother tongues. English was chosen because it is considered a universal language and most teachers use English to teach. The teachers would have worked at the school for at least five years. The teachers were interviewed individually focusing on their levels and awareness of EI within their classrooms. The study provides more realistic responses rather than statistical processes. The sample is a representation of the population of mathematics teachers in the Pretoria area, as in it includes participants in different areas (schools) around Pretoria, it includes both male and female participants and the participants were from different cultural backgrounds.

3.7. DATA ANALYSIS

The study used content analysis to analyse data that was collected through interviews and field notes. Maree (2007) explains content analysis as a way of analysing qualitative data through summaries and data interpretation. It is the coding and classifying of data to make sense of the data collected and to highlight the important findings. It analyses recorded information, procedures of observations and the themes that arise in the study (Hsieh & Shannon, 2005).

Interviews were tape-recorded and transcribed verbatim, word for word, bearing in mind non-verbal expressions. During the transcribing process, I found codes and themes in the data. The inductive codes were derived from the narrative and verbal information received during the interviews. The inductive codes were put into categories; for instance, if a teacher emphasised the importance of classroom management, the assigned category would be "discipline". I made sure that the coding structures that emerged through the data were aligned with the research questions (Noble & Smith, 2015). The supervisors verified the alignment of the codes and the research questions of the study.

After data collection, the transcripts were coded per the participant responses to each question (Mack et al. 2005) and themes that emerged during the interviews (Akomolafe & Olatomide, 2013). I developed a coding system and went through the data collected again, while highlighting important points, including quotations that would indicate themes within the data. These themes were written in the margins to simplify the coding system and the creation of links (Kombo & Tromp, 2006).

Data obtained through the interviews was handled and managed through content analysis. Content analysis was done by a qualitative data analysis software program that allowed me to manage codes, analyse, and output information in a selection of suitable procedures. This allows information to flow in a logical manner. I went through all my transcripts and tape-recordings and field notes taken during the interview. I then made notes derived from the interview data. The data was then analysed into codes. These codes are all the important words and phrases from the interview data. By using the coding method, I could categorize my information into segments that were related to my research questions (Smith & Ragan, 2005).

3.8 METHODOLOGICAL NORMS

3.8.1 Trustworthiness

The researcher ensured trustworthiness within the study by clearly transcribing the data and ensuring that all the transcribed data related to the research questions. The supervisors reviewed

all the transcribed data to ensure that all the research questions were answered (Morrow, 2005). Case studies imply that an adequate amount of detail is provided consequentially, where readers can measure the validity and credibility of the research. The researcher ensured that the case study is clearly transcribed, the sampling strategies have been properly used and data is collected and managed systematically (Shenton, 2004). Schwandt (2007) explains trustworthiness as the quality of an investigation and its findings that made it worth mentioning to readers.

3.8.2 Credibility

Smith and Ragan (2005) define credibility in qualitative research as the range to which the information and analysis are credible and reliable. Credibility in the study was ensured by constantly reviewing the interview process whether it was producing the data required for the study and if it helped the researcher answer the research questions (Morrow, 2005). To ensure that the study was credible, the researcher selected the participants randomly and none of the participants were known to the researcher. This is done to avoid bias within the researcher (Bunniss & Kelly, 2010).

To add, the researcher studied the topic thoroughly and consulted relevant sources on the topic. None of the participants were forced to take part in the interviews (Bunniss & Kelly, 2010). The researcher had prolonged engagement with the participants, this helped her to build and establish rapport and to gain more detailed in-depth information. During the interviews, the researcher used audio recording tools to check for data based on the participants' descriptions (Noble & Smith, 2015). The researcher engaged with the data recording and notes to demonstrate links, and adjustments were made in accordance with the supervisor's suggestions and recommendations (Vosloo, 2014).

Through the engagements, the researcher also had an opportunity to go back to clarify any information (Hadi & Closs, 2016). The study was done through a random sampling method to decrease chances of bias of the researcher. The data collection procedure aligned with the research questions (Bunniss & Kelly, 2010). Peer debriefing was done by the supervisors to test insights and procedures utilised by the researcher in the research process (Petty, Thompson & Stew, 2012).

3.8.3 Transferability

According to Lincoln and Guba (1985); transferability shows that the findings have applicability in other contexts; the ability to generalise the study to other settings. The researcher provided all the important information such as the context of the research, processes and participants, as the instrument for the reader to decide how the findings of the researcher could be transferable

(Morrow, 2005; Hadi & Closs, 2016). To enhance the study, the researcher described the research context by using descriptions rich with data, and the participants were provided with the research report to compare instances of phenomena described by the researcher in the study (Shenton, 2004; Hadi & Closs, 2016).

3.8.4 Dependability

Dependability is the stability of noting similar outcomes under similar situations (Hadi & Closs, 2016). Presenting Vosloo (2014), dependability discusses the degree to which investigation outcomes can be simulated with comparable themes in a similar setting. This is the degree of reliability involving the replication and repeatability. This will show that if we repeat the study it should be possible to come to the same results and findings. The researcher described in detail the occurrences during data collection and there was an audit trail of information, to show stability and consistency during the process of inquiry by giving a detailed account of the research process (Vosloo, 2014). The researcher clearly stated the study design and how to implement it and further described the events that occurred during the data collection. Both the researcher and supervisors evaluated the consistency of the inquiry (Creswell, 2014).

3.9 RESEARCH ETHICS

The researcher requested permission to conduct the study from the proposal defence committee. The researcher also sent out letters seeking permission to conduct research from the Department of Education (Appendix A) and the respective schools (Appendix B). Once permission was granted the researcher adhered to the ethical norms through communicating the purpose and implications of the research study to the participants.

3.9.1 Informed consent

Firstly, there was consent of those involved; namely the teachers. The teachers were made aware of the purpose of the research, they were informed that they could withdraw at any time during the study, and the researcher did not influence the behaviour of the participants, as they signed a statement of voluntary participation (Polit, Beck, & Hungler, 2001). The researcher revealed any alternative procedures that could be of advantage and participants were granted the chance to ask questions or seek clarity (Polit et al, 2001). Participants were also informed that they would have access to findings and final reports to validate the process. The purpose of the study was carefully described and no payment was offered.

3.9.2 Anonymity and confidentiality

By using pseudonyms, the researcher ensured that the participants' real identity was hidden throughout the research (Polit et al. 2001). Data provided by the participants would only be known

to them and the researcher. The participants would benefit by exchanging their thoughts with colleagues, as well as refining their awareness regarding EI and teacher motivation levels. The principle of human dignity and the right towards self-determination were adhered to. This means that participants were not pressured into taking part in the study. Participants had the right to decide whether to quit without incurring any consequence (Polit et al. 2001).

3.9.3 Safety Surroundings

To ensure the safety of the participants, the researcher allowed participants to choose locations that were safe for them. Participants were given the contact details of the researcher, enabling them to make contact at any time they felt any discomfort about the research. The researcher-participant's rapport was not misused by the researcher by sharing important or sensitive information with others (Polit et al. 2001).

3.10 CHAPTER SUMMARY

In this chapter, I briefly outlined the methods that were used to understand the role that emotional intelligence plays in the classroom management of mathematics teachers in Tshwane, Gauteng. I further outlined the research design and methods; the qualitative approach to the study, and the case study design. The data collection method for the study was semi-structured interviews and field notes that were taken during the interview sessions. To analyse my data, I used Atlas.ti together with content analysis, which assisted me in coding, categorising and producing the final output of the research results.

I also outlined the data validation and how trustworthiness was ensured. Finally, I outlined the ethical issues that were applied during the data collection process. The following chapter focuses on the results of the interviews.

CHAPTER FOUR: DATA ANALYSIS

4.1 INTRODUCTION

In this chapter special attention is given to the analysis of data collected and the interpretations of the findings from the participants' responses. This includes the analysis of the role of emotional intelligence in the teaching classroom practice of high school mathematics teachers. Merriam (1998) argues that verbatim transcriptions provide an adequate base for data analysis using qualitative methods. This author further states that the interview logs are vital to detect emerging themes and patterns to organise in the analysis phase of research. Creswell (2014) posits that having all interviews transcribed provides the most complete procedure and structure for analysis.

The research followed the same procedure for data analysis and the focus falls on the various patterns as they emerged from the participants' responses.

4.2 PROCESS

Data was collected qualitatively by means of unstructured interviews. The interviews were conducted face to face and the participants were informed through SMS, emails and telephonically in advance. All the participants confirmed their availability through SMS, email or telephone regarding their scheduled interviews. The interviews took place at different schools and in the participants' school offices. Interviews lasted for between thirty minutes to an hour for each participant.

The researcher began by introducing herself and the purpose of the interview, and indicated that the recorder would be used in order to ensure that everything pertaining to the interview was captured. Each participant was asked 21 questions as per Annexure F and allowed to ask for clarity when they needed it. The respondents were assured that the interviews were for the purpose of the study only, and nothing else.

4.3 RESEARCH QUESTIONS

4.3.1 Main research question

What role does emotional intelligence play in the classroom management practices of high performing mathematics teachers in Gauteng?

4.3.2 Sub-questions

- What role does self-awareness play in the classroom management practices of mathematics teachers?

- What role does self-management play in the classroom management practices of mathematics teachers?
- What role does social awareness play in the classroom management practices of mathematics teachers?
- What role does relationship management play in the classroom management practices of mathematics teachers?

4.4 THE ROLE OF SELF-AWARENESS

What role does self-awareness play in the classroom management practices of mathematics teachers?

4.4.1 Strengths and weaknesses of mathematics teachers in the classroom

In this question the researcher wanted to find out the opinions of the respondents concerning their strengths and weaknesses in school.

The participants demonstrated that they understood and knew their strengths and weaknesses because they had been in the field for more than ten years. Four out of five respondents interviewed indicated that their strengths ranged from knowledge and understanding of the subject they teach, knowing how to discipline learners, assisting struggling learners and making the subject easier for them to understand.

Natalie (pseudonym*)

Natalie stated:

"My *strength is being able to explain in different kinds of ways, the other one is that I do not over talk, I would rather try to under talk making the concepts easier.*"

This shows that the teachers are trying by all means to equip themselves to be relevant and be able to go down to the level of the learners. The skills level of the teacher plays a crucial role as it influences the level of success of the learners and also how learners cope in the learning environment. This statement is supported by Ramana (2016) who indicates that teachers should have skills such as enthusiasm, fairness, confidence, dedication, creativity, openness, humility and integrity.

The teachers did indicate however, that they are human and have weaknesses. According to Goleman (2004) a teacher who is self-aware, knows their own emotions, strengths, weakness, values and goals; they understand how their emotions can impact on other people while using them to make decisions. Cecelia* highlighted issues such as taking for granted, or assuming the

learner knows or understands what they have been taught, without making sure, having challenges with interacting with learners and not being able to handle the pressure, while some mentioned that they are not good at record keeping of the learners' progress.

Thapelo* mentioned that:

"The problem that I realised in teaching is that sometimes we assume that these kids know and that creates a lot of problems, so it is important to first find out what they know and then grow from there."

This indicates that teachers are aware of their emotional levels in terms of having empathy. Thapelo added that as a teacher, before you react, it is important to ask the students why they might not be doing their work. As mentioned earlier students have needs and requirements in classrooms; not doing their work might indicate that a certain need is not being fulfilled. In this way teachers can communication openly to students to find out what the problem might be and in this way relationships are being formed. Teachers must always find an opportunity to learn from their experiences and accept feedback so that there is continuous self-development (Vyas, 2015). Hwang (2006) sums up the above discussion by arguing that emotionally intelligent teachers encourage, motivate and support their learners.

Therefore, teachers must ensure that they deal with their weaknesses so that they can better control their emotions.

4.4.2 Characteristics of a learner that would most likely make you angry

In this aspect the researcher wanted to know the respondents' views on the characteristics of learners who are most likely to make their teachers angry in the classroom. Four of the respondents are of the view that although these learners are to some degree mature, there are some of them who do not utilize their full potential or do not take their studies seriously.

The respondents further mentioned that while they are busy teaching, some learners like talking, distracting other learners or disrupting other learners' opportunities to listen and understand. The respondents highlighted the fact that these learners do not have consideration for other learners. This makes them (teachers) angry, as this results in the learners not giving them their undivided attention.

Sipho* mentioned that:

"If they talk while I am talking, if they don't listen to me, I get really angry because not only can they not listen and understand but they are also taking someone else's opportunity because they are probably talking to someone else. So I want undivided attention."

Natalie* indicated that she becomes angry when learners tell lies about their homework and explains that learners have tendencies to say that they have done their homework but fail to produce it when requested to do so.

The above statement is supported by Vyas (2015) who indicates that a teacher has goals and visions of seeing their class achieve. Team FME (2014) further stipulates that it is the teacher's responsibility to motivate their learners and keep their emotions in check in order to address any unpleasant situations that may arise in class. It is therefore, necessary or important for the teachers to control their emotions even when they feel provoked and have an open policy where he or she can openly discuss emotions in the classroom (Hwang, 2006).

4.4.3 Ways of dealing with anger

The researcher in this question wanted the views of the respondents on how to deal with anger. Four of the respondents were of the view that when dealing with their anger, they prefer calling the learner aside and having a private talk with them, as this avoids confrontation in front of other learners. They further encouraged open communication as a form of building trust between themselves and the learners. In these instances, it is not helpful for the teachers to shout at a learner in front of other learners. Hence, they further stressed the importance of controlling and dealing with negative emotions. They indicated that it is important for a teacher to go out to relax and calm down. Goleman (2004) supports this by stipulating that a self-aware teacher knows their own emotions, strengths, weaknesses, values and goals and understands how their emotions can impact on other people, while using them to make decisions. Thapelo stated that:

"…sometimes you shout at the child but not in front of other kids because sometimes it might get out of hand but when it is the two of you, the child will listen and realise that this is a parent."

The other aspect that came across strongly from one respondent in dealing with anger, is to remain calm, and build a good relationship with learners and win their trust. In this way the learners will listen and realise that respondents are not only teachers but also parents to them.

Hwang (2006) highlights the fact that emotionally intelligent teachers encourage, motivate and support their learners and this habit assists them to relax, calm down and focus on their core responsibilities.

4.4.4 Emotions experienced when receiving negative feedback from the head of department

The researcher aimed at knowing the respondents' feelings when receiving negative feedback from the head of department about their class's overall performance in their subject (mathematics) and how they deal with or control such emotions.

Three out of the five respondents blamed themselves and mentioned that they have feelings of disappointment and of failing their learners. The respondents also mentioned that this might mean that they may not have taken their work seriously and need to come up with more strategies on how to improve going forward, as it is important for them as teachers to use all the resources at their disposal to empower the learners. The teachers mentioned that it is important for an individual to introspect and in addition, put more effort into their work, be fully dedicated in doing their work and therefore be committed to education. Teachers must always find an opportunity to learn from their experiences, accept feedback; thus ensuring that there is continuous self-development (Vyas, 2015).

Thapelo replied by saying:

"I will feel bad but that says that I have to do something, I have to change the way I do things because year in and year out we get different types of learners with different backgrounds. You have to go back and do research and check what it is that I am doing wrong. There is positive criticism which in turn builds me, if you criticize me positively, then I can say yes my class is underachieving and I can do something about it."

Thapelo does not deny that he will feel bad, but he also realises that he might need to change the way he is doing things in order to get different results. Instead of handling the negative emotions irrationally, he reflects by himself and regards the criticism as positive instead of negative. This shows that Thapelo is able to control his negative emotions and use them to direct positive actions, which in this case is to figure out where he went wrong in the first place. Self-awareness teaches us that we need to look at a set-back and reflect objectively, because if we accept our failures, we are then able to explore better ways of achieving success.

While two of the respondents agreed with the majority on having to come up with strategies and improving as they work with different learners from different backgrounds, they also believe that introspection is important towards one's improvement. These teachers believe that positive criticism builds them up when their class is underperforming or underachieving.

Stark (2011) sums up the above by stating that teachers should be able to handle defeats and value feedback from others. Honesty is the basis of teaching; by being transparent in treating all learners with humility and respect.

It is indeed very important for the teachers to go back to the drawing board, study the recommended textbooks and other study materials, and make full use of the internet to ensure that they are up to date. This will assist teachers to control their emotions and feel good about their performance.

4.4.5 Values teachers strive to in-still in the learners and why

These two questions aimed at establishing which values respondents strive to instil in learners and why those values are important to instil.

All five of the respondents alluded to the fact that they wanted to instil a culture of learning, and not only learning, but also of understanding what they are doing. The other aspect that the respondents raised was that they want to instil values such as self-respect, respect for others, honesty, trust, good communication skills and working hard. The respondents highlighted values such as openness and constant communication, encouraged in order to avoid disappointments when coming to their performance. Hence the focus is on the learner's future. The above-mentioned values will be possible if the teacher creates positive relationships with the students. By creating these relationships teachers will be able to communicate clearly and openly with their students; they will know when their students are having difficulty with the subject.

Cecilia mentioned that:

"*Respecting me as their teacher and respecting other people, because if they don't respect me, I cannot work with them because they don't respect me. I want them to respect others so that they can be able to work as a team with other people.*"

Sipho stated:

"*Honesty… If you can't be honest with yourself or me, then you can get nowhere. So if you can honestly say I don't understand or feel this and that then its better, because often I think the learners' emotions have an influence on their work.*"

The respondents believed that these are elements that both teachers and learners must have in order to control their emotions and have the ability to participate and engage in team work. It is important for the teachers to instil values that will enable learners to behave appropriately, especially in this era where learners have lost their moral values and culture of learning.

Therefore, it is the teachers' responsibility to develop learners to their full potential. The respondents concurred that if a learner is not honest they will not get anywhere, because they believe that the learner's emotions have an influence on their performance in class, and that the learner needs to know how to communicate so that they, as teachers, can assist the learner to achieve and expand their knowledge. Stark (2011) sums up the above, by stipulating that a transparent teacher leads their classroom with the hope of achieving great results, by building solid relationships based on integrity, as they are reliable and committed to serving and supporting their learners.

4.4.6 Fears that teachers have

The purpose of this question was to determine the fears that the respondents have as teachers. Four of the five respondents reported that having failing learners was one of their greatest fears, as this will have a negative impact on their careers and reputations. They believe that it is important for learners to pass and be successful hence they do not want to be perceived as stumbling blocks to the learners' success. One respondent mentioned that when they are angry, they sometimes say something insensitive towards learners, unaware that the learners become demoralised and underperform. The respondents believe that they need to be caring and develop learners to their full potential by building trust and constantly encouraging communication with them.

Peter* stated:

"Every *person has something that he remembers about his school days or that a teacher told me this and that and that still hurts or that I do something like that, that I might unintentionally say something to a kid that might harm them emotionally*."

Team FME (2014) sums up the above by alluding that it is the teacher's responsibility to motivate the learners, to keep their emotions in check in order to address any unpleasant situation that can arise in the classroom.

Therefore, they believe that teachers must not do or say anything that may harm the learners, such as saying something unintentionally hurtful.

4.4.7 Values that define respondents as individuals and as teachers

In this aspect, the researcher wanted to establish what values the respondents felt defines them as individuals and as a teacher.

Two of the respondents indicated that they conduct themselves in a professional manner. They are caring, loving and loved by community members, respected, honest, and people of integrity. On the other hand, three of them indicated that values that define them as teachers, include respecting and being respected by other teachers and learners, being ambitious, hardworking and open, and displaying great empathy.

Peter mentioned:

"I try to be honest and be an individual of integrity, and to consider people's feelings and I regard good relations as very prominent, that is what life is all about for me, having good relationships."

This means that when you are a public figure one needs to be a person who has high values both in private and in public.

The above assertion is confirmed by Team FME (2014) by arguing that a teacher should be transparent and maintain standards of honesty and integrity, by managing their own emotions and responsibilities, resulting in achievement and building rapport.

There are things however, that can make teachers react emotionally; learners in particular who do not listen or do what is expected or required of them. The above values will indeed help teachers to be professional and above petty issues. The above discussion is supported by Sergiovanni, (1990) who asserts that learners are a priority to teachers.

4.4.8 How values influence classroom management strategies

In this aspect the researcher wanted to establish how these values influence the teachers' classroom management strategies. The majority of the respondents in this aspect are of the opinion that these values help them to love their learners and communicate well with them in order to create a positive attitude towards one another. Furthermore, the respondents mentioned that these values helped them quite significantly because they are able to treat learners with respect and integrity and learners respond positively to this. The respondents also indicated that being professional and strict in their approach, does motivate and give positive hope and encouragement to learners. Stark (2011) supports the above by alluding that a transparent teacher leads their classroom with the hope of achieving great results, by building solid relationships based on integrity, as they are reliable and committed to serving and supporting their learners.

The respondents also indicated they teach their learners to be passionate and respect their school work, and thus they do not struggle in getting learners to do their work.

Thapelo stated:

"You *see when these kids get to understand who you are, they can get to understand that you are not only their teacher but you are a parent and a brother/mother, it makes them respect you and so it becomes easy to control the class.*"

Teachers highlighted that in this regard there is more order in their classroom as they do not struggle getting learners to classrooms on time. They treat each other as equals and they are willing to help them not only in the classroom, but also outside.

It is therefore important to note that without teachers learning to be influenced by the values discussed, the behaviour of the learners will not improve, they will disrespect their teachers, they will not do their work and the failure rate will escalate.

4.4.9 Ways of motivating a learner in the face of a setback

In this aspect the researcher wanted the opinions of the respondents on how they would motivate a learner with high hopes of passing a test, and then failing or getting a lower mark than the one hoped for.

Three of the respondents reported that they would tell the learner that it is not all about getting a distinction, but about getting good results and telling them the score that is needed. This will encourage them, instead of regarding their result as a setback. Two of the respondents however, highlighted that the resultant low marks that were not hoped for by the learners, should ideally motivate and encourage them to work harder. The respondents mentioned that these setbacks happen quite often, as there is always pressure on the learners to get high marks, and they do unfortunately not always get them.

Sipho mentioned:

"*Well if they had unrealistic expectations of their ability, then you would have to again be honest with them. Not that I know what a child's potential is but I do have some kind of feeling towards that, so maybe just be honest with the learner and say you are maybe looking for a mark that you can't achieve for the amount of work you are putting in at the moment. So just spending time with that learner and trying to help them with their confidence in maths, you know encourage them, say "Well done", "Look at this, you got it right for the first time", things like that*

and lastly encouraging them to put more effort into practising maths is how I would handle the
situation."

Therefore, the respondents believe that learners must know that there is always a chance, and a possibility to achieve more, if they are not demotivated and tired of whatever they endeavour to achieve.

They believe that saying 'well done you got it right', spending more time trying to help them understand the subject more comprehensively, will help them gain confidence and possibly develop a love for mathematics. This means that teachers must always strive to encourage learners to find positives rather than negatives within themselves.

4.5 THE ROLE OF SOCIAL MANAGEMENT

What role does social awareness play in the classroom management practices of mathematics teachers?

4.5.1 The challenges and management of situations that teachers face in the classroom

In this aspect the researcher wanted the views about the challenging situations that respondents once faced in the classroom and how they managed it. The respondents mentioned that there are many challenging situations that they experience in the classroom.

They mentioned challenges such as insubordination, talking while the teacher is teaching and unwillingness by the learners to do their school work. Four out of the five respondents indicated that they experience challenges with learners who talk back when they are reprimanded and show aggressive behaviour towards them in front of other learners. Such behaviour is destructive especially if other learners want to concentrate.

Thapelo explained a challenge that he had faced in the classroom and explained that this is how the situation was dealt with:

"There *was this child I taught, had I think a mental problem and so was very aggressive, so when I went around in the classroom checking if their work is done and shouting at those who did not, he shouted back. And the best way to handle that was to ignore the child at that moment, I then call the child aside. If they don't respond, then you engage the parents and the head of the school and try to find out what the problem is. Sometimes it's not maybe about the child being disrespectful, like in this case the problem was mental and teachers should understand and know how to handle these things."*

The respondents also mentioned that they have challenges with learners who are lazy and not willing to participate in classroom discussions, but are destructive, and those who gamble during breaks and lunch time. Learners who have tendencies to copy another learner's work and then denying this when confronted.

Although sometimes it is difficult to manage these challenges, respondents say they are able to keep their cool, treat learners with respect and encourage them continuously, and also treat them with some strictness and love.

The respondents believe that teachers should understand and know how to handle challenges in the classroom environment. Chermiss et al., (1998), sums up the above discussion when arguing that teachers can guide their drives to meet an internal standard of excellence.

4.5.2 Definition of a fair teacher

The researcher wanted to establish from the respondents how they define a fair teacher. Three out of the five respondents are of the opinion that a fair teacher is one who treats learners equally, caringly, constantly communicating with learners and always encouraging them. They believe that teachers should be conscious of treating learners the same although it is not always easy. The respondents also mentioned that a fair teacher should be a role model, build trust and connect with the child as an individual, more than just a teacher to the student.

Two of the respondents feel that a fair teacher is the one who gives learners second chances; even those who anger and disappoint them.

Natalie stated:

"Giving *children a second chance, even the one that disappoints you and the one that angers you a second chance. Second thing we must know that is that everyone comes in with a story, I come in with my story and each of the learners has a story.*"

The respondents further mentioned that they make learners understand that they are not only their teachers but act as a parent, brother or sister as well. This makes the learners respect them and it becomes easy to control them. Goleman, (1995) supports the above discussion by alluding that teachers should not become barriers for learners to achieve, by not being able to acknowledge that learners are different and have their own views, and therefore teachers must learn to listen while developing self-awareness.

4.5.3 Classroom management strategies

In this aspect the researcher wanted to establish whether the respondents can explain some of their classroom management strategies. Four of the respondents were of the view that they start by highlighting the bigger picture of why they (learners) are studying mathematics and how it will open doors for them.

The respondents also mentioned that they encourage learners to practise more and more in order to better understand mathematics, and that they are always strict in demanding attention in class all the time and making learners aware of what they are allowed to do. Other respondents indicated that by making rules very clear and restrictive and not compromising, classroom standards assist a lot in getting learners to improve their performance.

They felt that the use of mathematics as a subject to control the behaviour of learners, is part of the classroom management strategy. If learners do not perform well in the subject, they may not be admitted to certain university programmes. The respondents also indicated that by addressing issues immediately, being professional and encouraging learners to be committed to their education, are some of the classroom management strategies that assist teachers to manage their work. Learners who are not co-operating and who disregard their work, should be encouraged and motivated to take their schoolwork seriously. This may include punishing them to a slight degree.

 Sipho mentioned:

"I am very strict and I demand attention all the time, so uhm I think it's the way sometimes that you carry yourself in class that will make the learners aware of what they are allowed to do, and making rules very clear and sticking to them and not sometimes compromising on your standards, if something is what it is then you must stick to that. "

The participants also mentioned that they encourage their learners to participate in group work and ask questions when they do not understand something. They also mentioned that it is very important to choose class leaders who are reliable; who will make sure that the class is clean and who will be responsive to be taught leadership skills. This assertion is supported by Cherniss et al., (1998) when concluding that emotionally intelligent teachers will have high levels of achievement of learners, together with an effective and supportive structure and culture within the classroom.

4.5.4 Methods of positive feedback used

This question seeks the opinion of the respondents on what method of positive feedback they apply to a learner who does well in a class test. All the respondents mentioned that they congratulate learners for their excellent work and encourage them to work hard to keep on obtaining high marks. They further mentioned that they write notes on the test scripts to motivate them. However, they avoid congratulating them in front of other learners.

To those learners who showed tremendous improvement, they are congratulated in front of the entire class in order to motivate and encourage them. The respondents also mentioned that they put stickers on their test scripts when they have shown improvement from their previous test.

This shows that it is important for teachers to recognise the learners' hard work, the extra effort they put into their school work and overall improvement. Cecelia stated:

"I give them stickers; they love them even though they are old already. So that's a good motivation, so I will try my best to give them a sticker again even when they have just improved form their last test. So I focus on individuals and their performance and so if you improve, you know you can be rewarded for that even though you might just still be on 52 or whatever mark."

Team FME, (2014) concludes the above discussion when stipulating that it is the teacher's responsibility to motivate the learners, to keep their emotions in check and address any unpleasant situations that can arise in the classroom.

4.5.5 Confronting learners asking disturbing questions

In this aspect the researcher wanted the views of the respondents on how they deal with learners who ask disturbing questions, especially when it is obvious from the teacher's facial expression that their comments are inappropriate. Three of the respondents mentioned that they will not tolerate such questions in class. They will not respond, and their facial expression will show that these kinds of remarks will not be tolerated in the classroom. They also indicated that they will tell the learner that it is not the time and place for such questions to be asked. Peter stated:

"I will go back to telling them this is not the time and place, now we need to work now, we can do this afterwards if it's that important."

The other two respondents were of the view that in their classes there are no "bad questions" because every question has a reason and that there are no useless questions because answering that question might unlock doors for the learner.

They also indicated that if they feel that the question is out of order, they will inquire from the learner what they mean and what has prompted the question. It is possible that the question may be hiding an underlying problem with the learner. The respondents further mentioned that friends often understand what their fellow friends or classmates are trying to say.

Thapelo mentioned:

"*In my class there is no bad question, every question has a reason, there is no useless question because answering that might unlock many doors to this particular child so practically we don't look at any question as useless or out of order. If I feel the question is out of order I need to find out what you mean by that question and where does it come from, maybe behind the question there is a real problem.* "

The above is supported by Chapman, (2016) when he indicates that a teacher with a high emotional intelligent competency can communicate goals and visions clearly, deal with conflict, persuade and lead learners by knowing what to say and how to say it.

4.6 THE ROLE OF RELATIONSHIP-MANAGEMENT

What role does relationship management play in the classroom management practices of mathematics teachers?

4.6.1 Being an inspirational leader in managing their classroom

The purpose of this question was for the researcher to get the views of the respondents on how as inspirational leaders, they could apply this concept in managing their classrooms.

Four out of the five respondents are of the view that as a class teacher, they inspire learners by encouraging them to give more effort in all the subjects that they are doing. They further mentioned that learners must know that maintaining a good average mark means that they must do well in almost all the subjects for which they are registered. The respondents further added that paying attention to a learner's overall performance in all instances, having an open relationship, co-operation, consistency and being a role model equally to all learners, are some of the qualities an inspirational leader should possess in managing their classrooms.

This means that learners become "extended" parts of a teacher, in that when they enjoy and obtain good average marks, they are motivated to teach other learners and inspire them to take ownership. A teacher's ability induces the need and desire from the learners to make every effort towards a convincing vision of the future that embraces the school's values, mission and vision (National Research Council Canada, 2015).

Thapelo stated:

"*As a class teacher I do not look at the subject I teach only, I look at all the subjects that my kids are doing, so if you did not do your geography homework, then it is my problem and I am going to sit down with you and say passing is not only about passing my subject, it's about all the subjects. Maintaining a good average means you must do well in almost all the subjects, it's looking into such things.*"

One of the respondents highlighted the fact that they put a lot of energy into mathematics and other subjects the learners do, how they treat learners with dignity and inspire them to enjoy all of their subjects. The respondent stated:

"*I regard myself as having one (inspiration), because of the way that I love my subject, I like to bring lot of energy and the way that I treat them, I treat them with dignity. I have a lot of students who are now maths teachers and I won't say it's solely because of me but maybe it might be of the feeling they got when they were in my class.* "

4.6.2 Promoting values of trust and respect in teacher-learner relationship

The purpose of this question was for the researcher to seek opinions of the respondents on how they promote values such as trust and respect, as essential components to a positive teacher-learner relationship in the classroom. All five the respondents mentioned that they treat learners with respect, by always addressing them correctly and in a positive manner. This includes encouraging them to be considerate towards each other and their teacher. The respondents feel that giving learners autonomy in the classroom, creating trust, openness and empathy, promotes values of trust and respect between a teacher and a learner. This will help a teacher to focus on a learner's future and connect with them as individuals, and address issues immediately by constantly communicating with them.

They further indicated that it is not helpful to get negative and angry or to make a scene if homework is not done, as there may be valid personal reasons for this happening at times. Should this occur regularly however, it does need to be dealt with. This means that they do not judge learners on solitary incidents. Peter mentioned:

"*Trusting them to work hard and not always checking on them. Tell them this is for your own good. As a teacher you must treat children with respect, you need to always address them correctly and in a positive manner. Don't get negative and angry, if a home work is not done, don't make a scene about it, perhaps there is a very good personal reason for that. So don't judge any children on solitary incidents.*"

The participants also mentioned that they teach male learners not to touch fellow female learners in an inappropriate manner but to show respect and make sure that no one is stealing from each other.

This means that maintaining respect towards each other as learners and teachers, in and outside the classroom, will instil a culture of self-respect and trust especially amongst young people.

4.6.3 Team work as an important skill in classroom management

With this question the researcher wanted the opinions of the respondents on whether team work is an important skill in classroom management. The respondents were of the view that they encourage team work and they believe that learners can learn something while teaching somebody. The respondents mentioned that through team work they are able to notice those learners who are failing and focus more on them. The respondents believe that with team work, if one student is disruptive they put the whole team at a disadvantage, and if learners all work together they all have an equal opportunity to learn. The respondents feel that giving learners responsibilities, encouraging co-operation and consideration for others, and allowing learners to develop individually creates team work in the classroom.

Peter mentioned:

"*Yeah. You need the support of other students. They are 30 and I am one and so I need their cooperation and we are working as a team to achieve the goal of being the best they can, it's not them alone, it is me, them, their friends. So if one student is disruptive they putting the whole team at a disadvantage. So we all need to work together so that everyone might have the same opportunity to learn.*"

The other important fact which came out strongly from the respondents was that team work is very important because they pair learners according to those who are good and those who are not, so that they are able to assist each other. Chapman (2016) concludes the above discussion by indicating that a good understanding of one's emotional intelligence stance will increase effectiveness in the classroom environment, where everyone will feel welcome and free to voice their opinions.

4.6.4 Enforcement of values driving classroom rules

This question was investigating the opinions of the respondents on how they enforce values that drive classroom rules to learners who often get carried away and cross boundaries.

Three of the respondents stated that they do not have written rules but have instilled values that make the learners realise their mistake and self-correct. They further alluded to the fact that those learners who cross boundaries are dealt with immediately, so that they do not repeat such practises in the classroom. Therefore, mutual respect and self-discipline emerge as a factor in controlling the classroom situation. Some of the respondents mentioned the fact that some learners are able to respect each other in their classrooms. However, there are those who act disrespectfully, and they are dealt with by having class representatives write their names down to ensure that they are dealt with immediately. The respondents highlighted the fact that learners must be given the power to make choices in the classroom, with teachers monitoring fully.

Cecelia stated:

"I tell them to respect me, and each other. They must not talk while am teaching and if they break those rules, class rep' notes their names and we punish them after school and they should not swear."

This is supported by Curry, (2009) by alluding that teachers must have the emotional ability to carry out day to day duties.

4.6.5 Strategies applied to encourage group work

In this question the researcher wanted the views of the respondents on which strategies they apply to encourage group work amongst learners. Most of the respondents are of the view that it is very important to group learners who are very good in maths with those who struggle a lot with the subject. Natalie mentioned:

"I encourage group work; I like to say you can learn something while teaching somebody. So while a student is teaching I will be there listening so that other students can come and ask me if it's correct. So when they do class work I don't like it to be silent, I like them to ask each other. I like them working together. "

In addition to that, the respondents mentioned that they pair learners according to a class list, to avoid conflicts and resistance, and this helps learners to adapt to group dynamics and enjoy learning from each other. Some of the respondents mentioned that the improvements in classes where they have introduced the teams, are producing good results, especially in mathematics, and learners are happy to continue with mathematics to tertiary education. Thus according to Chapman, (2016), good teachers demand emotional strength and behavioural characteristics.

4.7 CONCLUSION

Data was collected through a qualitative approach by unstructured interviews, with five participants from high schools in Pretoria, Gauteng.

Participants noted that they understood their strengths and weaknesses, which enabled them to manage their classrooms and make certain that positive learning and teaching takes place.

It is recommended that teachers attend monthly EI training in order to improve their current level of EI. Through this training, they will be able to identify problems in students and assist them accordingly. Furthermore, they will be able to manage their classrooms by sustaining relationships that are there through trust and open communication. Teacher and learner relationships seldom end when students leave school. In many cases, some teachers continue their relationships as they keep supporting and encouraging their students throughout their lives.

CHAPTER FIVE: FINDINGS

5.1 INTRODUCTION

This chapter outlines and discusses the findings of the study from the analysed data that answered the research questions in chapter 1. The study focused on the role of emotional intelligence in the teaching classroom practice of high school mathematics teachers.

According to Reynolds (2011) the Emotional Intelligence (EI) competencies of teachers or the lack thereof, is an important factor that can contribute to the success or failure of the school. Emotionally Intelligent, competent teachers have a significant positive impact and are conducive to a positive learning and teaching environment, where everyone is free to socialise physically and emotionally through sport and extra-curricular activities, creating healthy and sustainable relationships.

EI can be defined as a set of capabilities that allows teachers to do extremely well in working associations, and also in the management of his or her classroom (Sutton & Wheatly, 2003). Miranda (2011) explained that there are significant numbers of teachers that fail to support and motivate their learners. She adds the importance of EI in such a situation; EI includes motivation, having empathy, being able to understand that all learners are individuals and therefore display different sets of emotions. It is the responsibility of the teacher to create classrooms that are conducive to learning and teaching, by recognising the learner's needs, strengths and weaknesses (Ramana, 2013).

EI is not only about the teachers; it affects their relationship with learners, colleagues, parents and the community at large. It is about the ability to sustain these relationships while also considering their emotions. The teacher should be highly positive, motivated and understanding. He or she should respect and listen to the learner's feelings and opinions to create a classroom that allows the teaching and learning process to support the learner's socio-emotional development (Sutton & Wheatly, 2003). This is about recognising their needs and feelings even before they can share them. With the lack of such a teacher there will never be productivity among the learners. Goleman (2005:36) refers to EI as "character," and continues to explain it as "academic intelligence that offers virtually no preparation for the turmoil or opportunity brought about by life's ups and downs". Teachers are confronted with the overwhelming duty of being considerate and motivating each person as an individual. This can be achieved by teachers who have great knowledge of EI, and are capable of inspiring their learners through motivation and respect. Therefore, the research questions that the researcher wanted to answer were the following:

5.2 RESEARCH QUESTIONS

5.2.1 Main research question

What role does emotional intelligence play in the classroom management practices of high performing mathematics teachers in Gauteng?

5.2.2 Sub-questions

- What role does self-awareness play in the classroom management practices of mathematics teachers?
- What role does self-management play in the classroom management practices of mathematics teachers?
- What role does social awareness play in the classroom management practices of mathematics teachers?
- What role does relationship management play in the classroom management practices of mathematics teachers?

5.3 FINDINGS OF THE RESEARCH

The aim of this study was to investigate the role of emotional intelligence in classroom management strategies of high performing mathematics teachers in Gauteng. Emotional intelligence is an important aspect of a mathematics teacher not only is it important in the teacher-student relationship but also important for the success of the student. Naqvi et al. (2016) states that if there is an application of negative emotions within the classroom from the teacher, the student will be inhibited from learning and performing well, as a positive classroom environment is highly linked to a student's achievement as it tends to address the student's needs (Curry, 2009).

This study discovered that teacher's weaknesses and strengths play a vital role in the management of a classroom. There are certain characteristics of learners such as: resisting discipline, provoking teachers, distracting other learners and lying about having done their school work, that have an impact on the emotions of the teacher. Teachers experience emotions such as self-blame and disappointment when receiving negative feedback from their head of department about how their class is performing, and these emotions heavily influence how the teacher decides to deal with the situation. The study further discovered that teachers strive to in-still values such as self-respect, honesty, communication skills, hard work and a culture of learning which in turn helps in managing their classrooms. Teachers are continuously faced by challenging situations in the classroom such as having learners who are lazy, talk while the teacher is teaching and insubordination which tests their emotional intelligence. However, most

teachers keep calm, and are able to deal with the situation in an amicable manner. It was also discovered that teachers valued team-work, encouraged it by occasionally pairing learners (those excelling in mathematics and those who are not excelling) together, and regarded it as very important in managing their own classroom and in the improvement of those not performing well in mathematics.

The following discuss these findings in detail. Even though the teachers' emotional intelligence allows them to manage their classrooms adequately, according to these findings there are gaps. Therefore, recommendations follow after the discussion of the findings.

5.3.1 Content knowledge, discipline and tracking progress

This study established that mathematics teachers in Gauteng province, South Africa, have both strengths and weaknesses in their interaction with students in schools. As their strengths, the majority of the teachers revealed that they have good content knowledge when coming to their subject. They are exceptionally able in getting down to a learner's level and explaining whatever concepts might be discussed at that point. This is a very important strength because teachers who do not have good content knowledge or who are not qualified to teach, but are teaching, pose a huge risk to the learner's future. Naqvi et al. (2016) states that teachers have the key responsibility of ensuring that the information provided to the students is properly understood by them, to follow the curriculum, maintain classroom discipline and manage interaction with students. The teachers further mentioned that they are able to discipline their learners. As their weakness, teachers explained that they struggle with tracking the learner's progress through homework as they do not usually mark it.

This finding reveals that these teachers are indeed aware of themselves, who they are, and what their strengths and weaknesses are. Curry (2009) states that a classroom teacher should maintain classroom order and avoid chaos by knowing their strengths and weaknesses. Jennings and Greenberg (2009) concur by asserting that emotionally intelligent teachers have sufficient self-awareness to recognise their weaknesses and strengths in controlling and managing their emotions.

5.3.2 Resistance to discipline, distracting other learners and lying about having done schoolwork

The findings reveal that the characteristics of learners that make teachers angry, include learners who resist being disciplined and enjoy provoking teachers, those distracting other learners and lying about doing their schoolwork. It was also discovered that although teachers do shout at learners, they prefer to do it privately because some believed that shouting at a learner in front

of the whole classroom could elicit a negative reaction and the learner might retaliate. Some teachers felt that there are times when acting out or disrespecting a teacher, could be a symptom of an underlying personal problem with which the child is dealing. When a learner acts out, it was also discovered that teachers try hard to win their learners' trust and build a good relationship with them.

Jennings and Greenberg (2009), state that in a diverse classroom, a teacher should learn to be empathetic, authoritative and proactive by creating caring relationships to motivate learners to improve their performance. In such a classroom, there is openness and flexibility. This means that teachers do know the importance of creating a good relationship, one filled with trust between them and the learners and they take responsibility for creating that relationship. Teachers should be trusted by their learners, because learners that have a trusting relationship with their teachers are more prone to open communication and willing to discuss their emotions, which in turn will assist the teacher to manage their disruptive behaviour. Teachers should also acknowledge the diversity of students (Russell, 2008). This however, is not easy as it may not always be sustainable, which means that teachers may spend most of their time trying to create trust and paying little attention to the core tasks of mathematics as a subject.

5.3.3 Self-blame and disappointment

It was discovered that when teachers receive negative feedback about the performance of their learners, they tend to blame themselves and have feelings of disappointment. These findings revealed that when teachers receive negative feedback from their superior (head of department) they blame themselves for not taking their work seriously and thereby underperforming, and therefore seek help in order to improve their work.

Jackson, Simoncini and Davidson (2013) state that teachers enter their classroom with high hopes for their learners and themselves, and during their first five years of teaching teachers often start to question their quality of teaching and the ability of their learners. Teachers then fear that learners may not perform to their full potential due to their mistakes and this in turn affects their emotions negatively. Naqvi et al. (2016) explains this by stating that teachers have the key responsibility of ensuring that the information provided to the students is properly understood by them.

Teachers also have the capacity to improve students' progress by being committed, enthusiastic and by ensuring that the classroom is conducive to learning (Leithwood, 2008). While this might be true, teachers however, need to realise and always keep in mind, that the success of the students is a result of a combined effort between themselves and the learners.

5.3.4 Honesty, self-respect and hard work as values instilled by teachers

One of the domains EI stresses, is that of creating bonds. This is necessary for teachers because through bonds they can understand other people; in this case their students, by providing feedback, through open communication strategies (verbal and non-verbal) (Tok et al., 2010). It is important to also keep in mind that the teacher's emotional state will decide which values are present in the classroom. This study discovered that teachers want to instil a culture of learning among their students. They further explained that they want to instil values such as honesty and open communication.

For one teacher, honesty is very important, and he always tries to be honest with his learners. He feels that if learners are not honest first with themselves, and then with him as their teacher, it is a problem, because that might indicate that learners are not able to be open when it comes to communicating with him as their teacher.

Jackson, Simoncini and Davidson (2013) state that a pleasant classroom is every teacher's desire and effective teachers know that to achieve this, there should be clear rules and expectations set out to manage students' behaviour. The teachers revealed that these values are the same values that they use to govern and guide their classrooms. The teachers further indicated that they instil values such as self-respect and hard work which are vital in managing the classroom.

5.3.5 Insubordination from learners, talking without permission and laziness

It was discovered that there are numerous challenges that teachers are constantly faced with in the classroom. Although the majority of the teachers reported that they do not have formal written rules, they however, do have rules. Goleman (1995) stipulates that just as in any workplace or environment with a group of people, there should be clear and simple established rules as rules are there to keep order and peace. Amongst the challenges named, it was discovered that insubordination and talking while the teacher is talking were prevalent.

Tok et al. (2013) is of the opinion, that at times a learner's disruptive behaviour may be a result of underlying, and possibly hidden emotions, and teachers who are emotionally intelligent will not be too quick to punish the learner, but rather try to understand the root cause of the disruptive behaviour. Teachers concur with Tok et al. (2013) as they reported that when this kind of situation occurs in their classroom they are not quick to dismiss or scold the student, but rather try to understand where this behaviour is stemming from. They would call the student aside and discipline them but not in front of other students.

The study further discovered that there are teachers who have learners who are sluggish, not eager to participate in classroom discussions and do not seem interested in learning mathematics. They copy another learner's work and then deny this when confronted. Teachers deal with diverse students, who experience diverse emotions, who have diverse problems socially, emotionally as well as family problems. It is up to the teacher to balance their individual emotions together with the students'. This will only occur if they utilise their relevant emotional skills to take control of the classroom, for learning to take place (Hussun, 2016).

In many instances, emotions can create disruptive classrooms (student's outburst, arguments, failure of following rules and simply students who cannot control their emotions). It is therefore essential that teachers recognise that each student is different and might have different views and opinions about certain issues. To control such occurrences, respect should be the basis of any classroom (Foster, 2011).

5.3.6 Team work encouraged by teachers

It was discovered that teachers do encourage team work because they believe that students learn something when they teach and engage with their fellow learners. Through team work, teachers mentioned that they are able to notice those students who are actually struggling and give them additional support. As a way of encouraging team work and helping those who are not that competent in mathematics, teachers pair students who are good in mathematics and those who are not (Sofroniou & Poutos, 2016).

5.4 CONCLUSION

Teachers try using all means to be supportive, in order to see their students, achieve. They try to build positive relations, others play positive roles in the lives of their students by modelling behaviour and teaching students about values and morals. Jennings and Greenberg (2009), mention that diverse classrooms should encourage empathetic and caring learning atmospheres, as teachers also understand that students are different in nature as they come from different homes with different cultures. By acknowledging this, teachers will be able to support students according to their needs (Hussun, 2016).

CHAPTER SIX: RECOMMENDATIONS AND CONCLUSION

6.1 INTRODUCTION

The following chapter will be providing the recommendations of the findings discussed in chapter five, provide a summary of the study and end by providing concluding remarks.

6.2 RESISTANCE TO DISCIPLINE IN MATHEMATICS CLASSES

Learners who make teachers angry classrooms have proven to impact heavily on teachers' emotions. Hwang (2006) states that an emotionally intelligent teacher will have an open policy where he or she can openly discuss emotions in the classroom. The results of this analysis provided evidence that there is a serious gap between teachers and learners which needs to be reduced in terms of anger management. The findings were able to highlight the characteristics of ill-disciplined learners and the extent to which teachers agreed about common issues which make them angry in classrooms. The teachers experienced resistance from learners who distract other learners, and who lie about their schoolwork and provoke teachers in different ways.

An important step in minimising teachers' challenges is to present the situation to all stakeholders which include principals, heads of departments, subject advisors, student leadership, parent and school governing bodies. It is therefore recommended that teachers must involve different stakeholders in maintaining classroom discipline; ensuring that disciplinary policies are implemented with immediate effect and insisting that learners adhere to them.

They should have seniors (e.g. prefects) to create disciplinary policy awareness so that learners become familiar with such policies. Jennings and Greenberg (2009) explain that teachers will reap what they sow in the learners by setting examples of behaviours and creating a welcoming, supportive and encouraging environment for students. This means that teachers also need to practise values such as respect, empathy and understanding towards their learners which are vital components when disciplining them. Treating the learners in this manner sets a standard for the students on how they also need to treat the teacher.

It is also recommended that schools consider hiring educational psychologists, especially schools in townships, who will not only provide career guidance to the learners, but also psychosocial support. It is possible that the problematic behaviour that the learners display might be symptomatic of a larger problem that the teacher might not otherwise discover, and this is where the educational psychologist might help. Subject advisors, parents and school governing bodies should be more involved when it comes to disciplinary matters. The latter will only happen when

teachers recognise and are always aware of a learner's emotions and hopes. This awareness can be a basis of inspiration (Barling, Slater & Kelloway, 2000).

6.3 SELF-BLAME AND DISAPPOINTMENT

Findings of the study suggest that teachers acknowledge mistakes when they receive negative feedback from their superiors and thus they do not defend themselves or have excuses. The findings also suggest that when teachers receive negative feedback, they start blaming themselves and feeling disappointed for failing learners.

The findings suggest that teachers blame themselves for not taking their work seriously and thereby underperforming, and therefore seek help in order to improve their work. Abraham and Scaria (2017) state that emotional intelligence is a self-motivated quality that requires proactive and self-reflective practices; teachers reflecting on their performance after receiving negative feedback could be indicative of a certain level of emotional intelligence. These findings suggest that teachers fear that learners may not perform to their potential due to their mistakes, and this in turn affects their emotions negatively.

Naqvi et al. (2016) states that teachers have the key responsibility of ensuring that the information provided to the students is properly understood by them. It is therefore recommended that teachers must come up with strategies to improve where they are underperforming, and implement them constantly, to avoid the repeat of negative feedback, and also to actively encourage learners to take responsibility.

6.4 HONESTY, SELF-RESPECT AND HARD WORK AS VALUES INSTILLED BY TEACHERS

The findings suggest that learners have lost their values and hence they behave badly in classrooms, and therefore teachers want to instil the culture of learning amongst learners. The findings also suggest that learners need certain values in order to change their behaviours. The values that teachers want to instil include self-respect, honesty, communication skills and hard work.

The findings suggest that without these values, the learners might not progress in their studies. Watts (2011) states, those teachers should be trusted by their students, and in turn students that have a trusting relationship with their teacher are more prone to open communication and openly discussing their emotions and managing disruptive behaviour.

It is therefore recommended that teachers must have proper programmes in place, in order to introduce or instil these values in students. Parents must also work together with teachers in instilling these values in their children, as they influence how the classroom is managed and

teachers must be open and transparent with their learners in order to assist them. It is also recommended that teachers be patient and accommodative in order to ensure that students are able to control their emotions. The mathematics head of department must come up with support structures that will enhance teachers' performance and improve their classroom management strategies.

6.5 IDLENESS AND INABILITY TO FOLLOW RULES

The study further established that there are teachers who have learners who are lazy, not willing to participate in classroom discussions and do not seem interested in learning mathematics. They copy another learner's work and then deny this when confronted. Despite all these challenges, teachers are able to keep their cool, treat learners with respect and encourage them continuously.

The study established that teachers are ensuring that rules are very clear and restrictive and by not compromising classroom standards, assist greatly in getting learners to improve on their performance. While it is good that teachers start by explaining the importance of mathematics to learners, and how the subject can possibly open doors for them, encourage them to practise more and more, and not to compromise classroom standards, this is not enough, especially if the teachers are seeking to minimise classroom challenges and improve each and every learner's performance in mathematics. Abraham and Scaria (2017) reiterate by stating that teachers well-found with emotional intelligence are strategically able to manage change and manage conflicts.

Leithwood (2008) states that teachers have the capacity to improve students' progress by being committed, enthusiastic and by setting up the classroom to be conducive to learning. Therefore, it is recommended that teachers make mathematics a subject that is fun to learn. For example, covering classroom walls with colourful posters, highlighting all the main points of the syllabus in words and in pictures, because much learning is subconscious, Dryden and Vos (2005) further explain this by stipulating that learners will absorb the learning content even without consciously thinking about it, to be creative, be able to move processes and patterns around independently.

Let the classroom atmosphere be welcoming and non-threatening. It should also be made a rule by teachers during the year before test weeks that mathematics class tests be written every week. This will not only track learners' progress but will also ensure that learners know that they need to constantly, actively engage with their work, in order for them to progress.

6.6 LIMITATION OF THE STUDY

The limitation of this study is that the findings cannot be generalised to a broader population in South African classrooms of mathematics teachers. This was an MEd dissertation that was executed by means of a research project. The purpose was to understand how emotional intelligence influences the classroom management of mathematics teachers.

6.7 SUMMARY OF THE RESEARCH STUDY

This research study aimed at investigating the role of emotional intelligence in classroom management strategies of high performing mathematics teachers in Gauteng. As stated in chapter one, the research indicated that if a teacher is emotionally intelligent, there will be better job gratification and added progression among learners than when teachers require the competency of EI (Curry, 2009).

The reason the researcher became interested in this study, is because there has not been much research done that focuses on emotional intelligence and its influence in the classroom management of mathematics teachers who are high performing in Gauteng. The researcher was curious to understand the impact of emotional intelligence in the classroom management of mathematics teachers.

This study was qualitative in nature and data was collected by means of a semi-structured interview. Five participants from five schools in Pretoria, Gauteng formed the sample of this study. Data was analysed by means of content analysis, which involved analysing qualitative data through summaries and data interpretation.

This study discovered, as discussed in chapter five, that a teacher's weaknesses and strengths play a vital role in the management of a classroom. There are certain characteristics of learners such as resistance to discipline, provoking teachers, distracting other learners and lying about having done their schoolwork that have an impact on the emotions of the teacher. Teachers experience emotions such as self-blame and disappointment when receiving negative feedback from their head of department about how their class is performing and these emotions heavily influence how the teacher decides to deal with the situation.

The study further discovered that teachers strive to instil values such as self-respect, honesty, communication skills, hard work and a culture of learning which in turn helps in managing their classrooms. Teachers are continuously faced with challenging situations in the classroom such as having learners who are lazy, talking while the teacher is teaching and insubordination which

tests their emotional intelligence. However, most keep calm, and are able to deal with the situation in an amicable manner.

It was also discovered that teachers valued team-work, encouraged it by occasionally pairing learners (those excelling in mathematics and those who are not excelling) and regarded it as very important in managing their own classroom and in the improvement of those not performing well in mathematics.

The recommendations therefore are:

- Teachers can create an open a communication platform where everyone in the classroom can openly discuss their feelings in a respectable manner. However, if teachers are still facing resistance they can involve different stakeholders in maintaining classroom discipline and in ensuring that disciplinary policies are implemented with immediate effect to ensure that learners adhere to it. They should have seniors (e.g. prefects) to create disciplinary policy awareness so that learners become familiar with such policies (Evertson & Weinstein, 2006).

- Schools should consider hiring educational psychologists, especially schools in townships, who will not only provide career guidance to the learners but also psychosocial support.

- Teachers must come up with strategies to improve where they are underperforming, and implement them constantly in order to avoid the repeat of negative feedback and also to actively encourage learners to take responsibility (Jennings & Greenberg, 2009).

- Teachers must have proper programmes in place to introduce or instil values in students. Parents must also work together with teachers to instil these values in their children as they influence how the classroom is managed. Teachers must be open and transparent with their learners in order to assist them.

- Teachers should make mathematics a subject that is fun to learn. For example, covering classroom walls with colourful posters highlighting all the main points of the syllabus.

- More team-building exercises must be organised in order to create the atmosphere of learning and sharing ideas with one another. This can include celebrating birthdays or achieving high marks during mid-term exams (Dryden & Vos, 2005).

6.8 CONCLUDING REMARKS

Emotional intelligence is critical for teacher and learner relationships in and outside of the classroom. Schools need to be careful and sensitive in dealing with learners given the fact that they are from various backgrounds, cultures and religions. So, it is important to achieve common

goals by giving learners a sense of being, welcome and belonging. The challenge of building trust, recognition and team spirit in the learning environment is essential and needs to be managed carefully. The schools must accept the realities of managing emotional intelligence. It is important for teachers to conduct themselves in a professional manner when dealing with learners. It is also important that they avoid being emotional and moody in classrooms, and they must understand that they will always be provoked in their classrooms.

The rules they have in place as an attempt to regulate behaviour, do not surpass the departmental rules, and it is therefore important that they keep cool heads in every situation they face in schools.

It is recommended that other researchers pursue and explore the topic further to fill the gaps and constraints that are important and significant to the study.

REFERENCE LIST

Abraham J., & Scaria, J. (2017). *Emotional Intelligence: The Context for Successful Nursing Leadership.* A Literature Review. Nurse Care Open Access Journal. 2(6).

Akar, H., Erden, F.T., Tor, D., & Sahin, I.K. (2010). Study on Teachers' Classroom Management Approaches and Experiences. *Elementary Education Online.* 9 (2), 792-806.

Akomolafe, M. & Olatomide, O.O. (2013). Job Satisfaction and Emotional Intelligence as Predictors of Organizational Commitment of Secondary School Teachers. *Academic Journal Article. 21*(2).

Aritzeta, A., Balluerka, N., Gorostiaga, A., Alonso-Arbiol, I., Haranburu, M., & Gartzia, L. (2016). Classroom emotional intelligence and its relationship with school performance. *European Journal of Education and Psychology.* 9 (1), 1-9.

Bardach, R. (2008). Leading schools with emotional intelligence: A study of the degree of association between middle school teachers emotional intelligence and school success.

Barling, J. S., Slater, T., & Kelloway, E.K. (2000). Transformational teachersship and emotional intelligence: and explorative study. *Teachersship and Organizational Development Journal.*

Bar-On, R. (1997). *The Emotional Intelligence Inventory (EQ-I): Technical manual.*

Bar-On, R. (2000). Emotional and Social Intelligence: Insights from the Emotional Qoutient Inventory. In R. Bar-On, *The Handbook of Emotional Intelligence.* San Francisco: Jossey-Bass.

Bar-On, R. (2006). The Bar-On model of emotional-social inelligence (ESI). *Pscicothema*, 13-25.

Bogdan, R. C. & Biklen, S.K. (2003). *Qualitative research for education: An introduction to theory and methods.* Boston: Allyn and Bacon, Inc.

Bogdan, R. C. & Biklen, S.K. (1982). *Qualitative Research for Education: An introduction to theory and methods.* (Third Edition). Boston: Allyn and Bacon, Inc.

Bolderston, A. (2012). Conducting a research interview. *Journal of Medical Imaging and Radiation. 43* (66-76).

Brackett, M. A., & Katalak, N. A. (2006). Emotional intelligence in the classroom: Skill-based training for teachers and students. In Ciarrochi, J., & Mayer, J.D. (Eds.), *Improving emotional intelligence: A practitioner's guide*. (pp. 1-27). New York: Psychology Press/Taylor & Francis.

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, 88-103.

Brophy, J. E. (2006). History of research in classroom management. In C.M. Evertson & C.S. Weinstein (Eds), *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 3-43). Mahwah, NJ: Lawrence Erlbaum.

Brophy, J. E., & Putnam, J., G. (1978). Classroom Management in the Elementary Grades. *Institute for Research on Teaching. 1* (1), 5-88.

Bunniss, S., & Kelly, D.R. (2010). Research paradigms in medical education research. *Med Educ.* 44 (4), 358-366.

Burgess, R. (1991). Keeping Field notes. In R. Burgess, & R. Burgess (Ed.), *Field Research: A sourcebook and Field Manual.* (pp. 191-194). London: Routledge.

Burnard, P., Gill, P., Stewart, K., Treasure, E., and Chadwick, B. (2008). Analysing and presenting qualitative data. *British Dental Journal.*

Chapman, A. (2016). Teachersship: Teachersship development methods and tips. Retrieved from <http://www.BussinesBalls.com>

Cherniss, C., Goleman, D. & Emmerling, R. (1998). Bringing emotional intelligence to the workplace. In Rugers, NJ; *Consortium for Research on Emotional Intelligence in Organizations.* Retrieved from www.eiconsortium.org/reports.

Chhabra, B. (2010). Role of Emotional Intelligence in Teaching: Emotional Intelligence and Leadership. In: Malekar, S (Ed.) *Better Work and Learning Environment.* India: Serials Publications Pvt. Ltd. 318-322.

Chowdhury, M. F. (2014). Interpretivism in Aiding Our Understanding of the Contemporary Social World. *Open Journal of Philosophy.* 4, 432-438.

 Cohen, D., & Crabtree, B. (2006). *Qualitative Research Guidelines Project.* Retrieved from http://www.qualres.org/HomeSemi-3629.html.

Corbin, J., & Strauss, A. (2015). Basics of Qualitative Research. Thousand Oaks, CA: Sage.456.

Creswell, J. W. (2013). Qualitative Inquiry & Research Design: Choosing among Five Approaches 3rd ed. Thousand Oaks, CA: Sage. 448.

Creswell, J.W. (2007). *Qualitative inquiry and research design: Choosing among five approaches.* 2nd ed. Thousand Oaks, CA: Sage. 395.

Creswell, J.W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches.* United States of America: University of Nebrska, Lincoln.

Curry, C. (2009). *Correlation of Emotional Intelligence of school teacherss to perceptions of school climate as percieved by teachers.* Indiana University of Pennsylvania, United States- Pennsylvania.

Dolev, N., Leshem, S. (2016). Teacher's Emotional Intelligence: The Impact of Training. *International Journal of Emotional Education.* 8 (1), 75-94.

Downey, L. A., Mountstephen, J., Lloyd, J., Hansen, B., & Stough, C. (2008). Emotional Intelligence and scholastic achievement in Australian adolescents. *Australian Journal of Psychology*, 10-17.

Dryden, G., & Vos, J. (2005). *The New Learning Revolution*. 3rd ed. United Kingdom: A & C Black. 544.

Dunbar, B. (2004). Anger Management: A Holistic Approach. *American Psychiatric Nurses Association*. 10 (1), 16-23.

Elliot, R., & Timulak, L. (2005). Descriptive and interpretive approaches to qualitative research. In: Miles, J., & Gilbert, P. *A handbook of research methods for clinical and health psychology*. New York: Oxford University Press. 147-159.

Evertson, C. M., & Weinstein, C. S. (2006). *Handbook of classroom management: Research, Practice and Contemporary issues.* (Eds), Mahwah, NJ: Erlbaum.

Fatt, J. P. T. (2002). Emotional intelligence: for human resource managers. *Management Research News*. *25*(11), 57-74.

Flyvbjerd, B. (2006). Five Misunderstandings About Case Study Research. *Qualitative Inquiry*. *12*(2), 219-245.

Foster, E.L. (2011). *Implementation of Social Skills Curriculum to reduce Behavioural Problems of African American Boys in Elementary Settings*. United States of America: Xlibris Corporation.

Friedman, I. A. (2006). Classroom Management and Teacher Stress and Burnout. In: Evertson, C.M., & Weinstein, C.S. *A Handbook of Classroom Management: Research, Practice and Contemporary Issues*. Mahwah: NJ: Lawrence Erlbaum Associates. 925-945.

Frye, C. M., & Bennet, R. (2006). Team Emotional Intelligence and Team Interpersonal Process Effectiveness. *American Journal of Business*. 2 (1), 49-58.

Furnham, A., & Petrova, E. (2010). *Body Language in Business: Decoding the Signals*. 1st ed. United Kingdom: Palgrave MacMillan.

Galler, D. (2015). *Emotional Intelligence and Positive Classroom Climate an Exploration of how Outstanding Teachers use Emotional Intelligence to Create Positive Classroom Climates.* Unpublished master's thesis.

Goldkuhl, G. (2012). Pragmatism vs Interpretivism in qualitative information systems research. *European Journal of Information Systems, 21*(2) 135-146.

Goleman, D. (1995). *Emotional Intelligence: Why it can matter more than IQ.* New York: Bantam Books.

Goleman, D. (1998). What Makes Teachers? *Harvard Business Review.*

Goleman, D. (2000). Emotional Intelligence: Issues in paradigm building. In Goleman, D., & Cherniss, C. (Eds.), *The Emotionally Intelligent Workplace: How to Select for, Measure, and Improve Emotional Intelligence in Individuals, Groups and Organizations.* San Francisco, CA: Jossey-Bass.

Goleman, D. (2004). What Makes Teachers? *Harvard Business Review, 82*(1) 82-91.

Goleman, D. (2005a). *Emotional Intelligence: Why it can matter more than IQ.* New York: Bantam Books.

Goleman, D. (2005b) *Social Intelligence: Beyond IQ, Beyond Emotional Intelligence.* 10 ed. New York: Bantam Books.

Goleman, D. (2015) *Emotional Intelligence.* Retrieved from http://www.danielgoleman.info

Goleman, D., Boyatzis, R., & McKee, A. (2002). *Primal Leadership: Realizing the Power of Emotional Intelligence*. Boston: Harvard Business School Press. 305.

Goleman, D., Boyatzis, R., Davidson, R.J., Druskat, V., & Kohlreiser, G (2017). *Building Blocks of Emotional Intelligence*. Florence MA: More Than Sound. 6-18.

Goodwin, W. (2016). Assessing the Link between Emotional Intelligence and Online Student Achievement. Doctor of Education in Educational Leadership. Corpus Christi, Texas.

Hadi, M.A., & Closs, J. (2016). Ensuring rigour and trustworthiness of qualitative research in clinical pharmacy. *International Journal of Clinical Pharmacy*. 38 (3), 641-646.

Hassan, N., Som, R. M., Hamid, N. Z. A., & Azmaniza, A.N. (2015). The Relationship between Emotional Intelligence and Teaching Effectiveness among Lecturers at Universiti Teknologi MARA, Puncak Alam, Malaysia. *International Journal of Social Science and Humanity. 5*(1), 1-5.

Hopkin, M. R. (2011). *Teachersship is a relationship.* Retrieved from http//www.leadonpurpose.org

Hsieh, H. & Shannon, S.E. (2005). Three Approaches to Qualitative content Analysis. *Qualitative Health Research. 15*(9) 1277-1288.

Huitt, W. (2011). Self and self-views. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University.

Hussun, T. (2016). *Understanding Three Key Classroom Management Theories.* Retrieved from http://www.theedadvocate.org/understanding-three-key-classroom-management-theories/.

Hwang, F. F. (2006). *The relationship between emotional intelligence and teaching effectiveness.* Paper presented at the 2nd International conference on youth & Education for the 21L century. Texas A & M University Corpus Christ. May 30 - June 2.

Jackson, C., Simoncini, K., & Davidson, M. (2013). Classroom Profiling Training: Increasing Preservice Teachers' Confidence and Knowledge of Classroom Management Skills. *Australia Journal of Teacher Education*. 38 (8), 30-48.

Jennings, A., & Greenberg, M.T. (2009). The Prosocial Classroom: Teacher Social and Emotional Competence in Relation to Student and Classroom Outcomes. *Review of Educational Research. 79*(1), 491-525.

Jones, T.S. (2000). Emotional Communication in conflict: Essence and Impact. In: Eadie, W., & Nelson, P *The Language of Conflict and Resolution*. Thousand Oaks: SAGE. 81-104.

Jones, V., & Jones, L. (2012). *Comprehensive Classroom Management: Creating Communities of Support and Solving Problems.* 10th ed. London: Pearson. 20-300.

Jones, V., & Jones, L. (2015). *Comprehensive Classroom Management: Creating Communities of Support and Solving Problems.* 11th ed. London: Pearson Education. 432.

Joseph, D.L., & Newman, D. A. (2010). Emotional Intelligence: An Integrative Meta-Analysis and Cascading Model. *Journal of Applied Psychology.* 95 (1), 54 –78.

Joseph, D.L., Jin, J., Newman, D.A., & O'Boyle, E.H. (2015). Why does self-reported emotional intelligence predict job performance? A meta-analytic investigation of mixed EI. *A Journal of Applied Psychology.* 100 (2), 298-342.

Kase, L. (2008). *The Four Components of Emotional Intelligence.* Retrieved from <http://www.pascoaching.typed.com>

Kombo, D., &. Tromp, D.L.A. (2006). *Proposal and thesis writing: An introduction.* Nairobi: Paulines Publications Africa.

Konrad, S., & Gabrijelcic, K. (2014). Importance of Emotional Intelligence in Teachers Professional Development. *Didactica Slovenica.* 29 (2), 3-17.

Korpershoek, H, Harms, T, de Boer, H, van Kuijk, M & Doolaard, S. (2014). Effective classroom management strategies and classroom management programs for educational practice: A meta-analysis of the effects of classroom management strategies and classroom management program. *Research and Evaluation of Educational Effectiveness*, *1*(1), 62.

Lauermann, F. V. (2013). Teacher Responsibility: It's Meaning, Measure, and Educational Implications. Doctor of Philosophy. The University of Michigan. United States of America.

Leithwood, K. (2008) 'Seven Strong claims about Successful Leadership: The Impact of School Leadership on Student Outcomes'. *School Leadership and Management, 28*(1), 27-42.

Lincoln, Y. S., & Guba, E.G. (1985). *Naturalistic Inquiry.* Beverly Hills: Sage Publishers.

Mack, N. Woodsong, A. C., McQueen, K.M., Guest, G., & Namey, C. (2005). Qualitative Reserach Methods: A Data Collector's field Guide. *Family Health International.*

Maree, K. (2007). *First Steps in Research.* Pretoria: Van Schaik Publishers.

Marlow, R. (2015). Teaching Classroom Management: A Potential Health Intervention. *Health Education*, *115*(3), 230-248.

Marphartia, A., Legault, E., Edge, K., & Archer, D. (2010). The Role of teachers in improving learning in Burundi, Malawi, Senegal and Uganda: great expectations, little support. In *The role of teachers in improving learning in Burundi, Malawi, Senegal and Uganda.* ActionAid/Institute of Education: London, UK.

Marzano, R.J., & Marzano, J. S. (2003). The Key to Classroom Management: Building Classroom Relationships. *Educational Leadership*, *61*(1), 6-13.

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey, *Emotional development and emotional intelligence: Implications for Educators.* New York: Basic Books.

Mayer, J. D., Salovey, P., & Caruso, D.R. (2004). Emotional Intelligence: Theory, findings and implications. *Psychology Inquiry*, *(15)*197-215.

Mayer, J.D. & Salovey, P. (1990). Emotional Intelligence: Imagination. *Cognition and Personality*, *9*, 185-211.

McCaslin, M., & Good, T. L., (1996). The informal curriculum. In: Berliner, D.C., & Calfee, R.C. *Handbook of Educational Psychology*. London: Macmillan Library Reference. 622-670.

McGregor, S.L.T., & Murnane, J. A. (2010). Paradigm, methodology and method: Intellectual integrity in consumer scholarship. *International Journal of Consumer Studies*. 34(4), 419-427.

Merriam, S. (1998). *Qualitative Research and Case Study Applications in Education: Revised and Expanded from Case Stusy Research in Education.* United States of America: Josset-Bass.

Miles, R. (2015). Complexity, representation and practice: Case study as method and methodology. *Issues in Educational Research*. 25 (3), 309-318.

Mingers, J. (2001). *Combining IS Research Methods*: Towards a Pluralist Methdology. *Information Systems Research, 12*(3).

Miranda, L. (2011). *The relationship between emotional intelligence and teachersship effectiveness with an emphasis on corporate culture in a consumer goods organization.* Pretoria: University of South Africa.

Miyagamwala, G. (2015). Emotional intelligence and teacher effectiveness- an analysis. *The Business & Management Review, 5*(4), 233-239.

Morin, A. (2011) 'Self-Awareness Part 1: Definition, Measures, Effects, Functions, And Antecedents '. *Social and Personality Psychology Compass, 5*(10) 807-823.

Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counselling psychology. *Journal of Counselling Psychology, 52*(2), 250-260.

MTD Training. (2016). *Emotional Intelligence.* Retrieved from www.bookboon.com

Myers, M., & Klein, H.K. (2011). A set of Princioles for Conducting Critical Reserach in Information Systems. *MIS Quarterly, 35*(1). 17-39.

Naqvi, I.H., Iqbal, M., & Akhtar, S. N. (2016). The Relationship between Emotional Intelligence and Performance of Secondary School Teachers. *Bulletin of Education and Research*. 38 (1), 209-224.

National Research Council Canada. (2015). *Inspirational teachersship: Core Competency.* Retrieved from http//www.nrc-cnrc.gc.ca.

Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence-Based Nursing*. 18(2), 34-5.

Orme, G. (2001). *Emotionally intelligent living*. London: Crown House.

Palys, T. (2008). Purposive sampling. in L. M. (Ed). *The Sage Encyclopedia of Qualitative Research Methods. (vol.2).* Sage: Los Angeles, 697-8.

Pas, E. T., Cash, A. H., O'Brennan, L., Debnam, K. J., & Bradshaw P. (2015). Profiles of classroom behaviour in high schools: associations with teacher behaviour management strategies and classroom composition. *Journal of School Psychology*. 53 (2), 137-148.

Patton, M.Q. (1990). *Qualitative Evaluation and Research Methods.* London: Sage Publishers.

Peters, J.H. (2012). Are They Ready? Final Year Pre-service Teachers' Learning about Managing Student Behaviour. *Australian Journal of Teacher Education*. 37 (9), 18-42.

Petty, N. J., Thomson, O. P., & Stew, G. (2012). Ready for a paradigm shift? Part 1: introducing the philosophy of qualitative research. *Man Ther*. 17 (4), 267-274.

Polit, D., Beck, C.T., and Hungler, B.P. (2001). *Essentials of nursing research: Methods, Appraisal and Utilization.* Philadelphia: Lippnott Williams and Wilkins.

Ponelis, S. R. (2015). Using interpretive qualitative case studies for exploratory research in doctoral studies: A case of Information Systems research in small and medium enterprises. *International Journal of Doctoral Studies.* 10, 535-550.

Poole, I. R., & Evertson, C.M. (2013). Elementary Classroom Management. In: Hattie, J., & Anderman, E. M. *International Guide to Student Achievement*. New York: Routledge.

Potter, G. (2011). *A Qualitative Exploration of new Concepts in support of Good Educational Teachership.* Retrieved from <www.carmineleo.com>

Ramana, T. V. (2013). Emotional Intelligence and Teacher Effectiveness -An Analysis. *Voice of Research*, *2*(2), 18-22.

Reynolds, M. (2011). *An investigation of the Emotional Intelligence Competencies of National Middle Schools to Watch Teachers.*

Ritchie, J. & Lewis, J. (2013). *Qualitative research practice: A guide for social science students and researcher.* New Delhi: Sage. 456.

Ritchie, J., & Lewis, J. (2003). *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. Thousand Oaks: Sage.

Russell, J. (2008). *Emotional Intelligence: Competencies for enhancing your Effectiveness by Building Healthy and Productive Relationships at Work.* Retrieved from www.RussellConsultingInc.com.

Rust, D. A. (2014). Relationship Between the Emotional Intelligence of Teachers and Student Academic Achievement. Degree in Doctor of Education. University of Kentucky. Independence, Kentucky.

Salim, S.S., Nasir, R., Arip, M.A., & Mustafa, M.B. (2012). The Role of Emotional Intelligence on Job Satisfaction among School Teachers. *The Social Science.* 7 (1), 125-129.

Salovey, P., Brackett, M.A., & Mayer, J.D. (2007). *Emotional Intelligence Key Readings on the Mayer and Salovey Model.* New York: Dude Publishing.

Schmoker, M., & Marzano, R.J. (1999). Realizing the promise of standards-based education. *Educational Teachersship*, *56*(6) 17-21.

Schwandt, T. (2007). *The Sage Dictionary of Qualitative Inquiry.* Thousand Oaks: Sage Publishers.

Schwartz-Shea, P., & Yanow, D. (2011). *Interpretive research Design: Concepts and Processes.* 1st ed. New York: Routledge. 10-88.

Senge, P. (2000). *Schools that learn: A fifth discipline field-book for educators, parents, and everyone who cares about education*. New York, NY: Doubleday.

Sergiovanni, T. J. (1990). *Adding Value to Teachersship Gets Extraordinary Results: How to get Extraordinary Performance in Schools.* New York: Hancourt Brace Jovanovich.

Shenton, A. (2004). Strategies for ensurinmg trustworthiness in qualittaive research projects. *Education for Information*, *22*(2) 63-75.

Shields, C. M. (2007). Can Case Studies achieve the " Gold Standards"? In *Annual Meeting of the American Educational Research Association*. Chicago, USA: American Educational Research. 12.

Singh, I., & Jha, A. (2012). Teacher Effectiveness in Relation to Emotional Intelligence Among Medical and Engineering Faculty Members. *Europe's Journal of Psychology*, *8*(4), 667-685.

Smith, P., & Ragan, T.J. (2005). *Instructional Design.* New Jerse*y:* John Wiley and Sons.

Sofroniou, A., & Poutos, K. (2016). Investigating the Effectiveness of Group Work in Mathematics. *Education Sciences*, *1*(1), 2-3.

Spicker, P. (2012). Teachersship: A pemicously vague concept. *International Journal of Public Sector Management*, *25*(1) 34-37. Emerald Group Publishing Limited.

Sree, G.D., & Srinivasan, P. (2014) 'Emotional Intelligence: A Secret for Happy Teachers '. *International Journal of Economic and Business Review, 2*(12) 155-159.

Stanulis, R. N., & Ames, K. T. (2009). Learning to Mentor; Evidence and Observation as Tools in Learning to Teach. *The Professional Educator*, *33*(1), 11.

Stark, P.B. (2011). What is *Transparent Teachersship*? Retrieved from http/www.peterstark.com

Sternberg, R. J., & Williams, W. M. (2010) *Educational Psychology.* 2 ed. N.J: Merrill: Upper Saddle River.

Strauss, S. (2013). A call for a multidisciplinary approach to the scientific study of teaching: Inspirations from Howard Gardner. In: M. Kornhaber, M., & Winner, E. *Mind, work, and*

life: A Festschrift on the occasion of Howard Gardner's 70th birthday, with an introduction and comments by Howard Gardner. Yehuda, Israel: Center for Academic Studies. 1-26.

Sutte, J. (2016). *Four Ways Teachers Can Reduce Implicit Bias.* Retrieved from http://www.greatergood.berkeley.edu

Sutton, R.E., & Wheatly, K.F. (2003). Teachers Emotions and Teaching: A Review of the Literature and Directions for Future Research. *Educational Psychology Review, 15*(4): 327-358.

Team FME. (2014). *Understanding Emotional Intelligence*: People skills. Retrieved from http://www.Free-management-ebooks.com

Thahn, N. C., & Le Thahn, T. T. (2015). The Interconnection Between Interpretivist Paradigm and Qualitative Methods in Education. *American Journal of Educational Science*, *1*(2), 24-27.

Thorndike, E.L. (1920). A Constant error in psychological ratings. *A Journal of Applied Psychology*. 4 (1), 25-29.

Tok, T., Tok., S., & Dolapcioglu, D. (2013). The Relationship between Emotional Intelligence and Classroom Management approaches of Primary School Teachers. *International Research Journals, 4*(2)

Trabun, M.A. (2002). *The Relationship between Emotional Intelligence and Teachers performance*. Monterey, California: Naval Post-Graduate School.

Van Blerk, W.E. (2013). *The role of Emotional Intelligence in Implementing Information Technology Strategies.* Unpublished master's thesis.

Van Maanen, J. (1988). *Tales of the Field: On Writing Ethnography.* Chicago: University Chicago Press.

Vierimaa, J. (2013). *Emotional Intelligence and Project Teachersship: An Explorative Study.* Sweden: Chalmers University of Technology.

Vosloo J.J. (2014). *A sport management programme for educator training in accordance with the diverse needs of South African schools*. Doctoral Dissertation. North-West University, Potchefstroom.

Vyas, K. (2015). Retrieved from Potentials Unlimited: www.kartikvyas.com/articles5.

Wahyuaddin, W. (2016). The Relationship between of Teacher Competence, Emotional Intelligence and Teacher Performance Madrasah Tsanawiyah at District of Serang Banten. *Higher Education Studies*, *6*(1), 128-135.

Wahyuni, D. (2012). The Research Design Maze: Understanding Paradigms, Cases, Methods and methodologies. *Journal of applied management accounting research*. 10 (1), 69-80.

Walter, O., & Marcel, A. (2013). Emotional intelligence and teaching self-efficacy as predictors of teaching ability. *Journal of Studies in Education, 3*(3).

Waters, T., Marzano, R.J., & McNulty, B.A. (2005). *School Leadership that works: From Research to Result*s. Alexandria, VA: ASCD.

Watts, P. (2011). *Teachership learning through challenging situations*: Primary school headteachers. Birmingham.

Yin, R. (2003). *Case Study Research: Design and Methods.* Thousand Oaks: Sage.

Yin, R. (2004). *Case Study Methods.* Washington: Sage.

Yin, R. (2014). *Case Study Research: Design and Methods.* Thousand Oaks: Sage.

Yohannan, P. (2010). *Towards developing a web-based blended learning environment at the University of Botswana*. Pretoria: University of South Africa.

List of appendices

Appendix A
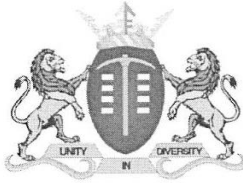
GAUTENG PROVINCE
Department: Education
REPUBLIC OF SOUTH AFRICA

For administrative use:
Reference no. M2017/383

GDE RESEARCH APPROVAL LETTER

Date:	30 January 2017
Validity of Research Approval:	06 February 2017 – 29 September 2017
Name of Researcher:	Molatodi R.A
Address of Researcher:	1606 Block SS
	Extention 4
	Soshanguve,0152
Telephone Number:	061 679 5309 083 679 5309
Email address:	U29647917@tuks.co.za
Research Topic:	The role of emotional intelligence in the classroom management practice of mathematics teachers in Gauteng Province
Number and type of schools:	Five Secondary Schools
District/s/HO	Gauteng North

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

30/01/2017   1

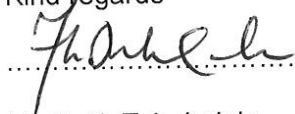*Making education a societal priority*

Office of the Director: Education Research and Knowledge Management
7th Floor, 17 Simmonds Street, Johannesburg, 2001
Tel: (011) 355 0488
Email: Faith.Tshabalala@gauteng.gov.za
Website: www.education.gpg.gov.za

1. The District/Head Office Senior Manager/s concerned must be presented with a copy of this letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.

2. The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.

3. A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.

4. A letter / document that outlines the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.

5. The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.

6. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.

7. Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.

8. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.

9. It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.

10. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.

11. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.

12. On completion of the study the researcher/s must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.

13. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.

14. Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards

....

Ms Faith Tshabalala
CES: Education Research and Knowledge Management

DATE: 30/01/2017 ....

2

Making education a societal priority

Office of the Director: Education Research and Knowledge Management
7th Floor, 17 Simmonds Street, Johannesburg, 2001
Tel: (011) 355 0488
Email: Faith.Tshabalala@gauteng.gov.za
Website: www.education.gpg.gov.za

Appendix B

The Principal……High School

Dear Sir/Madam,

INVITATION TO FOR YOUR SCHOOL TO PARTICPATE IN RESEARCH PROJECT - The role of emotional intelligence in the classroom management practice of high school mathematics teachers.

I am currently enrolled for a Master's degree at the University of Pretoria. Part of the requirements for the awarding of this degree is the successful completion of a significant research project in the field of education.

The title of my approved research study is **"The role of emotional intelligence in the classroom management practice of high school mathematics teachers.** This study is concerned with the investigating the use of emotional intelligence by mathematics teachers in the management of their classrooms.

You are hereby invited your school to participate in this research project, which aims to:

➢ Understand how high school mathematics teachers utilise their emotional intelligence to create high performing students.
➢ Understand the relationship between emotional intelligence and classroom management.
➢ Explore how mathematics teachers employ emotional intelligence to keep students motivated.

Below is the scope and responsibility of your participation. To gather information, I require to approach the grade 12 mathematics teacher(s) with an individual invitation to participate. Those who do agree to participate will be interviewed about certain aspects of emotional intelligence and classroom management practices used in your classroom. This interview should take no longer than 60 minutes, and can be conducted at any location the participants suggest. I have included here for your information a schedule of interview questions.

Please understand that the decision for your school to participate is completely voluntary and that permission for your participation will also be protected by the Gauteng Department of Education. Please also note that each individual's participation in the study will be completely voluntarily and will in no way either advantage or disadvantage them. Each participant will be free, at any stage

during the process up to and including the stage at which they authenticate the transcript of their interview, to withdraw their consent to participate, in which case their participation will end immediately without any negative consequences. Any and all data collected from them up to that point in the study will then be destroyed.

All the information obtained during the research study will be treated confidentially, with not even the Department of Education having access to the raw data obtained from the interviews. At no time will either your school or any of the individual participants be mentioned by name or indeed be allowed to be identified by any means in the research report.

At the end of the research study you will be provided with a copy of the research report containing both the findings of the study and recommendations. This research study presents a unique opportunity for your school to get involved in the process of research aimed at exploring ways and means to improve the relations at management level in South African schools. If you decide to allow your school's participation, kindly show this by completing the consent form at the end of this letter.

Thanking you in anticipation.

Yours in service of education,

R Molatodi   Dr. M. Mihai
Student Researcher   Supervisor
University of Pretoria   University of Pretoria
u29647917@tuks.co.za   maryke.mihai@up.ac.za
(061) 242 4079   (082) 430 2928

Dr. E. Eberlein
Co- Supervisor
University of Pretoria
eric.eberlein@up.ac.za
(012) 420 3331

Appendix C

<div align="center">

LETTER of CONSENT

SCHOOL AS PARTICIPANT

VOLUNTARY PARTICIPATION IN THE RESEARCH PROJECT ENTITLED

The role of emotional intelligence in the classroom management practice of high school mathematics teachers.

</div>

I, _____, the principal of

_____hereby voluntarily and willingly agree to allow my school to participate in the above-mentioned study introduced and explained to me by Refilwe Molatodi, currently a student enrolled for an MEd degree at the University of Pretoria.

I further declare that I understand, as were explained to me by the researcher, the aim, scope, purpose, possible consequences and benefits and methods of collecting information proposed by the researcher, as well as the means by which the researcher will attempt to ensure the confidentiality and integrity of the information she collects.

_____   _____

Full name   Signature

_____

Date

School stamp

Appendix D

<p align="center">**TEACHER CONSENT LETTER**</p>

<p align="center">**Mathematics teacher**</p>

……High School

Dear Sir/Madam,

<p align="center">**INVITATION TO PARTICPATE IN RESEARCH PROJECT –**</p>

<p align="center">**The role of emotional intelligence in the classroom management practice of high school mathematics teachers.**</p>

I am currently enrolled for a Master's degree at the University of Pretoria. Part of the requirements for the awarding of this degree is the successful completion of a significant research project in the field of education.

The title of my approved research study is **"The role of emotional intelligence in the classroom management practice of high school mathematics teachers"**.

This study is concerned with the investigating the use of emotional intelligence by mathematics teachers in the management of their classrooms.

You are hereby invited to participate in this research project, which aims to:

➢ Understand how high school mathematics teachers utilise their emotional intelligence to create high performing students.
➢ Understand the relationship between emotional intelligence and classroom management.
➢ Explore how mathematics teachers employ emotional intelligence to keep students motivated.

Below is the scope and responsibility of your participation. To gather information, I require for this research, I request permission to interview you as a mathematics teacher about certain aspects of emotional intelligence and classroom management practices used in your classroom. This interview should take no longer than 60 minutes, and can be conducted at any location you suggest. I have included here for your information a schedule of interview questions.

Please understand that the decision for you to participate is completely voluntary and that permission for your participation will also be protected by the Gauteng Department of Education.

Please also take into account that each individual's participation in the study will be completely voluntarily and will in no way either advantage or disadvantage them. Each participant will be free, at any stage during the process up to and including the stage at which they authenticate the transcript of their interview, to withdraw their consent to participate, in which case their participation will end immediately without any negative consequences. Any and all data collected from them up to that point in the study will then be destroyed.

All the information obtained during the research study will be treated confidentially, with not even the Department of Education having access to the raw data obtained from the interviews. At no time will either you as an individual or your school be mentioned by name or indeed be allowed to be identified by any manner or means whatsoever in the research report.

At the end of the research study you will be provided with a copy of the research report containing both the findings of the study and recommendations. This research study presents a unique opportunity for you and your school to get involved in the process of research aimed at exploring ways and means to improve the relations at management level in South African schools. If you decide to participate in this research study, kindly indicate this by completing the consent form at the end of this letter.

Thanking you in anticipation.

Yours in service of education,

R. Molatodi   Dr. M. Mihai

Student Researcher   Supervisor

University of Pretoria   University of Pretoria

u29647917@tuks.co.za   maryke.mihai@up.ac.za

(061) 242 4079   (082) 430 2928

Dr. E. Eberlein
Co- Supervisor
University of Pretoria
eric.eberlein@up.ac.za
(012) 420 3331

Appendix E

LETTER of CONSENT

INDIVIDUAL PARTICIPANT

VOLUNTARY PARTICIPATION IN THE RESEARCH PROJECT ENTITLED

The role of emotional intelligence in the classroom management practice of high school mathematics teachers.

I, _____, hereby voluntarily and willingly agree to participate as an individual in the above-mentioned study introduced and explained to me by Refilwe Molatodi, currently a student enrolled for an MEd degree at the University of Pretoria.

I further declare that I understand, as were explained to me by the researcher, the aim, scope, purpose, possible consequences and benefits and methods of collecting information proposed by the researcher, as well as the means by which the researcher will attempt to ensure the confidentiality and integrity of the information she collects.

_____   _____

Full name   Signature

_____

Date

Appendix F

Teacher interview template

<div align="center">

Teacher Interview procedure

The role of emotional intelligence in the classroom management practice of high school mathematics teachers.

</div>

Date…………………………… Venue……………………………………………

Interviewer: ………………………………Interviewee…….…………………………...

A teacher is a crucial contributor to a child's education. Quite apart from academic responsibilities, it is the teacher's task to lead, inspire, encourage, provide structure and discipline, and serve as a role model. In fulfilling these requirements, the teacher is likely to arouse emotional responses from the learners that can range from hero-worship to outright hostility. At the same time, being human, almost every teacher will experience feelings of frustration or anger, as well as pride and affection towards the learners. All of these emotions experienced in the classroom could impact either negatively or positively on the learner's achievement level and the effectiveness of the teacher's classroom management. Hence the study aims to understand the role that emotional intelligence plays in the classroom management practice of mathematics teachers.

All personal information provided by the participants shall remain confidential. In the findings, pseudonyms will be used where necessary to refer to the individual participants, whose identity will not be disclosed. All information received will be used for research purposes only.

Questions:

1. **Domain: Self-Awareness**
   1.1. As a mathematics teacher, what would you say your strengths and weaknesses are?
   1.2. Can you name one characteristic of a learner that would make you angry?
   1.3. How do you deal with that anger?
   1.4. Your Head of Department tells you that class performance for your mathematics class is below average.

a. Name and describe the feeling that this feedback to you might evoke

b. How will you control such an emotion?

1.5. What values do you strive to instil in your learners?

1.6. Why do you regard those values as important?

1.7. Describe the fears you have as a teacher?

1.8. Would you describe yourself as an influential teacher? Please elaborate.

2. **Social Awareness:**

2.1. What values would you say define you as?

a. An individual

b. A teacher

2.2. How do these values influence your classroom management strategies?

2.3. A learner had high hopes of getting a distinction in mathematics, but only managed 60%. How would you motivate such a learner in the face of this setback?

3. **Self-management:**

3.1. Tell me about a challenging situation you once experienced in the classroom. How did you manage it?

3.2. How would you define a fair teacher?

3.3. Can you explain some of your classroom management strategies?

3.4. A learner does very well in a test. What method of positive feedback do you apply?

3.5. A learner asks you a very disturbing question, which is obvious from your facial expression. How do you confront such a question?

4. **Relationship-management:**

4.1. A teacher is often seen as an inspirational leader. How do you apply this concept in managing your classroom?

4.2. Trust and respect are essential components to a positive teacher-learner relationship. How do you promote such values in your classroom?

4.3. In your opinion, is team-work an important skill in classroom management?

4.4. Learners often get carried away and cross boundaries. How do you enforce classroom rules?

a. Are there values that drive the classroom rules?

b. Please name a few.

4.5. Which strategies do you apply to encourage group work among the learners?