USING EMOTIONAL INTELLIGENCE (EI) TO SUPPORT LEARNERS WITH AUTISM SPECTRUM DISORDER (ASD) IN THE FOUNDATION PHASE

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Using emotional intelligence (EI) to support learners with Autism Spectrum Disorder (ASD) in the Foundation Phase

by

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Submitted in partial fulfillment of the requirements of the degree

Magister Educationis

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ETHICS STATEMENT

The author, whose name appears on the title page of this thesis, has obtained, for the research described in this work, the applicable research approval. The author declares that she has observed the ethical requirements in terms of the University of Pretoria's Code of Ethics for Researchers and the Policy Guidelines for Responsible Research.

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Laura du Plessis

November 2016

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I, Laura du Plessis (student number 1129 8686) hereby declare that this dissertation, *"Using emotional intelligence (EI) to support learners with autism spectrum disorder (ASD) in the Foundation Phase,"* is submitted in accordance with the requirements for the Magister Educationis degree at University of Pretoria, is my own original work and has not previously been submitted to any other institution of higher learning. All sources cited or quoted in this research paper are indicated and acknowledged with a comprehensive list of references.

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USING EMOTIONAL INTELLIGENCE TO SUPPORT LEARNERS WITH AUTISM SPECTRUM DISORDER IN THE FOUNDATION PHASE

By Laura du Plessis

Submitted in fulfilment of the requirements for the degree

Magister Educationis

Faculty of Education

University of Pretoria

Signed .....

Date 07/11/2016

DECLARATION OF TECHNICAL EDITOR

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TO WHOM IT MAY CONCERN

I hereby declare that Laura du Plessis's dissertation, *"Using emotional intelligence (EI) to support learners with autism spectrum disorder (ASD) in the Foundation Phase,"* was edited by me, in January 2017.

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LIST OF ABBREVIATIONS

EI	Emotional intelligence
ASD	Autistic spectrum disorder
FP	Foundation Phase
SEI	Social Emotional Intelligence
SABER	System Approach for Better Education Result

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SUMMATION OF STUDY

The purpose of this study was to identify characteristics pertaining to emotional intelligence (EI) that parents and Foundation Phase teachers may use when supporting learners with autism spectrum disorder (ASD) in an inclusive classroom setting. Teachers are facing various degrees of challenges due to the demands of a range of diverse needs attributable to the influx of learners with disabilities in the school system. Given the increase in the number of children diagnosed with ASD, research indicates that it is likely that teachers will encounter learners with ASD in their classes. Teachers are generally not trained to identify and cope with such a disability, as many requirements of these learners are beyond the services of a general school system. A multiple case study was conducted where the perspectives of a teacher and two parents were gained, in order to understand experiences with children with ASD from the participants' point of view. The primary aim of this study was therefore to provide both parents and teachers with listed characteristics of EI that they could utilise while supporting learners with ASD in households or the educational sphere.

Findings illuminated the collective characteristics of learners with ASD, which include intense obsessions with a narrow range of subjects, repetitive routines, central coherence difficulties and problems with social-emotional functioning, communication and executive functioning. These indicators require specific responses from parents and teachers to effectively provide support to these learners. Qualities identified that relate to EI are patience, empathy, problem solving skills, working collaboratively with parents and being proactive. The main recommendation relates to specific training in EI skills, to prepare student teachers in supporting the growing number of learners with ASD in their classes.

Key Concepts

Autism spectrum disorder (ASD)
Emotional intelligence (EI)
Social Emotional Intelligence
System Approach for better Educational Results
Inclusive Education
Learning disabilities
Foundation Phase

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CHAPTER 1
INTRODUCTION AND ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Given the increase in the number of children diagnosed with autism spectrum disorder (ASD), it has become more than likely that at some point in time, teachers will have a learner with ASD in their classes (Myles, Hagen, Holverstott, Hubbard, Adreon & Trautman, 2005, p.2), as more and more learners with special needs are accommodated in inclusive classrooms (White Paper 6, 2001). This study aimed to provide parents and Foundation Phase teachers with characteristics of emotional intelligence (EI) to be utilised when supporting learners with ASD.

Prior to 1994, the ruling party endorsed a system of apartheid or segregation in South Africa. Under the apartheid regime, education systems were segregated and consisted of nineteen education departments, defined by race and ethnicity (Carrim, 1998, p.303). Furthermore, the government followed a dual system of education, which consisted of a mainstream and a special education component (Naicker, 2000, p.1). Learners with special needs were referred to special schools where they received tuition in isolation as it was alleged to be effective and more beneficial in catering to the needs of these learners (Muthukrishna & Schoeman, 2000). Education provision and special support services were characterised by racial prejudice and gross inequities (Muthukrishna & Schoeman, 2000), with the result that schools which accepted white disabled learners were well funded and those who accepted black disabled learners received little financial support.

The year 1994 heralded the birth of democracy in South Africa, and in line with international policies on human rights, education was subsequently regarded “as a weapon of transformation” (Msila, 2007, p.146). The newly elected government was tasked with addressing several injustices and inequities of the past, radically transforming the education system in the process (Steyn & Kamper, 2012). The *White Paper on Education and Training* (Department of Education, 2001), a policy document that played a key role in changing the education system, proposed quality education for all population groups. Thereafter similar policies followed,

ensuring that the education system which used to be based on exclusion, was transformed in order to reflect an “Inclusive Education and Training system” (Spies, 2013, p.1). The intentions of new policies were to remove barriers to learning, and to facilitate inclusion of children with disabilities in mainstream schooling (Roberts, 2007, p.6). Spies (2013, p.1) holds the opinion that Inclusive Education provides for appropriate educational opportunities embracing all learners, including those with disabilities in the general education class. South African education thus began its transformation towards an integrated system for all learners, regardless of learners’ learning abilities (Muthukrishna & Schoeman, 2010, p.319).

Provision was made for a curriculum that was not only flexible, but also accessible for diverse learning needs. In addition, district-based support teams were developed to strengthen the knowledge and skill sets of Foundation Phase teachers who were to commence with instruction in diverse classrooms (Muthukrishna & Schoeman, 2000). The inclusive classroom in the new dispensation was altered dramatically to include learners with diverse educational needs. Although the inclusion of all learners in an inclusive setting was an admirable objective, many Foundation Phase teachers were not trained to deal with the different learning needs within the inclusive classroom (Donohue & Bornman, 2014, p.4).

The challenge of accepting learners with ASD depends on the nature and severity of the learner’s disability. The enormous impact of early detection, is partly why the Centre for Disease Control and Prevention, is campaigning to raise public awareness of ASD. “These learners spend the majority of their time in general education with professionals who do not have specialised training for supporting learners with disabilities” (Spies, 2013, p.3). In general, Foundation Phase teachers are unequipped to identify and cope with such a disability as several needs of these learners cannot be managed by existing services of a general school system. Therefore, Foundation Phase teachers still generally believe that the needs of learners with disabilities are best dealt with in separate classrooms (Campbell, Gilmore & Cuskelly, 2003).

1.2 RATIONALE

I have been engaged with learners in an inclusive classroom setting over the course of the previous five years. During this timeframe an increase in the number of learners with disabilities and learning difficulties could be observed in a mainstream classroom. ASD has become one of the prominent disabilities – with its associated learning difficulties – that poses new challenges to the ideal of sustaining an inclusive classroom. According to Peer and Reid (2011, pp.235-236), learners with ASD require specific accommodations and interventions not only at school but when at home, socially and post-school. These interventions differ amongst individuals and can be related to either curriculum issues, support at home, or community support, depending on the nature of the disability and the needs of the individual (Peer & Reid, 2011, p.236). These above-mentioned aspects, of course, are only a few of the many challenges affecting a learner with ASD in an inclusive school setting.

An inclusive classroom is an ideal model when there is an acceptance of diversity and the school curriculum is not only flexible, but also suitable for the needs and capabilities of all learners (Donohue & Bornman, 2014, p.4). In reality, and with regards to a learner diagnosed with ASD in our school, it soon became evident that the demands of such a learner are immense. As a learning support teacher, I had no prior knowledge or experience of efficiently handling or assisting such a learner.

In an effort to obtain relevant information, I found few guidelines for Foundation Phase teachers to follow in dealing with learners with ASD. I found one source stipulating that the teacher's personality plays a vital role in determining the manner of tuition applied to such learners. Bauer (2006) states that the teacher's emotional state inevitably affects the classroom atmosphere, hence determining the way that learners with ASD relate to the teacher. Sutton and Wheatley (2003, p.328) confirm the value of a teacher's emotional experiences and the link with his/her teaching practices, and posit that these emotional responses are paramount in influencing learner response and learner performance.

The concept of EI should be borne in mind when teaching learners suffering from learning impairments. It is imperative that Foundation Phase teachers remain

emotionally aware and develop EI when looking for characteristics to assist the learner suffering from ASD. A Foundation Phase learner with ASD has an innate mental health disorder that causes him/her to respond differently to the world and its surrounding stimuli (Bauer, 2006).

Mayer, Salovey, Caruso and Sitarenios (2001) define EI as "an ability to recognise the meanings of emotions and their relationships and to use them as a basis in reasoning and problem solving" (Mayer et al., 2001, p.234). Foundation Phase teachers are encouraged to personalise their way of instruction within the classroom, and to ensure that support services such as tutoring, speech therapy and occupational therapy are provided, if and when needed (Bauer, 2006).

My intention with this study was therefore to observe learners that have been diagnosed with ASD, and to conduct semi-structured interviews with the parents of these learners while taking note exactly what they require. The aim being that I may ultimately provide Foundation Phase teachers with guidelines to develop skills on how to apply EI when supporting such learners, in- and outside of the inclusive classroom. Spies (2013, p.4) underscores the fact that Foundation Phase teachers should learn good practice and apply it widely, because any persisting with inefficient practices will mean that the goals of an inclusive society will not be achieved.

1.3 PROBLEM STATEMENT

Foundation Phase teachers are facing various challenges due to the demands of meeting a range of diverse needs attributable to the influx of learners with disabilities in an inclusive setting. This circumstance affects the quality of education delivered. Wilkinson (1998, p.145) highlights how Foundation Phase teachers are burdened with the amount of diversity within their classrooms, and explains how this makes it difficult for the general teacher to differentiate the curriculum, and meet the needs of each individual. Learners with ASD require specific teaching methods (Peer & Reid, 2011, p.228), but most South African tertiary institutions do not offer any specialised training on how to accommodate or teach these learners. Therefore, the earlier in life ASD can be identified and treated, the better. Learners with ASD may suffer from depression, overwhelming feelings of sadness, poor

social interaction and feelings of a poor self-esteem (Howlin, 2003, p.18). Foundation Phase teachers should be trained to develop the knowledge and skills in their pursuit to create a classroom climate beneficial to these learners (Coetzee & Jansen, 2007, p.3). However, a teacher with a conscious awareness of his/her EI will strive to achieve a safe and loving space distinguished by emotional security (Coetzee & Jansen, 2007, p.18).

One way to assist Foundation Phase teachers in alleviating this problem, would be to advocate the acquirement of specific characteristics to accommodate learners with ASD in the inclusive classroom. Foundation Phase teachers should therefore be made aware of the components of EI so that they may be equipped to accommodate learners with ASD. In order to inform these characteristics, the advice of parents on the techniques in which they respond to their children with ASD can be incorporated, and their perceptions about the profile of a teacher who can meet the needs of learners with ASD can be recorded as well. The experiences of a teacher who teaches learners with ASD should be investigated as well.

The following research questions are formulated in response to the problem identified above.

1.3.1 MAIN RESEARCH QUESTION

What characteristics relating to emotional intelligence can a Foundation Phase teacher/ parent use when supporting learners with autism spectrum disorder?

1.3.2 SUB-QUESTIONS

- What are the characteristics of learners with autism spectrum disorder?
- What do parents expect of teachers who teach children with autism spectrum disorder?
- What are the experiences of teachers with children with autism spectrum disorder in the inclusive classroom?
- What are the characteristics of an emotionally intelligent teacher in the Foundation Phase?

1.4 CONCEPT CLARIFICATION

1.4.1 AUTISM SPECTRUM DISORDER

Adreon and Durocher (2007, p.272) define autism spectrum disorder (ASD) as a group of neurodevelopmental disorders which present a triad of impairments in social interaction, communication and behaviour. The group of disorders include, amongst others, Asperger's syndrome which was initially the focus of this study.

Khouzam, El-Gabalawi, Pirwani and Priest (2004) define ASD as a developmental disorder that encompasses features of social impairment disorder, restricted interests, and repetitive behaviours.

Ghaziuddin and Mountain-Kimchi (2004) regard ASD as "a pervasive developmental disorder characterised by autistic social dysfunction and isolated idiosyncratic interests, in the presence of normal intelligence." There is no history of language delay (APA, 1994; WHO, 1993). Despite the enormous degree of interest in this condition, research has so far failed to demarcate its boundaries from autism with normal intelligence, also referred to as "high-functioning autism (HFA)" (Ghaziuddin & Mountain-Kimchi, 2004, p. 279).

This study will use the following definition of Klin, MacPartland and Volkmar (2005, p.95) as point of departure. They define ASD as "a severe developmental disorder characterised by major difficulties in social interaction, and restricted and unusual patterns of interest and behaviour".

1.4.2 EMOTIONAL INTELLIGENCE

According to Mayer et al. (2001), emotional intelligence (EI) can be regarded as a type of social intelligence that deals with the ability to monitor emotions (in oneself and in others), to distinguish between particular emotions, and to implement the information to guide reasoning and actions.

Similarly, Brackett and Katulak (2006, p.2) explain that EI embraces four major emotion-related abilities, including "perception/expression of emotion, use of emotion to facilitate thinking, understanding of emotion, and management of emotion in oneself and others." These stated abilities could promote the

development of the learner with ASD holistically with regard to relationships, emotional health, academic work and work performance.

For the purpose of this study, EI will be interpreted as behaviour that needs emotional and behavioural control as manifested in social situations. It is deemed as the specific intelligence that people revert to in order to manage their emotional lives. Coetzee and Jansen (2007, pp.1-2) postulate that EI gradually develops over many years and can be improved through training and practice. It involves the development of specific abilities to reason intelligently where emotions are concerned. It embraces the ability to identify and interpret the emotions (in oneself and in others) as well as the necessary skills to comprehend and reflectively manage these emotions (Coetzee & Jansen, 2007, pp.1-2).

1.4.3 FOUNDATION PHASE

The expression "Foundation Phase" resorts under the umbrella term of *Early Childhood Development*. This beginning phase in early learning refers to the processes that children undergo from birth to at least nine years. It involves the phase during which the learners grow and thrive emotionally, spiritually, physically, mentally, morally and socially (Education White Paper 5, 2001, p.3). Bosman (2009, p.16) views the Foundation Phase as the first phase of the General Education and Training Band. The main emphasis of this phase is on the honing of primary skills, knowledge, values, and laying a sound foundation for further learning (Department of Education, 2003, p.19).

Foundation Phase comprises Grade R to Grade 3, and includes learners from six to nine years of age. This is a four-year phase, starting with the Reception year. The learning programmes deemed as crucial in this early childhood phase are Numeracy, Literacy and Life Skills (Mahlo, 2011, p.17).

Foundation Phase, according to Education White Paper 5 (2001, p.9), focuses on a comprehensive approach to programmes and policies for children within the range of birth to nine years of age. The active participation of parents and caregivers is emphasised, as it is an age where the children are still regarded as vulnerable and it is crucial that these children's rights are protected to develop their full cognitive, social, physical and emotional potential.

1.5 LITERATURE REVIEW

In providing context for this study, the history, prevalence, and the indicators of autism spectrum disorder, and the teacher of the learner with ASD will be briefly discussed.

1.5.1 HISTORY OF THE CONCEPT "AUTISM SPECTRUM DISORDER"

Autism spectrum disorder exists along the broad spectrum of the old pervasive developmental disorders. It is a “neurological disorder marked by impairments in socialisation, communication, cognition and sensation” (Myles et al., 2005, p.2).

Asperger’s syndrome (AS), as part of the general concept "autism spectrum disorder" (DSM-V, p.32), was named after the Austrian paediatrician, Hans Asperger, in 1944. Asperger initially described his study on AS as Autistic Psychopathy. However, unaware of each other’s work, Leo Kanner published an article on “early infantile autism” (Khouzam et al., 2004, p.184). Following Kanner’s description of Early Infantile Autism, clinicians became aware of more children who had similar characteristics, but did not reveal adequate criteria to diagnose them with an autistic disorder (Khouzam et al., 2004, p.184). In 1979, Gould and Wing as cited in Khouzam et al. (2004, p.184), suggested using the term "Asperger’s syndrome" to describe the learners who presented the triad of impairments but who could not be classified as having an autistic disorder. The triad of impairments include:

- difficulties in social interaction
- difficulties with flexibility of thought and imagination
- difficulties in producing, processing or understanding verbal and or non-verbal communication (Hirvelä, 2011, p.563)

The current Diagnostic and Statistical Manual of Mental Disorders, Edition 5 (DSM-V, p.32), proposes that the term autism spectrum disorder be used as the lone diagnosis possible for the previously categorised Pervasive Developmental Disorder (DSM-IV-TR), and has consequently eliminated the term Asperger’s syndrome (De-la-Iglesia & Jose-Sixto Olivar, 2015, p.1). Although there are various

perspectives held on this classification, the elimination of the term Asperger's syndrome is based purely on empirical evidence stating that individuals with a diagnosis of AS subsequently meet the DSM-IV criteria for an Autistic Disorder (De-la-Iglesia & Jose-Sixto Olivar, 2015, p.1).

1.5.2 AUTISM SPECTRUM DISORDER PREVALENCE RATE

Khazoum et al. (2004, p.185) postulates that ASD tends to be more prevalent in males than females with a 4:1 ratio, and believe it to be a more common impairment than autism. Although the actual aetiology of ASD is unknown, there are several suggestions regarding possible causes, such as genetics (Khazoum et al., 2004, p.185). It was not until 1994 that ASD was first recognised in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (Bauer, 2006).

1.5.3 INDICATORS OF AUTISM SPECTRUM DISORDER

Even though autism spectrum disorder exists along a spectrum of severity, Myles et al. (2005, p.2) single out the most common symptoms of ASD as being:

- trouble understanding social cues and conversational language styles
- inflexible adherence to a non-functional routine or ritual
- repetition of movements or words and phrases
- difficulties with fine-motor skills and sensory integration
- persistent preoccupation with objects or narrowly focused topics of interest

Due to the increasing prevalence of this disorder, it is crucial that Foundation Phase teachers become knowledgeable regarding the array of indicators that are frequently associated with learners with ASD. Should a teacher observe such indicators, it will be appropriate to express concerns with the learner's parents, and possibly suggest a formal referral for an assessment. Table 1.1 lists the possible indicators that a teacher should be aware of (Dahle & Gargiulo, 2004).

Table 1.1: Possible indicators of autism spectrum disorder in young children (Adapted from Dahle & Garguilo, 2004; Myles et al., 2005).

Social Challenges
• Lack of understanding of social cues and subtleties • Literal interpretation of others' words
Behavioural Challenges
• May suffer from depression, overwhelming feelings of sadness, and feelings of poor self-esteem • Poor coping skills and feelings of inadequacy which may result in aggression
Learning and Cognition Challenges
• Poor problem-solving and organisational skills • Concrete, literal thinking
Sensory Challenges
• Difficulties with visual tracking • High threshold for physical pain
Motoric Challenges
• Motor awkwardness and ungraceful behaviour • Gross motor difficulties, including coordination and balance problems
Emotional Challenges
• React emotionally, rather than logically • Inability to inhibit emotional urges • Emotional vulnerability

This table provides a concise summary of some indicators that a teacher should be cognisant of when suspicions regarding behaviour arise. Since the prevalence of ASD is rising, increased attention has been given to the needs of these learners as they transition into an inclusive educational environment. Meanwhile, Foundation Phase teachers of these learners are required to acquaint themselves with the indicators of such a developmental disability, if they wish to be able to determine suitable support for their learners with ASD.

1.5.4 THE TEACHER OF THE LEARNER WITH AUTISM SPECTRUM DISORDER

Learners spend a significant amount of time in a classroom with a teacher. Although the learners have various backgrounds, the teacher remains responsible for helping to shape each individual life. It is imperative that Foundation Phase teachers endeavour to understand and meet the diverse needs of learners in order to be a positive influence in their lives, especially in the case of learners with ASD (Myles et al., 2005, p.2).

With the passing of *Education White Paper 6: Special Needs Education: Building an Inclusive Education and Training System* (Department of Education, 2001), disabled children (of all varieties) have a legitimate right to be accommodated within the general educational sphere. Many Foundation Phase teachers have only recently begun to take cognisance of ASD (Dahle & Gargiulo, 2004, p.199).

A learner with ASD in a classroom will present a teacher with unique challenges. It does, however, provide the teacher with an opportunity to draw on creative sources, and to develop and implement new ways of teaching that will hopefully last for a lifetime (Myles et al., 2005, p.2). Like any other learner, learners with ASD have specific strengths and weaknesses. Unfortunately, as mentioned above, it will demand unique teaching strategies to reach the goal of discovering and capitalising on these strengths, to facilitate successful learning (Myles et al., 2005, p.2).

1.6 THEORETICAL FRAMEWORK

A theoretical framework forms the scaffold or the underlying structure of a study (Mahlo, 2011, p.12). This study will utilise the theoretical perspective of the developmental psychologist, Urie Bronfenbrenner (1979). This theoretical framework is relevant to the study as it is based upon the way the individual's development is shaped by the nature of social interactions (MacIntosh, 2014, p.32). According to Mahlo (2011, p.21) the learner is not considered an island amongst the surrounding systems. In fact, these interrelated systems are responsible for determining success in a learner's academic career. Mahlo (2011) furthermore proposes that if all the systems are able to function together synergistically, then all learners – even those experiencing barriers to learning – could benefit.

Bronfenbrenner (1979, pp.22-26) distinguishes between the microsystem, mesosystem, exosystem and macrosystem. The microsystem is described as "a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics." This system constitutes the face-to-face interaction between an individual and their immediate environment (i.e. home and school). In this study, the microsystem will constitute the relationship between the learner with ASD, and the teacher.

According to Bronfenbrenner (1979, p.25), the mesosystem represents two or more settings in which the individual participates, such as the relationship between the school and home. In this study, the mesosystem will comprise the interrelationship between the teacher and the parents of the learner with ASD, as well as the support the teacher receives from the school management, school-based support teams and the Department of Education. MacIntosh (2014) advises that it is essential that the researcher examines the type of programmes implemented at a specific school. It is equally as important that the researcher establishes whether Foundation Phase teachers are in fact receiving the in-service training prescribed in the Inclusive Education policy, and observe whether Foundation Phase teachers are involved in any decision-making as this involvement contributes to their professional development (MacIntosh, 2014, pp.32-33). According to Mahlo (2011), the programmes within the school environment should be functioning at their optimum level, and the Department of Education should provide sufficient funding, in-service training and resources. A lack of support from the Department of Education can and will negatively impact the learner who is supposed to gain from their assistance (Mahlo, 2011, p.22). I investigated the accessibility of the curriculum for learners with ASD while discussing this system, i.e. the support systems that are available for the teacher who teaches learners with special needs.

The exosystem is regarded as one or more settings that do not embrace the growing person as an active participant, but refers to events that affect what happens in the setting including the developing person (Bronfenbrenner 1979, p.25). For the purpose of this study, the exosystem will comprise the accessibility of the curriculum to a learner with ASD, and the availability of funds and resources for the teacher of a learner with ASD.

The macrosystem embraces consistencies in the shape and content of lower-order systems (micro-, meso-, and exo-) that subsist, or could exist, at the surface of the subculture, or even the culture as a whole. Belief systems or ideology underlying such consistencies constitute another integral element of this macrosystem (Bronfenbrenner, 1979, p.26). The macrosystem forms part of a given culture and/or subculture (Bronfenbrenner, 1994, p.40), with particular reference to "societal norms, cultural traditions and national legislation" (MacIntosh, 2014, p.33). For the purpose of this study, the Inclusive Education policy as well as the subsequent Education White Papers will be discussed. My study aimed to explore how the implementation of this policy, or the lack thereof, impacts not only the learner with ASD but also the teacher responsible for the development of learners diagnosed with ASD. It is lamentable to note the lack of support strategies in the policies to address the needs of and ensure successful implementation of Inclusive Education (Mahlo, 2011, p.22).

1.7 RESEARCH METHODOLOGY

Moustakas (2011, p.266) defines research methodology as the "construction of methods and procedures to guide the collection of data that will illuminate an answer to the research questions". Once the data has been collected, the researcher must organise and present meanings and essences of the research experience that has been scrutinised in a way that illuminates and illustrates patterns and themes (Moustakas, 2011, p.266). The research methodology consists of the research design and research methods.

1.7.1 RESEARCH DESIGN

Thomas (2013, p.70) mentions that a research design is a general plan or blueprint of the investigation which the researcher uses to obtain evidence to answer the research question. Subsequently, I shall discuss the research paradigm, research approach and research type as part of this section.

1.7.1.1 Research paradigm

According to Thomas (2013, p.73), a paradigm is a set of assumptions or beliefs about fundamental aspects of reality giving rise to a particular world-view. Maree

(2010, pp.47-48) postulates that it addresses fundamental assumptions such as beliefs about the nature of reality, the relationship between knower and known and assumptions about methodologies. In this study, my chosen paradigm – or, my "way of thinking" and interpreting the data – has not only contributed to, but shaped the final outcomes of the inquiry**.**

By observing individuals within their natural environment, I was able to accumulate findings based on the broad meanings of experiences (Mahlo, 2011, p.82) of teachers in the Foundation Phase, with reference to teaching learners who have been diagnosed with ASD. Utilising the Interpretivist paradigm enabled me to focus on the socially constructed experiences of Foundation Phase teachers (Mahlo, 2011, p.82).

1.7.1.2 Qualitative approach

This study necessitated a qualitative research approach, which was used to gain information about the learner with ASD, and what characteristics Foundation Phase teachers and parents should portray in order to support such learners. Qualitative research involves a relativistic, interpretivist ontology that maintains that there is no objective single reality, but multiple realities that are constructed by humans who are engaged in describing a phenomenon of interest (Rossman & Rallis, 2003, p.33).

Maree (2010, p.50) furthermore suggests that a qualitative research approach is geared towards collecting and gathering rich, descriptive data of a specific phenomenon or context, with the aim of developing an understanding of the phenomenon that is observed or studied. For the purpose of this study, two cases were explored in order to understand the world-views and the meanings through which these individuals have been able to construct their experiences. Therefore, by collecting data qualitatively (Maree, 2010, p.50), interpretivists are concerned with the uniqueness of each particular situation, and to observe the phenomenon through the participants' perspective (Maree, 2010, p.51).

1.7.1.3 Case study design

According to Bromley (1990), case study research is a "systematic inquiry into an event or a set of related events which aims to describe and explain the phenomenon of interest" (Maree, 2010, p.75). In this study, I conducted a dual case study which consisted of one learner with ASD, and the relationship with their wider contexts, i.e. parents and a Foundation Phase teacher. The second case consisted of a father providing me with a retrospective case report about his journey with his two sons, who were both diagnosed with ASD at a young age. This case was selected based on the father's experience with his sons, and the subsequent insights he could provide in looking back on their development and which could contribute to developing guidelines for parents and teachers of young children in the Foundation Phase. The purpose of a dual case study in this research was to examine the contextual variables (such as emotions) that may tentatively hinder and/or assist learners with ASD in an inclusive classroom. These case studies aim to "identify the various interactive processes at work, to show how they affect the implementation of systems" (Bell, 2014, p.9).

1.7.1.4 Phenomenology

The purpose of a phenomenological study is to understand experiences from a participant's point of view (Johnson & Christensen, 2012, p.48). In this study, a phenomenological research design was integrated to explore the experiences of parents and a teacher, which were used to build characteristics that Foundation Phase teachers may follow when teaching learners with ASD.

This study is phenomenological because it is based on the lived experiences of parents and a teacher who deal with learners diagnosed with ASD. It sought their interpretations, viewed against their personal paradigms of reasoning and value systems (Mahlo, 2011, p.88). McMillan and Schumacher (2001, as cited in Mahlo 2011, p.89), state that the interpretivist paradigm upon which qualitative research was built assumed that reality, as interpreted by individuals, is multilayered, interactive and a shared social experience (Mahlo, 2011, p.89).

1.7.2 RESEARCH METHODS

According to Maree (2007, p.34), research methods delineate how and where the collection of data takes place. It describes how the data is organised and presented in a way that depicts and illustrates the themes, meanings and essences of the experience that has been investigated (Moustakas, 2011, p.266).

The role of the researcher will be discussed as well as the participants and research sites.

1.7.2.1 The role of the researcher

The role of the researcher will be primarily as an interviewer in this study; first as the interviewer of two respective parents of children diagnosed with ASD, then as the interviewer of a teacher who has experience of teaching learners with ASD. Observations were conducted at a school situated in a Pretoria suburb. In my letters of informed consent I informed the learner, the parents and the teacher of my role in the classroom. It was my priority not to interfere with the education of the learners in the classroom.

1.7.2.2 Participants and research site

In order to generate rich information on the phenomenon of interest, stratified purposeful sampling was used to select participants non-randomly (Basson, 2013, p.42). Stratified purposeful sampling is defined as the selection of information-rich cases to facilitate in-depth analyses. Information-rich cases are cases that provide ample opportunity for investigation and learning opportunities to facilitate access to issues of central importance to the purpose of the research (Coyne, 1997, p.624).

The one case study were conducted at a public school situated in a suburb of Pretoria. The school provides specialised education to learners who have been diagnosed with ASD within and around Pretoria, with English as the main medium of instruction. I contacted the principal prior to my visit to obtain advice concerning an appropriate manner of observing learners at the school during 2016. For the second case, the narrative was completed in the safety and comfort of the participant's own home. The follow-up interview was conducted at the participant's

job office in a suburb of Pretoria. Since it was a setting where the participant felt comfortable with no risk to safety attached, more valuable and trustworthy data could be collected.

A prerequisite of a multiple case study is that it focuses on understanding phenomena within a "naturalistic context" (Maree, 2010, p.51). One case in this study included observations of one particular learner in the Foundation Phase who had been diagnosed with ASD, and interviews with the learner's teacher and his mother. The second case consisted of the father of children with ASD writing a narrative, concluding with a follow up interview on his return to Pretoria.

1.7.2.3 Data collection

Once I had received written permission from all the stakeholders who were to be contributors to the study, I commenced with my data collection and analytical procedures, while guided by my research questions. Due to data collection and analysis being "ongoing, cyclical and iterative process[es]" (Maree, 2010, p.81), I employed multiple methods as data collection strategies, to bolster the depth of inquiry. I observed the research participants, wrote field notes and conducted semi-structured interviews with the teacher and respective parents.

(a) Observation

"Observation is the systematic process of recording the behavioural patterns of participants, objects and occurrences without necessarily questioning or communicating with them" (Wagner, Kawulich & Garner, 2012, p.152). However, because observation is a very subjective exercise, it remained my responsibility to avoid any bias and to become immersed within a particular research situation (Maree, 2010, p.84).

It was imperative that I enter the research situation with the purpose and focus already established. This was achieved by constantly referring back to the research question (Maree, 2010, p.84). Maree (2010, p.84) advises researchers to become acquainted with the discourse used by research participants, and to always uphold the "integrity and anonymity" of the participants.

I employed the "observer as participant" method in my observation, as it would be suitable to the study's purpose. I focused on my role as researcher (Maree, 2010, p.85), and although the researcher does "get into" (Maree, 2010, p.85) the situation, he/she does not impact the dynamics of the setting (Maree, 2010, p.85). I planned to use the running records method in recording my observational data. This entailed particular, continuous or sequential accounts arrived at by observing actions. The actions are delineated within the context in which they occur (Maree, 2010, p.85).

The intention was to observe the participating learner as well as the teacher's contact with him during the observation period. Observations were recorded in a journal known as "field notes". Observations were made and data was collected throughout the academic school day.

(b) Semi-structured interviews

A semi-structured interview involves the interviewees answering a set of predetermined questions. Probing and clarification of answers are allowed (Maree, 2010, p.87). Answers evoked by the researcher's original questions should hone the researcher's subsequent questions (Basson, 2014, p.44).

I conducted semi-structured interviews with the teacher and the parents of the learners with ASD. Interviews were recorded on an audio tape and remain the sole property of the University of Pretoria for a minimum of fifteen years.

1.7.2.4 Data analysis

I followed a process of inductive analysis of the qualitative data collected. Due to the Interpretivist paradigm being a naturalistic component, inductive analysis focuses on certain themes that are derived from the data. These themes cover an explanation, understanding or interpretation of the people and situations (Maree, 2010, p.99) in order to make sense of the data collected. Data collection and the analysis thereof is an ongoing, cyclical as well as iterative process (Maree, 2010, p.81), enabling me to refer back to research data and refine the analysis of it. Transcriptions and coding were completed by hand, and results were then typed on a computer and stored in computer files.

1.7.3 TRUSTWORTHINESS

The research was conducted qualitatively; therefore trustworthiness rather than validity or reliability forms the basis of assessing the findings of the investigation (Mphahlele, 2005, p.39). To ensure that the results of any study are trustworthy, it is imperative that they are "dependable, conformable, credible and transferable" (MacIntosh, 2014, p.11). These four key categories will be briefly discussed and also how this qualitative study adhered to these principles of trustworthiness.

1.7.3.1 Dependability

Dependability is an endeavour to provide clear and traceable accounts of the way the research was conducted (Basson, 2013, pp.8-9), and to ensure consistency in research findings. To warrant that my research findings are dependable, I ensured that my techniques of data collection and data analysis are transparent. The techniques are included as addenda to this document.

1.7.3.2 Conformability

Conformability refers to "the degree of neutrality of the findings" (MacIntosh, 2014, p.11). To ensure that my study adhered to conformability I continuously questioned the findings, to guarantee that the interpretation of the raw data was based on the research participants' reality or world-view, and that the information provided was unbiased and would not influence my understanding of the data. I also made use of member-checking to ensure the conformability of the findings. Discussing the findings with the research participants aided me in ensuring that conclusions were in line with what was mentioned in the semi-structured interviews.

1.7.3.3 Credibility

As stated by Sinkovics, Penz and Ghauri (2008, as cited in MacIntosh, 2014, p.11), credibility means that the researcher is obliged to attempt sustaining the same type of individual reality as perceived by the research participants. In order to ensure that the research data was credible, I collected appropriate data by making use of multiple data collection sources, namely observations, drawing analyses and semi-structured interviews. The interviews were captured electronically via audio tape

and the individual research participant's verbatim transcriptions of their interviews were typed out. Thereafter, I crystallised the data to eliminate any biases within the findings (Mphahlele, 2005, p.39). In addition to the latter, member-checking was used. Member-checking is a technique that, according to Baxter and Jack (2008) as cited in MacIntosh (2014, p.11), allows "the participants the opportunity to add a new perspective to the data as well as to discuss and clarify certain aspects of the data."

1.7.3.4 Transferability

Transferability relates to how transferable the research findings are and whether they are suitable to be applied to other contexts (MacIntosh, 2014, p.11). I made use of stratified purposive sampling through a non-random selection of research participants from a school in a Pretoria suburb. Therefore, the findings of this research do not represent the general population, but instead raise a focused awareness of learners suffering from ASD.

1.7.4 ETHICAL CONSIDERATIONS

By adopting a qualitative approach and research design whereby not only adults, but crucially a learner is also involved, it was important to address ethical considerations. The use of ethical stipulations ensured the correct conduct towards participants. I, as the researcher, had an obligation towards the research participants to ensure that their rights were protected. Permission was sought from the University of Pretoria, the participating school, the respective parents and the relevant class teacher.

Ary, Jacobs, Sorensen and Walker (2013, pp.586-593) recommend mentioning in the ethical clearance aspects that need to be included in the consent form. These aspects include:

- informed consent
- an indication to participants of the voluntary nature of their intended participation; assurances of safety and privacy
- confidentiality, anonymity and the principle of trust

1.8 CONCLUSION

Chapter 1 highlighted the increasing prevalence of autism spectrum disorder and the need for caregivers (such as Foundation Phase teachers and parents) to be equipped to support learners with ASD. The rationale of the study, problem statement and concept clarification were provided, as well as the research methodology used in this study. In the next chapter, the literature review contextualizes the study theoretically by presenting key features in a theoretical framework for this study.

1.8.1 OUTLINE OF STUDY

This dissertation comprises five chapters.

Chapter 1: Introduction and orientation to the study

The introductory chapter of this study outlines the orientation, background, purpose and rationale of the proposed research, as well as the research method.

Chapter 2: Literature review

Adhering to the eco-systemic factors posited in Bronfenbrenner's Ecological Systems Theory, chapter 2 provides an in-depth account of the literature that is relevant in identifying and discussing characteristics of emotional intelligence to utilise when supporting learners with ASD.

Chapter 3: Research methodology

Chapter 3 contains detailed descriptions of the implementation of the proposed qualitative research methodology, selected research design, research participants and data collection procedures. This chapter also addresses the concepts of credibility, trustworthiness and ethical considerations pertinent to the empirical research.

Chapter 4: Data analysis and interpretation of findings

Chapter 4 focuses on the attained data (narratives, semi-structured interviews and observation). The interpretation of the acquired data emerged from the themes derived from the contributions of each participant.

Chapter 5: Summary, conclusions and recommendations

Chapter 5 provides germane conclusions drawn from the data, and pertinent recommendations made to the applicable stakeholders. An amalgamation of the main findings from the literature review (chapter 2) and the empirical inquiry (chapter 4) is offered.

Mayer et al. (2001) define EI as “an ability to recognise the meanings of emotions and their relationships and to use them as a basis in reasoning and problem solving” (Mayer et al., 2001, p.234). Foundation Phase teachers are encouraged to personalise their way of instruction within the classroom, and to ensure that support services such as tutoring, speech therapy and occupational therapy are provided, if and when needed (Bauer, 2006).

My intention with this study was therefore to observe learners that have been diagnosed with ASD, and to conduct semi-structured interviews with the parents of these learners while taking note exactly what they require. The aim being that I may ultimately provide Foundation Phase teachers with guidelines to develop skills on how to apply EI when supporting such learners, in- and outside of the inclusive classroom. Spies (2013, p.4) underscores the fact that Foundation Phase teachers should learn good practice and apply it widely, because any persisting with inefficient practices will mean that the goals of an inclusive society will not be achieved.

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CHAPTER 2
PERSPECTIVES ON AUTISM SPECTRUM DISORDER AND THEORETICAL FRAMEWORK

2.1 INTRODUCTION

The intention of this research study is to investigate how autism spectrum disorder (ASD) manifests in Foundation Phase learners (9 years of age), and to identify characteristics of emotional intelligence (EI) that are needed when supporting these learners.

This chapter reports on academic literature that assists in gaining insight into learners with ASD. First, an overview of the disorder provides context to the study. This is followed by a description of the theoretical framework, called the "Ecological Systems Theory" of Urie Bronfenbrenner (1979) that serves as a lens through which the information gathered in this study is viewed, including all the relevant factors impacting on the development of a learner with ASD. The chapter is concluded by a discussion of emotional intelligence as an important skill or characteristic of Foundation Phase teachers who are dealing with children who have been diagnosed with ASD.

2.2 AN OVERVIEW OF AUTISM SPECTRUM DISORDER

ASD is a disorder that begins in infancy and is evident at any stage before the age of six (Paasche, Gorrill & Strom, 2004, p.28). It is a neurodevelopmental disorder characterised by a pattern of symptoms which Bauer (2006, p.1) identifies as significant difficulty in social communication, restricted and repetitive patterns of behaviour and interests, motor clumsiness and an atypical use of language.

As background, I present here a first person account of a defining life event that triggered my interest in ASD:

> The first time that I was exposed to ASD, was when substituting for a colleague who teaches Grade 3 learners. I was scheduled to teach Art. After having prepared the room, I was ready to welcome the Grade 3

learners and provide them with instructions on what to do. The learners were asked to design and create their very own unique looking Minion, just like the ones from the movie *Despicable Me*. This is when I met her, what seemed like an introverted little girl, whom I will call Rebecca. She was sharing a group of tables with other girls, but I noticed that she never spoke to any of them. It was only after I had enquired about this little girl's background that I learned that Rebecca had been diagnosed with ASD. I did not know how to teach or approach such a vulnerable little girl. I happened to catch a glimpse of little Rebecca's art work. There was no Minion, but a beautiful drawing of a bear. As I was substituting for a colleague, I steered Rebecca in the correct direction – designing a Minion. When I asked Rebecca to stay on task, she slouched in her chair and refused to make any eye contact with me. She had become unhappy with the fact that she could not continue drawing her bear. Having witnessed, first-hand, the disappointment of this little girl, I became upset too and we came to a compromise. I moved an empty chair next to her, sat beside her and asked whether she would like to design a bear-minion (a Minion with bear features). Not long after this, her little face lit up again and the bear-minion drawing proceeded. I remained at Rebecca's side for a while and in that time, in what seemed to be an almost lecturer-like voice, she could not stop talking about her new dog, Griff – she seemed to be fixated on talking about different sorts of animals. Animals were clearly a topic of great interest to this little girl and Rebecca had managed to develop an extensive knowledge about them. Although I did not fully know how to teach her, I sat closely and listened – perhaps she had something to teach me. Rebecca was thereafter my inspiration – she became my motivation to develop a working knowledge of learners who had been diagnosed with ASD.

The term "geek" – primarily a slang and somewhat pejorative term – has become known as a culturally descriptive and increasingly accepted term to describe an eccentric and non-mainstream person who is far more interested in intellectual pursuit than they are skilled at conversing with people (Weinfeld, Silverman & Kenworthy, 2014, p.1). More recently, it has been reported that this "deficiency" in social etiquette is considered more than just an eccentricity; it can be classified as a

disability requiring special approaches to education (Myles & Southwick, 2005, p.2). Weinfeld, Silverman and Kenworthy (2014, p.xix) posit ASD to not only be “a developmental disorder or an aggregate of eccentricities”. It is a condition that represents social, communicative and behavioural challenges for learners (Brooks & Goldstein, 2011, p.1). These learners will require special educational support during their schooling careers, to provide opportunities for them to access the curriculum and further their own strengths (Schopler, Mesibov & Kunce, 1998, p.230). Such support will be required, as only individualised practices can address the primary areas of concern. Paasche, Gorrill and Strom (2004, p.28) report that if diagnosis and intervention are implemented early enough, depending on how severe the syndrome is, the child may be able to either overcome or lessen the impact of some symptoms. In such cases, specialised learning assistance may be halted as soon as the child is regarded as a productive member of society.

Swiss psychiatrist Eugen Bleuler (1857–1939) first used the term "autismus" (autos – 'self'; ismus – 'action/state') when he identified a characteristic of “extreme egocentrism” in individuals (Weinfeld, Silverman & Kenworthy, 2014, p.2). The identification of these individuals led to future research in the diagnosis and classification of learners presenting a form of autism spectrum disorder (Brooks & Goldstein, 2011, p.11). Hans Asperger (1906–1980), an Austrian paediatrician who specialised in remedial pedagogy (Schopler, Mesibov & Kunce, 1998, p.12), conducted a study on four young boys and identified a recurring pattern of behaviour and aptitudes that he termed "autistic psychopathy", which is defined as being a personality abnormality (Attwood, 1997, p.14). Asperger noted that the fathers of these boys had shared a similar set of life-long traits and according to his research, observed “5 out of 16 fathers and 2 out of 24 mothers to have had a marked degree of behaviour resembling that found in Asperger's syndrome” (Wing, 1981, p.119). According to Brooks and Goldstein (2011, p.11), Asperger observed that these boys had normal intelligence, but found it difficult to understand the behaviour of others, while Weinfeld, Silverman and Kenworthy (2014, p.3) note that children with AS have an “inability to form relationships, have conscious one-sided conversations, an obsession in a special interest and gauche gross and fine motor movements.” Asperger also noted how these individuals were identified as being

deficient in empathy and intuition, and had a tendency to be somewhat clumsy, due to poor motor skills (Schnur, 2005, p.302).

Lorna Wing, a British researcher, later named the aggregate of these traits as Asperger's syndrome (AS), because "autistic psychopathy" was regarded as a generalisation (Hippler & Klicpera, 2003, p.291). It was not until Wing published an article, "Asperger's syndrome: A clinical account", in 1981 in the *Journal of Psychological Medicine*, that Asperger's research started gaining global awareness (Khouzam et al., 2004, p.184). Wing identified more characteristics in her own research, presented by 34 female children diagnosed with AS in the first two years of their lives (Schnur, 2005, p.302). These characteristics included a "lack of empathy, being naïve, inappropriate behaviour, one-sided interaction, little or no ability to form friendships, pedantic and repetitive speech, poor non-verbal communication, intense absorption in certain subjects and clumsy, ill-coordinated movements and odd postures" (Attwood, 1997, p.15).

According to Lyons and Fitzgerald (2007, p.2022), Dr Leo Kanner (1894–1981) studied similar individuals as Asperger, with overlapping manifestations in their findings. Interestingly, Kanner and Asperger had no knowledge of one another, yet both wrote an article on their identified syndromes during the Second World War (Schopler, Mesibov & Kunce, 1998, p.15). There were some similarities between the participants used in Kanner and Asperger's research populations, although the individuals studied by Kanner were described as having more severe symptoms such as "profound disturbances in communication and a lower IQ" (Brooks & Goldstein, 2011, p.11). Kanner (in Weinfeld, Silverman & Kenworthy, 2014, p.4) defined these set of traits as "infantile autism", ascribing the condition to genetics as well as "refrigerator" mothers who may have consciously or unconsciously rejected their children while rearing them.

Van Krevelen (1971, p.83) mentions that whereas Asperger's work had not yet been recognised, Kanner's work was immediately introduced into the English speaking Western world, and it was later accepted as an emotional disturbance (e.g. schizophrenia) or a form of intellectual disability. Gillberg (1998, p.200) claims that with an increasing awareness of the biological causes of autism and of the wide spectrum of abilities that individuals with autism can possess, it was

somewhat difficult for practitioners and researchers to finally diagnose autism spectrum disorder correctly in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-V). Although it was thought that Asperger's syndrome and high-functioning autism were two separate disorders, it became clear that studies could not establish a distinct difference between the two disorders (Ozonoff, South & Miller, 2000, p.30).

The most recent edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-5, 2013, p.32) added Asperger's syndrome as a subgroup within the autistic spectrum and it now qualifies with its own diagnostic criteria (Attwood, 1997, p.16). Practitioners are now being instructed to diagnose such individuals – with problems in social interaction and inflexible behaviour in a person with normal to high intelligence, good vocabulary and sentence construction and comprehension of language – with the term autism spectrum disorder (Weinfeld, Silverman & Kenworthy, 2014, p.7).

With regards to the Individuals for Disabilities Education Act, almost six million learners (in the United States of America) "received special education services in public schools" in 1996, and among these learners a quarter of a million received special education after being diagnosed with ASD (Brooks & Goldstein, 2011, p.3).

Tribute, however, must be paid to a psychologist known as Bernard Rimland, who insisted that autism is a neurodevelopmental disorder and not an "emotional illness" (Sicile-Kira, 2004, p.10).

2.3 PREVALENCE AND AETIOLOGY OF AUTISM SPECTRUM DISORDER

Brooks and Goldstein (2011) concur with statistics issued by the Center for Disease Control and Prevention (CDC) that higher percentages of children are being diagnosed with ASD. Sicile-Kira (2004, p.12) fears that it is reaching "epidemic proportions". ASD occurs within the first three years of a child's life. Prevalence of this disorder is noted to be on the increase. Although developmental concerns can begin to be observed before three years of age, most diagnoses only take place between four and six years of age (Brooks & Goldstein, 2011, pp.1-2).

It is reported that the increase in the number of learners with ASD in public schools is as high as 173% (Sicile-Kira, 2004, p.13). More boys than girls are affected by ASD (ratio 7, p.4), and although it appears in all socio-economic, racial and ethnic groups, it is more prevalent in Caucasian populations (Brooks & Goldstein, 2011, p.2). An increasing number of children are being identified and diagnosed along the wide spectrum of ASD, as awareness spreads and more information becomes available (Bogdashina, 2006, pp.37-38). However, it is not only because of these measures that more children are being diagnosed; concern is growing about numerous other possible causes such as spontaneous changes, infections during pregnancy, drug and pesticide exposure, genetic predispositions and social trends (Weinfeld, Silverman & Kenworthy, 2014, pp.5-11). With respect to this increasing number of children who are diagnosed with ASD, inclusive schools need to adapt and seek interventions to assist all these individuals throughout their educational careers. Weinfeld, Silverman and Kenworthy (2014, p.10) mention that the "variability in presentation of ASD is also reflected in its aetiology."

In 1994, the fourth edition of the Diagnostical and Statistical Manual (DSM) was published. The DSM is a handbook used to "identify and diagnose mental disorders" (Sicile-Kira, 2004, p.29). In the fourth edition of the DSM, autism, Asperger's syndrome and pervasive developmental disorders were all considered to share symptoms (i.e. limited social communication/relationships, restricted/repetitive behaviour) and were placed under an umbrella term known today as autism spectrum disorder (Sicile-Kira, 2004, p.15). The fifth edition of the DSM was published in 2013 and only the term autism spectrum disorder remains. A delay in language development is no longer considered an indication of ASD (Sicile-Kira, 2004, pp.15 & 29). According to Myles and Southwick (2005, p.2), the diagnostic criteria in the DSM–V which are needed for a diagnosis of AS to occur, include, but are not limited to:

- a pre-occupation in one or more areas of interest
- a fixed adherence to a routine/ritual, insistence on sameness
- repetitive/stereotyped motor movements
- pre-occupation with parts of an object

According to Weinfeld, Silverman and Kenworthy (2014, p.11), the brains of individuals with ASD are different to a person that society deems neurotypical. Medical research finds that the synapses between neurons in a typical ASD individual are weak, and do not create proper connections between the various sections of the brain; these complex neural connections are inherently the ones responsible for controlling the social skills that individuals with ASD lack (Weinfeld, Silverman & Kenworthy, 2014, p.12). Wing (1981, p.119) reports that most participants in her study suffered from pre-, peri- or post-natal conditions, such as anoxia at birth, which may have caused cerebral damage in the brain of learners with ASD.

Unfortunately, there are no medical tests to identify ASD and a diagnosis is made based on behavioural manifestations classified in the DSM-V (Diagnostic and Statistical Manual of Mental Disorders) and ICD-10 (International Classification of Diseases) (Bogdashina, 2006, p.29). Due to the many plausible hypotheses of the causes of ASD, there is no sufficient evidence to continue blaming vaccines or the type of parenting styles that new parents use to rear their children. Cases have been recorded of individuals affected by ASD who, “with early and intensive treatment” (Sicile-Kira, 2004, p.19), were able to master certain skills so that they no longer qualified as ASD candidates as they matured. Most individuals, however, are only able to make such gains with the help of early intervention (Weinfeld, Silverman & Kenworthy, 2014, p.13). As ASD is a multifaceted disorder, various factors influence the development and manifestation thereof. Bronfenbrenner’s ecological systems theory (1979) studies human development within the context in which the person finds him/herself; the theory holds that in order for individuals to develop socially, they cannot be divorced from the social networks that surround them (Bronfenbrenner, 2005, p.17).

2.4 THEORETICAL FRAMEWORK

Bronfenbrenner’s ecological systems theory is based on human development and the premise that the external environment plays a role in affecting a family’s capacity to foster the healthy development of their children (Bronfenbrenner, 1986, p.723). This theory allows the characteristics of humans as individuals to be studied as part of a social organisation or community over time (Bronfenbrenner, 2005,

p.3). Bronfenbrenner's theory regards the environment as an "interactive set of systems that are nested within one another", and the interdependent interaction of each system directly shapes the social reality which the individual experiences (Algood, Hong, Gourdine & Williams, 2011, p.1143).

Bronfenbrenner identified four different environmental systems that exert external influences on the development of the person (Bronfenbrenner, 1986, p.723). Although the operating systems are found to be functioning at different levels, they are not independent of each other (Bronfenbrenner, 1986, p.723). Benjamin (2015, p.16) contends that "if one level of the Ecological System Theory fails to work together as a system, it negatively affects the child's development." The levels of ecological systems include: the microsystem, the mesosystem, the exosystem and the macrosystem (Bronfenbrenner, 1995, pp.22-26).

The microsystem refers to the proximal and innermost region of the individual – an immediate face-to-face setting (Bronfenbrenner, 2005, p.74). Children are interactively involved within their microsystems and the interchanges between the child and its environment are determined by interrelationships with varying microsystems (Abrams, Theberge & Karan, 2005, p.285). Although it is important for the researcher to focus and confront the particular proximal features within the immediate environment, it is also important that one looks at the more distal systems of the individual's environment (Bronfenbrenner, 2005, p.80). This is crucial, as the features beyond the immediate environment can "influence the power and direction of the proximal processes that affect development directly" (Bronfenbrenner, 2005, p.80). The other distal environments are termed the mesosystem, exosystem and macrosystem. Bronfenbrenner defined a fifth system, namely the chronosystem. The chronosystem entails the study of psychological developmental changes over time, synonymous to that of a person's chronological age based on either normative (puberty, etc.) and/or non-normative (death, etc.) transitions (Bronfenbrenner, 1986, p.724). The various systems and their applicability to this study is represented in the following figure.

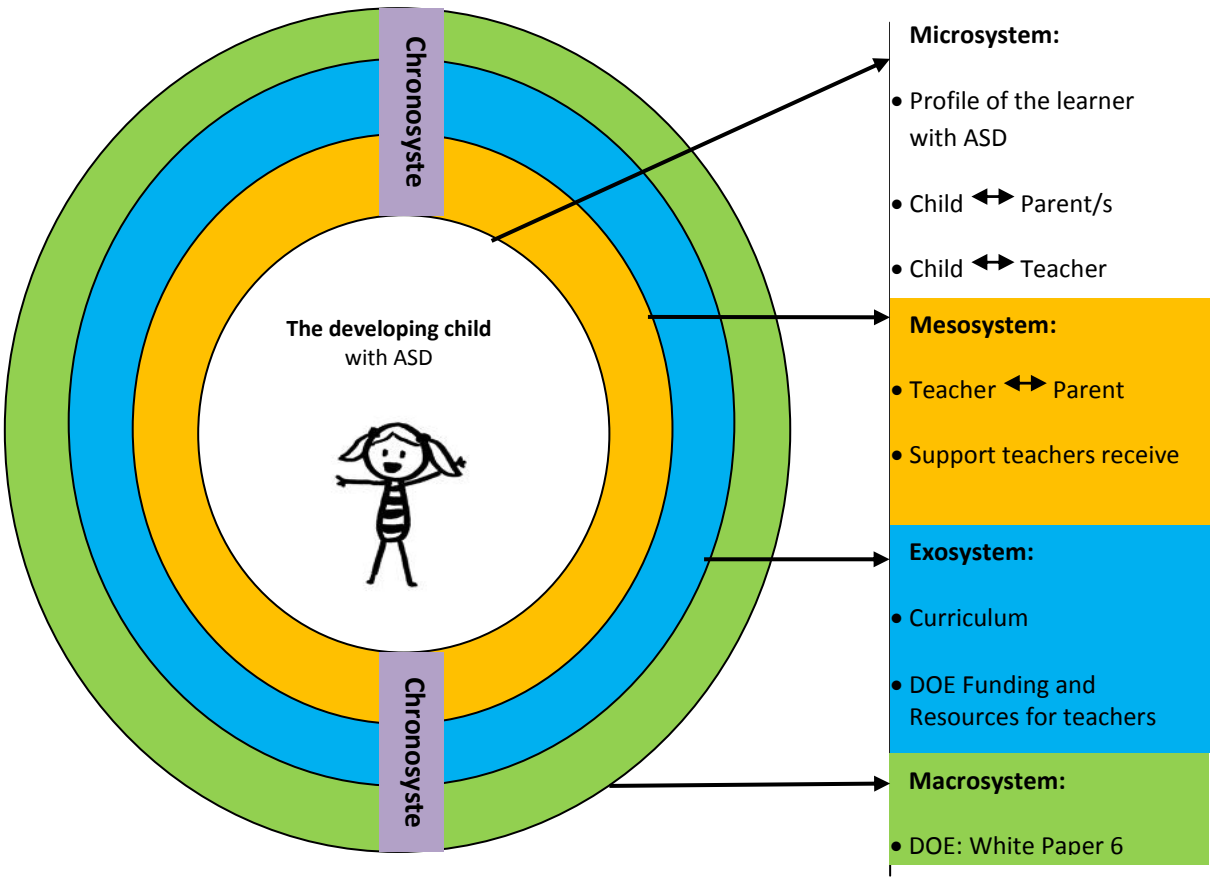

Figure 2.1: Adapted representation of Bronfenbrenner's ecological systems theory

The figure above depicts how Bronfenbrenner's ecological systems theory features in this study.

- The microsystem will consist of a profile of the learner with ASD, and the relationship between the learner and the parent, as well as the learner and the teacher.
- The mesosystem will consist of the relationship between the teacher and the parents of the learner with ASD, as well as the support the teacher receives from the school management, school-based support teams and the Department of Education.
- The exosystem will consist of the accessibility of the curriculum, the resources and the funding that is available to the teacher who teaches learners with special needs.

- The macrosystem will consist of how the Education White Paper 6, which contains the Inclusive Education policy, impacts not only the learner with ASD, but also the teacher who is responsible for the development of learners diagnosed with ASD.

According to Mooney (2013, pp.16-81 & 100), John Dewey, Jean Piaget and Lev Vygotsky all held the opinion that the development of a child is synonymously linked to the interactions they have with the environmental contexts that they are brought up in. Every child is continuously evolving and changing because "his/her affective structure is not static, he/she is gaining insight and the hierarchy of his/her values is broadening" (De Witt & Booysen, 1995, p.1). De Witt and Booysen (1995, p.1) mention how "maturation and growth are involved and are influenced by the genetic composition of the organism, external physical factors and social factors." Family patterns of interaction can be and are indeed put under strain when there is a child who has been diagnosed with a neurodevelopmental disability like ASD. Ultimately, with insufficient resources to cope, i.e. lack of finance or support groups, the child's social and cognitive competence may then be compromised (Heiman & Berger, 2008, pp.290-291).

In terms of Bronfenbrenner's ecological systems theory, the child is seen as the focal point from an ecological perspective (Abrams, Theberge & Karan 2005, p.286). Individuals are "embedded within multi-layered contextual systems that set developmental processes in motion" (Dalla, 2004, p.191). To illustrate the theory, the following ecological systems: i) microsystem, ii) mesosystem, iii) exosystem and iv) the macrosystem (Bronfenbrenner, 1995, pp.22-26) will be discussed with relation to the learner with ASD and the teacher who needs to support these learners in mainstream classrooms.

2.4.1 THE MICROSYSTEM

Bronfenbrenner (2005, p.147) defines the microsystem as any "inter- or intra-personal/familial relations experienced by the developing person in a given face-to-face setting." For the purpose of this study, the microsystem constitutes the learner with ASD and the interpersonal relationships that he/she shares with other "persons with distinctive characteristics of temperament, personality and systems of belief"

(Bronfenbrenner, 2005, p.148) that influence the learner (i.e. family and/or school and/or peer group) in an immediate setting. It is the interaction between these influences that will determine the development of the learner (Bronfenbrenner, 2005, p.147). Therefore this discussion of the microsystem will include the profile of the learner with ASD, and the interpersonal relationships the learner has with his/her parents and his/her teacher.

2.4.1.1 A profile of the learner with autism spectrum disorder

Bauer (2006, p.1) identifies people who have ASD as having significant difficulties in social communication, restricted and repetitive patterns of behaviour and interests, motor clumsiness and an atypical use of language. Carrington and Graham (1999, p.15) add that the most common challenges surrounding the learning and social characteristics of learners with ASD are: communication, motor clumsiness, obsessions and attention.

A learner with ASD may have above average verbal-intelligence scores. However, unusual and pedantic speech is often noticed. As cited in Carrington and Graham's research on ASD, Attwood (1997) found that the communication of a learner with ASD can be characterised by "a lack of spontaneous and reciprocal conversation, the overuse of stereotyped phrases, little descriptive language, the imitation and echoing of words, impaired imagination and a lack of the meaning of language and the function of communication". As cited below, Fine, Bartolucci, Szatmari and Ginsberg (1994) found repetitive questioning to be another characteristic.

> They [the teachers] referred to his frequent interruptions during lessons, as he would ask many questions which might, or might not, be appropriate. He did not always accept that when staff finished a conversation it was finished. Instead he would try to prolong it or raise the matter again later.

Tantam (1991, p.162) also reports that children with ASD give an impression of being clumsy, which arises from a delay in motor development. In this regard Carrington and Graham (1999, p.16) maintain that fine and gross motor difficulties are commonly experienced with ASD, and learners appear to develop an obsession with specific information areas with no regard or interest in conversation with others.

Attwood's research (in Carrington & Graham, 1999, p.17) illustrates how learners with ASD struggle to block out irregular stimuli, and thus seem easily distracted. Such learners have also been noted to be either hyper- or hyposensitive to stimuli.

In order to gain a holistic view of the learner with ASD, two domains of development will be discussed: cognitive development (Jean Piaget, 1969) and psychosocial development (Erik Erikson, 1959).

(a) Cognitive development

According to Schwebel and Raph (1973, p.3), Piaget's theory on cognitive development (1969) is timeless and still highly influential and relevant to modern-day education systems; an obvious reason being that he developed knowledge and understanding of the psychology of children and the nature of knowledge.

According to Piaget, a neurotypical child's cognition develops "through a continuous transformation of thought processes" (Ojose, 2008, p.26). Piaget observed a predictable sequence of four stages of cognitive development in children: sensorimotor; preoperational; concrete operational; and formal operational (Cartwright, 2001, p.214). Louw (1998, p.6) describes how the maturation process in children is linked to certain critical periods and describes those periods to be a time in the child's development where significant foundations are laid for further development, and when the child is most susceptible to external environmental influences.

Piaget's theory is based on the belief that children use two processes to adapt and construct knowledge (schemes) about the world, namely assimilation and accommodation in order to achieve equilibration (Louw, 1998, p.73). Assimilation occurs when a child uses what he/she has learned from the environment and integrates it with pre-existing schemes. Accommodation occurs when a child is forced to change his/her existing schemes in order to understand something in the environment (Louw, 1998, p.73). For example, infants who are in the sensorimotor stage process information through their senses by interacting with the world (assimilation) (Huitt & Hummel, 2003, p.1). As infants gradually pass into the next stage – the preoperational phase of their development – they are able to assimilate or accommodate their knowledge with an additional feature of symbolic mental

representation (Cartwright, 2001, p.214). Piaget believed that everything we know and learn is filtered through our frame of reference, and that we continue to construct knowledge based on what we already know (Watson, Stonebarger & Dunton, 2002, p.99).

Each phase of development becomes increasingly more complex, and are therefore termed in a hierarchical manner (Huitt & Hummel, 2003, p.2). Although development is generally grouped by chronological age, the level of development and the rate at which children develop differ significantly amongst individuals (Weinert & Helmke, 1998). Papila and Olds (1996) argues that this difference depends upon the maturity, experience, culture and ability of the child.

For the purpose of this study only the concrete operational phase will be discussed here, as this stage applies to the Foundation Phase learner aged nine years.

- **The concrete operational phase (age 7-11)**

Ojose (2008, p.26) emphasises that a specific developmental phase takes a certain amount of months or years before initial development occurs. The concrete operational phase is the third stage in Piaget's cognitive development theory, spans the period of middle childhood and is characterised by the development of logical thought pertaining to physical objects (Biggs & Telfer, 1987, p.194).

Piaget defines an "operation" as any mental transformation (Watson, Stonebarger & Dunton, 2002, p.113). A concrete operation is a "reversible mental action on real, concrete objects" (Santrock, 2001, p.216). In this phase of development, the child gains the ability of grouping: seriation and classification; conservation; number and space; and reversibility (Santrock, 2001, p.216).

Santrock (2001, p.218) reiterated Piaget's belief in "horizontal décalage" whereby "similar abilities do not appear at the same time within a stage of development" – those of a salient nature are mastered first.

- **Cognitive development of the learner with autism spectrum disorder**

Myles and Southwick (2005, p.2) report how Asperger noticed an almost "adult-like intellectual function" in the participants of his study, who later were named having

ASD. Myles and Southwick (2005, p.2) further explains how learners with ASD have a neurological disorder, experiencing difficulty in applying and integrating learned material and experiences. The neurological immaturity of these learners can impact how they may "think, feel and react" (Myles & Southwick, 2005, p.5). Although learners with ASD may have an exceptional rote memory, this does not mean that they have the ability to recall information (Myles & Southwick, 2005, p.8) and this may affect instances where alternative problem-solving strategies are required (Myles & Southwick, 2005, p.11). Individuals with ASD are more interested in building knowledge and learning facts than in gaining or bettering their interpersonal relationship skills (Weinfeld, Silverman & Kenworthy, 2014, p.22).

Learners with ASD also experience difficulties with central coherence which, according to Bogdashina (2006, p.50), leads to an inability to integrate their "thinking/information into a higher level of holistic information"; therefore they struggle to acquire the gist of things (Wright & Williams, 2003, p.53). Another kind of cognitive difficulty experienced is impaired executive functioning (Klin, Volkmar & Sparrow, 2000, p.86) – including difficulties in "organisational and planning abilities, working memory, inhibition and impulse control, self-reflection and self-monitoring, time management and prioritising, understanding complex and abstract concepts and using new strategies" (Attwood, 2006, p.234).

(b) Psychosocial development

Child psychiatrist Erik Erikson (1892-1994) suggested that individuals advance – from birth until old age – through eight differing, yet sequential crises in the form of *psychosocial stages* (McDevitt & Ormrod, 2010, p.404). Each stage represents a critical period or psychological crisis that is responsible for the emergence of an ego quality such as trust, initiative, or identity (Rosenthal, Gurney & Moore, 1981, p.526). Each crisis is brought on by an interaction between the individual and society (Louw, 1998: 58). Erikson referred to these stages as psychosocial stages as there is a reference to oneself (psycho-) and the relationships with others (-social) (McDevitt & Ormrod, 2010, p.404). Louw (1998, p.58) states that every stage has a positive and negative pole and that these polar opposites are always present throughout life. The first four core conflicts span the period of infancy and childhood, namely trust versus mistrust; autonomy versus shame and doubt;

initiative versus guilt; and industry versus inferiority (Rosenthal, Gurney & Moore, 1981, p.526). The development of an individual is only furthered depending on the individual's ability to resolve the given crises (Sacco, 2013, p.140). Erikson did, however, believe that an individual has its entire life in which to solve the crises and develop successfully. There is no "irreversible failure to develop" (Watson, Stonebarger & Dunton, 2002, p.40).

For the purpose of this study, focus is on the psychosocial development concept of industry versus inferiority, as this pertains specifically to the development of the Grade 3 Foundation Phase learner with ASD.

- **Industry versus inferiority**

Erikson's fourth stage of psychosocial development pertains to Grades 1–3, i.e. the Foundation Phase learner who commences with his/her formal instruction (Louw, 1998, p.61). It is at this stage that the learner begins to reason deductively, and other social institutions start to play a role in the developmental crises of a developing child. The child's development of industry or inferiority is no longer the sole responsibility of the parents, but relies on the actions of other adults as well (e.g. a teacher) (Elkind, 1970, pp.11-12). Some learners in this stage soon learn that they are able to gain recognition and be acknowledged through their holistic domain, which demonstrates a state of industry (McDevitt & Ormrod, 2010, p.405). Other learners are not able to meet adult expectations; those learners tends towards the other extreme and develop a sense of inferiority (McDevitt & Ormrod, 2010, p.405). Watson, Stonebarger & Dunton (2002, p.46) reflect how this stage is not only about what the learner can do, but also how they fit in and where they belong.

2.4.1.2 The psychosocial development of the learner with autism spectrum disorder

Myles and Southwick (2005, p.7) describe how one's maturity is often assessed by how socially adept one is in social situations. When a learner with ASD experiences stress, his/her reasoning prowess is affected, as they have "an emotional maturity level that is significantly below his/her chronological age" (Myles & Southwick, 2005, p.7). In times of stress they are less likely to be able to access the "thinking"

brain, and act in ways that are perceived to be irrational to others (Myles & Southwick, 2005, p.6).

Amongst several cognitive deficits that affect learners with ASD, is the inability to understand the emotions and mental states of others in social situations; this is known as “theory of mind” (Myles & Southwick, 2005, p.8) or “mind-blindness” (Bogdashina, 2006, p.48). According to Myles and Southwick (2005, p.8-10), learners with a problem in this area exhibit the following problems: difficulty in explaining one’s own behaviour; difficulty understanding one’s emotions; difficulty in predicting the behaviour and emotional states of others; difficulty in understanding the perspectives of others; difficulty in inferring the intentions of others; lack of understanding that behaviour impacts how others think and/or feel; difficulties with joint attention and social conventions; and difficulty with differentiating fact from fiction.

Lev Vygotsky’s work (cited in Mooney, 2013, p.100) illustrates how the cognitive development, in terms of expectancies, and social development of a child build on one another, and that the contexts of a child’s upbringing are shaped by personal and social experiences such as family, socio-economic status, culture, education and many more. The child’s meaning and understanding of the world is influenced by the adults and other children that are present in their lives. Effective partnerships between respective systems are vital in understanding normal child development and its function in that development (Benjamin, 2015, p.20).

Albert Bandura’s (1925) social learning theory explains that much of what we learn throughout our lives is achieved through simply observing significant behaviour of others, and then imitating this modelled behaviour (Bandura, 1977, p.5). It is only by observing the outcome of the behaviour of others, through a process deemed by Watson, Stonebarger and Dunton (2002, p.85) as "vicarious reinforcement", that the child learns to identify with certain behaviours, eventually internalising it. Watson, Stonebarger and Dunton (2002, p.85) focuses on learning from others, as that is what classifies this type of learning in a social domain.

A child’s social development refers to the process whereby he/she learns to “meet his/her particular society’s moral standards, role expectations and demands for

acceptable behaviour" (De Witt & Booysen, 1995, p.25). A hallmark characteristic of learners with ASD is their inability to form and maintain healthy social relationships (Myles & Southwick, 2005, p.14). The child "lacks the understanding of social cues, interprets concretely and has language comprehension problems" (Myles & Southwick, 2005, p.14). Although individuals with ASD do experience connecting with their peers as troublesome, it is an observable trait that they tend to form better relations with their parents, and thus may find it easier to engage confidently with adults rather than with their peers (Weinfeld, Silverman & Kenworthy, 2014, pp.16-17). Individuals with ASD will prefer to play parallel to their peers (Weinfeld, Silverman & Kenworthy, 2014, p.17), as they wish to have complete control over an activity, and an intrusion by others would cause the changing of rules, hence fostering resentment (Attwood, 1997, p.30).

"The expression of heritable traits such as socialisation in children is strongly dependent on experience-specific parent behaviours" (Brooks & Goldstein, 2011, p.6). In individuals with ASD, social motivation is almost always low (Attwood, 1997, p.14); this is reasonably assumed because individuals with ASD struggle to engage and perform any reciprocity (Weinfeld, Silverman & Kenworthy, 2014, p.16), as discussed before. However, the need to make friends may strengthen as the individual with ASD grows older (Weinfeld, Silverman & Kenworthy, 2014, p.17). To others, it may seem that individuals with ASD are introverted and egocentric; they are, however, quite philanthropic (Attwood, 1997, p.30).

It is unlikely that these individuals are able to detect subtleties in the spoken language that many others are inclined to use every day, like sarcasm (Weinfeld, Silverman & Kenworthy, 2014, p.18). Carrington and Graham (1999, p.17) suggest that this could be the cause of a lack of integration between the relevant sections of the brain. Many individuals who have been diagnosed with ASD suffer from what professionals have termed "theory of mind" (Myles & Southwick, 2005, p.8). This theory relates to how these individuals struggle to "intuit what others might be feeling in a given situation" (Weinfeld, Silverman & Kenworthy, 2014, pp.18-19).

These are some of the typical behaviours that infants with autism (and for the purpose of this study, ASD) may display socially (adapted from Sicile-Kira, 2004, p.25):

- does not reach out to be held/ cuddled
- does not imitate others
- does not develop peer relationships
- prefers to be alone
- aloof manner
- little or no eye contact
- has speech, then loses it
- speaks on focused topics

Learners with ASD struggle to develop appropriate social connections with others, and have irregular interests, routines and social language problems. This prevents them to experience opportunities to develop a “social resilient mindset” (Brooks & Goldstein, 2011, p.3). Myles and Southwick (2005, p.5) explain how learners with ASD, when under stress, exhibit signs of reacting emotionally rather than logically; and when not under stress, display degrees of reasoning and feeling as neurotypical individuals would normally do. Self-criticising and self-deprecation are common traits amongst learners with ASD, as they are well-aware that they differ from their peers (Myles & Southwick, 2005, p.15).

The school environment is potentially filled with negative experiences that may place the learner “at risk” (Goldstein & Brooks, 2012, p.239). According to Goldstein and Brooks (2012, p.239), the term "at risk" can be defined as any negative situation that can threaten the normal development of a child. Learners with ASD and their unique domain-specific learning difficulties therefore often experience “challenges to the integrity of their development” (Goldstein & Brooks, 2012, p.239). A learner’s social life also impacts his/her social learning, and those who struggle to maintain social relationships often tend to lose the social support networks that are of critical importance for humans to cope with stressors in life (Goldstein & Brooks, 2012, p.244).

In summary, ASD is a neurological defect that affects the functioning of the brain. It affects how a person processes information. Learners with ASD suffer from mind-

blindness and although they may possess an adult-like intellectual functioning, they do struggle with central coherence when trying to acquire an understanding of the elementary nature of objects and concepts.

The following section will illustrate the interaction between the learner with ASD, and the learner's parent.

2.4.1.3 Interaction between the learner with autism spectrum disorder and the parent

Learners with ASD have impairments in social interaction and communication. Proximal processes (reciprocal interactions in an immediate environment) appropriate for neurotypical children will not serve these learners well (Gable, 2006, p.130). For parents of children with ASD, it is often a laborious journey to realise this. It is imperative that Foundation Phase teachers work with parents in developing certain reciprocal proximal processes needed for a learner with ASD, in order to actualise these critical development goals (Gable, 2006, p.130).

Bronfenbrenner's ecological systems theory emphasises how our lives are shaped by levels of influence. Bronfenbrenner (1995, p.620) adds that the greatest influence on a child's life trajectory is their own participation, reciprocally interacting with others continuously around them. According to Bronfenbrenner (cited in Gable, 2006, p.130), these

> […] proximal processes lead to particular kinds of developmental outcomes, those that represent the realisation of potential for: differentiated perception and response; directing and controlling one's behaviour; coping successfully under stress; acquiring knowledge and skills; establishing and maintaining mutually rewarding relationships; and modifying and constructing one's own physical, social and symbolic environment.

Parent-child transactions consist of developing relationship processes through "frequent and extended sequences of successful and synchronous parent-child/teacher-child exchanges" (Guralnick, 2011, p.6). It is imperative that parents are sensitive, responsive, engaged and provide positive interactions with their

children in order for the learners with ASD to realise the "developmental value of relationships" (Guralnick, 2011, p.6).

Parents of learners with ASD can further contribute to their children's development by exposing them to experiences beyond their immediate relationships. In this regard, Guralnick (2011, p.7) lists types of experiences that parents can expose their children to, such as introducing the child to the parent's social network, arranging a peer social group for their child, and getting involved in community activities (e.g. shopping). All of the above present opportunities for a child to improve his/her developmental growth, as it not only exposes the child to different participants or settings, but also reinforces the parent-child/teacher-child transactions (Guralnick, 2011, p.7).

Parents are primarily responsible for the education, health and safety of the child with ASD (i.e. ensuring they provide proper nutrition, acquiring immunisations, et cetera). Failure to comply with any health and safety measure may have detrimental effects on the child's social and cognitive development (Guralnick, 2011, p.10). This responsibility may strain the fiscal and psychological well-being of a parent (Boyd, 2002, p.208). The interrelationship of all these variables is a vital element in understanding the impact and implications of caring for a child with ASD, and the unique stressors that it entails (Schieve, Blumberg, Rice, Visser & Boyle, 2007, S114).

Guralnick (2011) postulates that certain genetic predispositions assist neurotypical children in becoming more resilient to adversities. However, children with established disabilities are far less resilient and therefore cannot endure inconsistencies in the "quality of family interactions to maintain optimal levels of development" (Guralnick, 2011, p.10). The nature of the disability will determine how to moderate the family patterns of interaction.

Due to behavioural problems, irritability and reduced initiative on the part of the child with ASD, parents may find it difficult to adjust to their child's characteristics, and many adjustments that are needed (e.g. societal attitudes/beliefs and child-care) often surpass their awareness (Guralnick, 2011, p.11). At the same time, it is easy to comprehend why relationship processes do not develop organically.

Parents are therefore advised to have a working knowledge of ASD, and to structure appropriate interactions with their child to develop relationships in mutually satisfying ways (Gable, 2006, p.131).

Families with these vulnerable children are further strongly advised to work at improving their family patterns of interaction, and to allow professionals with appropriate backgrounds and training to assist and suggest effective early intervention. Interventions can trigger successful responses to the stressors that affect family patterns of interaction, resulting in improved social and cognitive developments of a child (Guralnick, 2011, p.12).

2.4.1.4 The teacher of the learner with autism spectrum disorder

Wing (1981, p.125) emphasises the importance of formal education for learners with ASD, because "it may help to develop special interests and general competence sufficiently to allow independence in adult life", and adds that the skills and understanding of the teacher play a determining role in the educational successes of such learners. In this regard, Schopler, Mesibov and Kunce (1998, p.230) mention that learners do not often meet chronological age expectations due to the characteristics of ASD, and therefore do not benefit from traditional ways of teaching. In practice this means that Foundation Phase teachers may have to adapt their instructional material. These requirements add a lot of additional stress on the teacher. Simpson, De Boer-Ott and Smith-Myles (2003, p.116) agree that Foundation Phase teachers worldwide are struggling to educate the increasing number of learners with ASD, while Sicile-Kira (2004, p.183) concurs that Foundation Phase teachers are indeed in desperate need of assistance and training to enable them to provide for learners with special needs.

Ells (2013, p.13) believes that a teacher needs to be flexible and supportive. Cannon (in Weinfeld, Silverman & Kenworthy, 2014, p.152) understands a supportive and flexible teacher as a person who:

- has a calm demeanour, empathic understanding, positive outlook and high expectations;
- can solve problems in determining the cause of a breakdown;

- knows him/herself and how to avoid any inflexibility;
- models situations that require flexibility;
- empowers learners by allowing them to make decisions/choices;
- provides countless opportunities to practise skills; and
- builds independent skills.

These characteristics are vitally important since Gerhardt (in Weinfeld, Silverman & Kenworthy, 2014, p.153) states that ASD learners often "show a surprising sensitivity to the personality of the teacher - the teacher's underlying attitude influences, involuntarily and unconsciously, the mood and behaviour of the child." Schopler, Mesibov and Kunce (1998, p.246) stress that a teacher should remain empathic and respectful at all times towards a child with ASD.

Benjamin (2015) considers it vital that Foundation Phase teachers develop an effective relationship with their learners and to constantly remind themselves that the child is a "product of a family system". Understanding the dynamics of the family will assist the teacher to grasp the learner's needs more efficiently. Ells (2013, p.13) opines that a learner who does not understand what is happening around him/her, cannot be taught by a person who thinks he or she can control their behaviour.

2.4.2 THE MESOSYSTEM

The mesosystem is a system of microsystems that can be viewed as the "linkages of processes" over two or more settings containing the developing learner (i.e. the relationship between the home environment and the school environment) (Bronfenbrenner, 2005, p.148). Although the family setting provides the primary context, other environmental systems assist developmental processes as well (Bronfenbrenner, 1986, p.723).

For the purpose of this study, the mesosystem refers to the relationship between the teacher and the parents of the learner with ASD, as well as the support the teacher receives from the school management, school-based support teams and the Department of Education.

2.4.2.1 The relationship between teacher and parent

Emotional intelligence (EI) impacts dramatically on all aspects of human performance (Maree & Elias, 2007, p.9), and can be defined as the development of specific abilities to reason intelligently where emotions are concerned. The concept of EI will be discussed in detail in the next section, and only key aspects are highlighted here. EI embraces the ability to identify and interpret the emotions (in oneself and others), and the inherent skills to comprehend and reflectively manage those emotions (Coetzee & Jansen, 2007, pp.1-2).

Cross and Hong (2012, p.1) believe that "emotional experiences involve person-environmental transactions, which include both 'internal' personal characteristics and 'external environments' such as the social, cultural and political structures of the school." The contexts in which a child develops, and the mesosystems linking those contexts are incrementally important to the success of the child in education and life in general (Maree & Elias, 2007, p.49). Foundation Phase teachers, however, are generally not prepared well enough to enhance a learner's social or emotional intelligence (Maree & Elias, 2007, p.50). A collaborative effort between parents and school is crucial for learners to enhance their social-emotional intelligence (SEI) (Maree & Elias, 2007, p.50). In enhancing their SEI, Foundation Phase teachers may empower learners to handle daily stressors better (Maree & Elias, 2007, p.51).

A copious amount of research has already been conducted on the influences that a child's family has on his/her performance and behaviour at school (Bronfenbrenner, 1986, p.727). However, few studies have been conducted on how the school environment influences the family processes at home. As is the case in educational spheres worldwide, early assessment practices and opportunities for intervention have not been established or exercised correctly (Weinfeld, Silverman & Kenworthy, 2014, p.29). It is imperative that both Foundation Phase teachers and parents are vigilant at all times to detect any developmental delays in an individual, and to suggest a possible assessment referral if needed (Weinfeld, Silverman & Kenworthy, 2014, p.30).

Benjamin (2015, p.32) claims that parent-teacher relationships are shown to influence children's academic and social development, especially in the case of learners with ASD. Guldberg (2010, p.4) refers to Myles and Simpson (2002) when stating that "ongoing parent and teacher collaboration is an essential foundational element in the education of children on the autism spectrum". It is important to maintain an open-door policy between parent and teacher, but in certain communities parents do not assume any rights in approaching the teacher. Lasky (2000, p.2) reports that the communal regard of appropriate relationships between Foundation Phase teachers and parents, is generally determined by "deep-seated, enduring social, political and institutional beliefs and practices."

Interactions between Foundation Phase teachers and parents constitute a common source of social interchange (Lasky, 2000, p.1). The degree of interaction between the two systems influences a learner's developmental outcomes on academic and social planes (Benjamin, 2015, pp.18 & 32). "Communication barriers can be created between parents and Foundation Phase teachers when teachers hold a notion of 'teacher-as-expert'" (Lasky, 2000, p.855). It is crucial to the child's development that parents and Foundation Phase teachers develop a collaborative, yet effective relationship that focuses on communication (Benjamin, 2015, p.18).

Cross and Hong (2012, p.1) state that emotions are central to teaching and learning endeavours, and are critical aspects in relation to quality of teaching, teacher-learner relationships and educational progress. Foundation Phase teachers should be emotionally intelligent (Coetzee & Jansen, 2007), meaning that they should effectively utilise emotional information to guide learners' thinking and behaviour.

"The teacher's level of EI is by far the single most important variable in creating an emotionally intelligent classroom" (De Klerk & Le Roux, 2003, p.19). A classroom where the teacher is emotionally intelligent:

> […] provides developmentally and culturally appropriate instruction; attempts to create a caring and engaging learning environment; teach children to apply social and emotional skills both in and out of school; enhance school performance by addressing the cognitive, emotional, and social dimensions of learning; encourage family and school partnerships;

and include continuous evaluation and improvement (Brackett & Katulak, 2006, p.2).

2.4.2.2 The support Foundation Phase teachers receive

In South Africa, as a national movement toward "Education for All" – stated in the UNESCO Salamanca Statement (1994) – the newly elected government of the democratic era pledged to address the injustices and inequities of the past, and to radically transform the existing education system in order to reflect an “Inclusive Education and Training system” (Steyn & Kamper, 2012; Spies, 2013, p.1). Inclusion thus involves no heterogeneous groupings and the full participation of “all students in all aspects of schooling” (Loreman, Deppeler & Harvey, 2010, pp.2-3).

Foundation Phase teachers in South Africa, however, are still saddled with remnants of the previous education system (Eloff & Kgwete, 2007, p.351). A prerequisite of the former Outcomes Based Education (OBE) system was that teacher training had to be designed to produce Foundation Phase teachers who were not only willing, but also able to achieve the objectives of an inclusive education (Naicker, 2000, p.8). However, Foundation Phase teachers were largely convinced that not enough training was provided to them, resulting in them not having the capacity, confidence or resources to adapt the curriculum for efficient learning to occur (Richeson, 2015, p.4). Foundation Phase teachers still contend with over-populated classrooms, limited educational resources and a vast array of language diversities (Eloff & Kgwete, 2007, p.352). The Department of Education had hoped that through the training programmes (which the district-based support teams would schedule), Foundation Phase teachers all over South Africa would be inspired to implement new and innovative teaching methods. However, feedback from these training sessions evaluate those programmes as too long, incomprehensive and insufficient (Donohue & Bornman, 2014, p.9).

Foundation Phase teachers need to be qualified subject-specialists if they hope to implement inclusion and acquire the specific knowledge, skills and attitudes embedded in the national learning outcomes successfully (Mosia, 2011, p.7). The success of inclusion relies strongly on the amount of support provided to Foundation Phase teachers (Richeson, 2015, p.13). The South African educational

realm can only move forward by devising original strategies to support Foundation Phase teachers in coping with the various challenges faced in today's inclusive classrooms. Benjamin (2015, pp.33-34) refers to Barnett (2003) when he states that "better-educated Foundation Phase teachers have more positive, sensitive, and responsive interactions with children; provide richer language and cognitive experiences; and are less authoritarian." Although Foundation Phase teachers require support in the form of training (pre- and in-service), parental involvement and support is also a requirement.

2.4.3 THE EXOSYSTEM

The exosystem is an environment that does not contain the developing individual, but consists of processes and influences that affect the immediate environment within which the developing individual is found (e.g. the relationship between the home environment and the parents' workplace) (Bronfenbrenner, 2005, p.148). The psychological development of the learner is vital here, as it relates to a domain to which the learners have limited direct access (Bronfenbrenner, 1986, p.723).

For the purpose of this study, the exosystem will consist of the accessibility of the curriculum for learners with ASD, and the support systems provided by the Department of Education for Foundation Phase teachers with special needs learners in their classes.

2.4.3.1 Accessibility of the curriculum

The South African Inclusive Education policy, which is contained in the White Paper 6 (Department of Education, 2001), makes provision for a flexible curriculum that is accessible for diverse learning needs, including learners with ASD. It is a learner-centred and result-oriented policy, based on the assumption that all learners can actualise their full potential (Naicker, 2000, p.3), while also based on the premise that all learners and their needs will be accommodated through the use of multiple teaching and learning strategies, and various assessment tools. However, many Foundation Phase teachers were not trained to manage the different learning needs within the inclusive classroom, and are unsure how to tailor the curriculum to suit every individual learner's own pace of learning (Donohue & Bornman, 2014, pp.4 & 9). Loreman, Deppeler and Harvey (2010, p.9) suggest that Foundation Phase

teachers become conversant in planning responsive lessons where differentiated learning and teaching can take place.

2.4.3.2 Availability of funds and resources for Foundation Phase teachers

"The broad concept of inclusion highlights that it does not suffice to look only at 'within child' factors when addressing how to educate a child on the autism spectrum, but that it is equally important to make adjustments to the learning environment or the way that staff work" (Guldberg, 2010, p.1). Therefore, the school needs to be an "enabling environment" (SABER Country Report, 2012, p.2), which means that the necessary resources should be available to ensure optimal support for learners with special educational needs.

According to Donohue and Bornman (2014, p.7), with the implementation of the White Paper 6 (as discussed below), the support systems envisioned to provide support-training to Foundation Phase teachers, in order to orient them to the ideals of becoming an inclusive society, were: special schools transformed and converted into resource centres; and the establishment of district-based support teams to assist Foundation Phase teachers in implementing inclusive practices in their classrooms. Engelbrecht and Green (2007, p.57), however, report that many Foundation Phase teachers received no training from the Department of Education to address the diverse needs of every learner. Neglect to provide such support will only continue to hinder inclusive practices. Foundation Phase teachers often shoulder the blame when new initiatives fail; however, most implementation efforts fail to address the contexts within which Foundation Phase teachers are expected to carry out directives (Engelbrecht & Green, 2007, p.59). Loreman, Deppeler and Harvey (2010, p.7) mention that, in order for Foundation Phase teachers to be efficient inclusive Foundation Phase teachers, they require exposure to a certain set of skills, knowledge and attributes in their initial teacher preparation, and through continuous professional development.

A key principle to the implementation of inclusion is cost effectiveness. However, this consideration does not take the practicality of this policy into account, because of the fiscal constraints imposed upon the country's budgets (Engelbrecht & Green, 2007, p.52). In order for any educational systems (i.e. infrastructures) to transform,

provincial departments would require a substantial increase in their funding in order to pursue this policy's envisaged outcomes (Donohue & Bornman, 2014, p.8). Having not received any increased funding from the Department of Education, education professionals believe that the Department of Education does not want to be held accountable for implementing the policy, and consequently delegated their responsibilities to others (Donohue & Bornman, 2014, p.8). "When new policies have been implemented, sufficient funding and capacity to deliver these policies are assumed" (Donohue & Bornman, 2014, p.8). The Department of Education currently lacks the funding needed to properly provide logistics and support to schools, which is why schools at present lack the means of accommodating the diverse range of learning needs (Fiske & Ladd, 2004, p.7). Initial funding is crucial if he Department of Education hopes to realise the inclusive policy (Loreman, Deppeler & Harvey, 2007, p.11). This should happen in an environment where every workforce is willing to assist by being flexible in the presentation of the curriculum, and adapting the environment and routines to best suit the learners' needs (Guldberg, 2010, p.2).

2.4.4 THE MACROSYSTEM

The macrosystem is the blueprint of a particular culture and subcultures of the community in which the developing individual exists (i.e. resources, lifestyles and hazards) (Bronfenbrenner, 2005, p.150). Lerner (in Bronfenbrenner, 2005) adds that public policies are also part of the macrosystem. This system is believed to affect "developmental processes at more proximal levels" (Bronfenbrenner, 2005, p.151).

For the purpose of this study, the macrosystem will consist of ways in which the Education White Paper 6 (containing the Inclusive Education policy) impacts not only on the learner diagnosed with ASD, but also the teacher responsible for the development of learners with ASD.

2.4.4.1 The White Paper 6 - how it impacts Foundation Phase teachers and the learners they teach

During the apartheid regime, learners diagnosed with disabilities struggled to gain access to education as not many special schools existed, and those schools that

catered for children with learning disabilities only accepted certain applicants based on strict criteria (Department of Education, 2001). In the Education White Paper 6 (2001), the World Health Organisation stated that any school could potentially have a 2.2 to 2.6 percentage of learners considered as disabled. Applied to the South African learner population, it means that a few hundred-thousand learners are considered disabled, needing to be accommodated in only 380 schools (Department of Education, 2001).

The present South African Constitution (Act 108 of 1996) is founded on democracy and provides for basic education to all citizens in the hope that all are able to pursue their potential in an environment encompassed by equity and equality. The implication is that all learners, regardless of their race, religion and intellectual abilities would be catered for in ordinary schools. Learners who require low-intensive support would receive this in mainstream schools; those requiring moderate support would receive this in full-service schools; and learners who require high-intensive educational support would continue to receive such support in special schools (Department of Education, 2001).

According to the Department of Education (2001), one of the many barriers that learners with ASD experience is the curriculum, including aspects such as:

- learning content
- language of instruction
- organisation and management of classrooms or lessons
- methods and processes used in teaching
- pace of teaching and time available to complete the curriculum
- learning materials and equipment
- assessment procedures

As Waddington (in Waddington & Reed, 2006, pp.151-152) cites, there is “a growing drive towards ‘full inclusion’ of children with Autistic Spectrum Disorder in schools” and that inclusion may not necessarily be beneficial to all children, as it is not always concerned with being able to meet every child’s scholastic needs.

Parents often feel that the quality of delivery and curriculum adaptation is vital in maintaining a successful mainstream placement.

Current beliefs dictate that the skills that are present in the emotionally intelligent can be indicators of content, pace of learning and assessment methods, if inclusion is to be successfully implemented. Therefore differentiated curricula and instructions – in conjunction with individual support – is required to accommodate all learners while still respecting their learning diversities (Friend & Pope, 2005, p.60). It is believed that by offering learners these choices, fewer accommodations will be required. In today's curriculum the content is centred on "authentic experiences in a natural context", and is more strength-based driven (Winter, 2007, p.30). It reduces prejudice and continues to "foster an appreciation of humankind and respect for its diversity" (Engelbrecht & Green, 2007, p.125). However, due to time constraints and varying teacher attitudes, many Foundation Phase teachers are still not adapting their teaching styles or their curricula. Professional training and support is required for Foundation Phase teachers to maximise their proficiency in this aspect of adaptation (Winter, 2007, p.165).

The discussion of the study's theoretical framework incorporating the ecological systems theory – emphasising the role of the teacher in the educational development of children with ASD – is now concluded. In the following section this important role of the teacher will be scrutinised, especially with regard to emotional intelligence and how important it is that Foundation Phase teachers who educate learners with ASD, are emotionally intelligent.

2.5 EMOTIONAL INTELLIGENCE

Humans live in a social world where social interactions are daily occurrences, and the ability to "successfully function within a social setting is deemed important in the overall healthy development of an individual" (Boyd, 2005, p.18). The ability to understand what we are feeling ourselves, to comprehend the feeling of others, and to know how to manage these feelings, is what distinguishes emotionally intelligent individuals. In this regard, emotional intelligence (EI) is defined as the behaviour that requires emotional and behavioural control as manifested in social situations (Coetzee & Jansen, 2007, pp.1-2).

The term emotional intelligence originates from Howard Gardner's spectrum of intelligences (cited in Kelly, Longbottom, Potts & Williamson, 2004, p.223). One of the identified intelligences in Gardner's spectrum was "personal intelligence", which successive research found to be personal intelligence that resembles the concept of emotional intelligence (De Klerk & Le Roux, 2003, p.8). It is the widespread opinion of psychologists that the human mind can be divided into three sections: cognition, affection and motivation (Boyd, 2005, p.3). EI originates from the affectionate side of mental functioning, yet cannot be completely separated from cognition. Although two different entities, cognition influences our responses to our feelings (Humphrey, Curran, Morris, Farrell & Woods, 2007, p.238).

Goleman (2001, p.2) defines EI as the ability "to recognise and regulate emotions in ourselves and in others." Mayer and Salovey (1997, p.10) define this concept as "the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth." Maree and Elias (2007, p.2) further explain social-emotional intelligence (SEI) as being "aware of the feelings and needs of others, and to be able to establish and maintain co-operative, constructive and mutually satisfying relationships."

While the various schools of thought differ in their definitions of EI, all seem to agree that it is about understanding feelings and how knowledge of emotions may be used to enhance behavioural traits and interrelationships (Boyd, 2005, p.5). From the aforementioned definitions of EI, Goleman (2001, p.2) identifies four domains or skills that are present in the emotionally intelligent: self-awareness, self-management, social awareness, and relationship management. Galler (2015, p.1) emphasises that these qualities may assist Foundation Phase teachers in creating effective work environments that are conducive to learner success.

These four domains of skills that emotionally intelligent people portray, will now be discussed.

2.5.1 SELF-AWARENESS

Morton (2014, p.22) defines this domain as one where Foundation Phase teachers need to recognise their own feelings and assess how these feelings affect their performances; to ascertain strengths and weaknesses; to prompt feedback and learn from mistakes. It is believed that this is the domain in which self-confidence is established. Foundation Phase teachers who are aware of the state of their feelings tend to be more verbal and assertive, and are superior negotiators (Maree & Elias, 2007, p.21).

2.5.2 SELF-MANAGEMENT

Morton (2014, p.23) draws attention to the fact that this domain focuses not so much on recognition of the self, but concentrates on regulation or modification of six competencies. These six competencies are: self-control, trustworthiness, conscientiousness, adaptability, achievement drive, and initiative. The regulation of such emotions tends to determine how parents or caregivers respond to the teacher (Maree & Elias, 2007, p.29).

2.5.3 SOCIAL AWARENESS

Social awareness is the domain whereby individuals become aware of the feelings, concerns, emotions, and needs of others (Morton, 2014, p.24). To be able to understand and infer the emotions of others, Foundation Phase teachers will have to learn how to read or interpret situational and expressive cues. A teacher's EI is directly linked to his/her ability to adapt to classroom teaching (Galler, 2015, p.2).

2.5.4 RELATIONSHIP MANAGEMENT

The final domain embraces social skills such as helping others to develop, influencing others, communication, conflict management, building bonds, and teamwork or collaboration (Morton, 2014, p.25). Foundation Phase teachers begin to direct their emotions by taking the available relationship dimensions into account (Maree & Elias, 2007, p.27).

Effective Foundation Phase teachers exhibit characteristics such as being "caring, understanding, warm, friendly, patient, able to relate to children, to motivate

children and to maintain discipline" – all necessary qualities for exceptional EI (Galler, 2015, p.2). Humphrey et al. (2007, p.240) explain how EI increases with age, referring to a hierarchical pyramid (see below) displaying EI's four stages of progression as drawn by McPhail (in Humphrey et al., 2007).

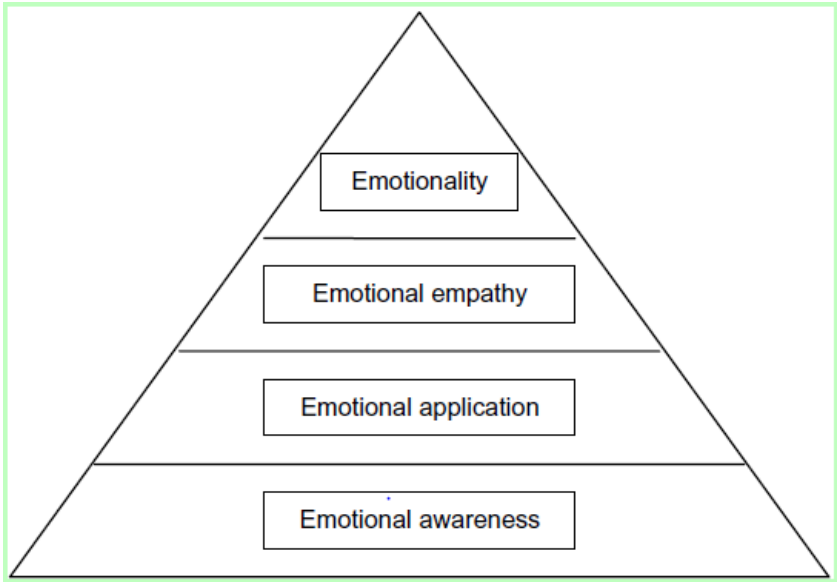

Figure 2.2: McPhail's (2004) hierarchical pyramid of emotional intelligence

Stage 1: Emotional awareness is the ability to recognise and identify one's own emotions and those of others. This is similar to Goleman's (2001) concept of self-awareness.

Stage 2: Emotional application is the ability to identify which emotions are suitable in certain situations. Emotional application is similar to Goleman's (2001) concept of self-management.

Stage 3: Emotional empathy is the ability to enter into the feelings of others. The third stage is similar to Goleman's (2001) concept of social awareness.

Stage 4: Emotionality is the highest level of self-awareness and is utilised in decision-making. Stage 4 represents the highest form of EI, which Foundation Phase teachers ideally want to actualise. Stage 4 resembles Goleman's concept of relationship management.

2.5.5 IMPLEMENTING EMOTIONAL INTELLIGENCE IN THE SCHOOL

EI is considered to be a foundation of competencies whereby Foundation Phase teachers are able to shape aptitudes that will inevitably result in improved psychological health and teaching success (Vesely, Saklofske & Leschied, 2013, p.71). These competencies are crucial for maintaining Foundation Phase teachers' motivational levels, as teaching is an occupation demanding a high degree of emotional labour in the present-day society (Vesely, Saklofske & Leschied, 2013, p.72).

Boyd (2005, p.5) emphasises that teacher-learner relationships are influenced by a teacher's EI. Galler (2015, p.11) advised therefore that the improvement of a teacher's EI be prioritised, to ensure a positive classroom environment. Elias (in Boyd, 2005, p.6) states that "children are emotionally attuned to be on the lookout for caring and they seek out and thrive in places where it is present." Brackett and Katulak (2006, p.4) warn that Foundation Phase teachers who experience difficulty in regulating their emotions tend to have learners who experience negative emotions in class. Those authors believe that a teacher's EI-level is a deciding factor in learners' well-being. Their research indicates that Foundation Phase teachers trained in EI are able to create more stable, supportive, and productive learning environments, i.e. environments that encourage positive social interaction, active engagement, and academic achievement among learners (Brackett & Katulak, 2006, p.4).

Many primary school Foundation Phase teachers gain emotional rewards by establishing close emotional bonds or emotional understanding with their learners as a foundation for teaching and learning (Hargreaves, 2000, p.816). Vesely, Saklofske and Leschied (2013, p.73) reiterate the relevance of EI in the classroom as it aids the development of emotional cognition, which directly impacts the behaviour of Foundation Phase teachers towards their learners. Hargreaves (2000, p.812) posits that emotions play an essential part in education and that Foundation Phase teachers are positioned to make classrooms either exciting or dull. Emotions arise due to interpretations of an occurred event, and hence any judgement made by a teacher about class behaviour is reflected in the emotions aroused within (Chang, 2009, p.1). Negative emotions and stressful experiences are linked to

perceptions of an event, and therefore EI is an important tool for the teacher to combat or cope with negatively charged situations in class (Vesely, Saklofske & Leschied, 2013, p.76).

A key focus in the pursuit of a successful application of EI in classrooms, is to first consider "the kinds of contexts that facilitate or inhibit adaptive emotional development" (Maree & Elias, 2007, p.11). Social contexts influences how Foundation Phase teachers and learners give meaning to their emotions and the environment in which incidents occur, as the interpersonal environment of an individual is a significant factor in the development of emotional competence (Maree & Elias, 2007, p.20).

To enhance the social-emotional outcomes of the learners within our classrooms, all forms of instruction are to be delivered in a "supportive, safe learning environment" (Maree & Elias, 2007, p.81). Foundation Phase teachers are obliged to display skills associated with advanced EI, as it is known that young children develop own skills through observation and imitation (Boyd, 2005, pp.60-61). Foundation Phase teachers and learners may consult the following blueprint (as proposed by Boyd, 2005) when attempting to understand and/or manage any form of emotion.

Table 2.1: Blueprint to use in understanding or managing emotions

EI Skill	Questions
Identify	How do I feel?
Use	How do I want to feel?
Understand	Why am I feeling the way I do, and how may my feelings change?
Manage	What am I able/willing to do to change the way I feel?

Foundation Phase teachers are rarely ever trained on the importance or handling of emotional skills (Jennings & Greenberg, 2009, p.496). Individuals with advanced EI suffer less "subjective stress, experience better health and general well-being, demonstrate better management performance, and are less likely to experience burn-out in very highly stressed jobs" (Humphrey et al., 2007, p.245). The opposite

appears to be true as well. Emotional distress is among the primary reasons for Foundation Phase teachers becoming dissatisfied and leaving the profession (Brackett & Katulak, 2006, p.4). Foundation Phase teachers are often exposed to "emotionally provocative situations", and some Foundation Phase teachers, due to a lower EI, have limited options for self-regulation when a strong emotional reaction occurs (Jennings & Greenberg, 2009, p.497).

Morton (2014, p.2) reveals how Foundation Phase teachers "need support to enhance their understanding of emotional intelligence", as little research exists regarding the relationship between teaching and emotions (Sutton & Wheatley, 2003, p.328). Foundation Phase teachers competent in applying high EI in classrooms will positively influence the learning environment (Morton, 2014, p.2), and enhance the social-emotional intelligence of their learners (Jennings & Greenberg, 2009, p.501).

Student Foundation Phase teachers receive a mere superficial introduction to the concept of EI, and are themselves testimony to how direly Foundation Phase teachers need EI training (Maree & Elias, 2007, p.144). Van der Linde (cited in Maree and Elias 2007, p.144) stresses the fact that South African Foundation Phase teachers are unequipped to deal with matters of EI. Maree and Elias (2007, p.145) state that "the best Foundation Phase teachers are themselves more emotionally intelligent", but to incorporate social-emotional intelligence into the curriculum, Foundation Phase teachers have to be educated in this aspect. EI is such a valuable skill for Foundation Phase teachers, as it addresses the "emotional, personal, social and survival dimensions of intelligence" (Maree & Elias, 2007, p.148). Gardner has expressed concern, however, and "warns against trying to apply the ideas without a sound developmental and curricular framework" (cited in Kelly et al., 2004, p.223).

Hargreaves (2000, p.813) states that there is "no systematic understanding of how Foundation Phase teachers' emotions are shaped by the variable and changing conditions of their work; nor of how these emotions are manifested in Foundation Phase teachers' interactions with students, parents, administrators and each other." Any knowledge on how Foundation Phase teachers are coping emotionally, is based largely on the sharing of their emotional experiences. A continuous

relationship and emotional engagement with learners is required for a teacher to learn how to "read" their emotions (Hargreaves, 2000, p.815). Also, a teacher cannot offer emotional support without any of the four previously discussed domains or skills associated with EI (Jennings & Greenberg, 2009, p.503).

Jennings and Greenberg (2009, p.499) argue that Foundation Phase teachers play a crucial part in contributing to their learners' emotional development. Socially and emotionally competent Foundation Phase teachers are known to set the tone of the classroom by being supportive and encouraging; designing lessons that utilise learners' strengths and abilities; establishing behavioural guidelines that promote intrinsic motivation; coaching learners through conflict situations and by acting as a role model by carrying out pro-social behaviour such as respectful and appropriate communication (Jennings & Greenberg, 2009, p.492).

2.5.6 EMOTIONAL INTELLIGENCE AND AUTISM SPECTRUM DISORDER

Several factors are involved in developing EI in children, such as "the learner's temperament, cognitive and socio-emotional development, parental child-rearing practices, social models, personal experiences, and the affective education at school and the community" (Garza, 2015, p.42). Because children spend a large amount of time in a school setting, it can be reasonably inferred that the development of a learner's social-emotional competencies are significantly influenced by the teacher in the formal learning context (Jennings & Greenberg, 2009, p.491). Galler (2015, p.2) advises that Foundation Phase teachers need to be "caring, understanding, warm, friendly, patient, relate to children, to motivate students, and to maintain discipline" to be effective in class. Garza (2015, p.44) states that socially and emotionally competent Foundation Phase teachers are resourceful in assisting children with learning difficulties, as they naturally develop caring, "supportive and encouraging relationships with their students." Jennings and Greenberg (2009, p.492) further explain how Foundation Phase teachers with high EI provide good examples of pro-social behaviour. They design lessons that not only build on their learners' strengths and abilities, but also help to foster intrinsically motivational behaviour within the classroom.

Learners with ASD experience difficulties in social communication and they exhibit various comorbid illnesses (e.g. stress and attention difficulties) (Bauer 2006, p.1). Jennings and Greenberg (2009, p.492) believe that Foundation Phase teachers with high EI are capable of assisting learners with ASD by implementing an appropriate social-emotional curriculum that these children require, since they are role models themselves who epitomise desired social and emotional behaviour. Those Foundation Phase teachers are valuable as they provide an environment that is both physically and psychologically safe (Garza, 2015, p.46), thereby relieving the amount and intensity of stress experienced, and increasing attention in learners (Fredrickson & Branigan, 2005, p.1). Robitaille (2008, p.8) declares that while all effective Foundation Phase teachers exhibit and incorporate high EI, such skills are even more critical when teaching learners with emotional and behavioural difficulties.

Research has yielded that EI is a crucial factor in the success of all dimensions of human performance, relationships and education, and that Foundation Phase teachers "with emotional intelligence would relate better to children and, through a positive teacher-student relationship, be better able to meet their needs" (Boyd, 2005). However, most research has only focused on neurotypical participants and not on clinical participants, such as individuals with ASD (Maree & Elias, 2007, p.225). My literature search illustrates that more research is needed to fill such a crucial gap in the knowledge base, if Foundation Phase teachers are going to successfully apply EI in assisting learners with ASD.

2.6 CONCLUSION

The purpose of this chapter was to present a literature review on behaviour ascribed to Asperger's syndrome, which now resorts under the umbrella diagnosis "autism spectrum disorder" (ASD) in the latest edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). ASD refers to a high functioning form of autism. People with ASD often lack social skills and sometimes have problems with motor regulation and obsessiveness; however, their language and cognitive skills are largely intact. Emotional intelligence (EI) is related to theory of mind and individuals with ASD suffer from such mind-blindness. This explains why they lack the ability to understand the perspectives and feelings of others since

events are often taken literally, and the emotional subtexts are often unseen. EI possibly represents the opposite condition to mind-blindness. Boyd (2005, p.5) emphasises that teacher-learner relationships are influenced by the teacher's EI, which includes the abilities to perceive and assess the emotional state of oneself and others, and to "read between the lines" in conversations and relations to others. Foundation Phase teachers with high EI set good examples of pro-social behaviour: they design lessons that not only build on their learners' strengths and abilities, but also help to foster intrinsically motivational behaviour within the classroom.

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CHAPTER 3
RESEARCH METHODOLOGY

3.1 INTRODUCTION

Chapter 2 highlighted the critical perspectives on autism spectrum disorder (ASD) and demonstrated how Urie Bronfenbrenner's ecological system theory and its demarcated interactive structures influence a family's capacity to foster the healthy development of their children (Bronfenbrenner, 1986, p.723). A profile delineating the cognitive, social and emotional development of a neurotypical learner was presented, as well as the profile of a learner diagnosed with ASD. The application of emotional intelligence (EI) by the Foundation Phase teacher was deliberated on and it was determined that Foundation Phase teachers who are competent in applying their EI in the classroom could positively influence the learning environment (Morton, 2014, p.2), and thereby enhance the social-emotional intelligent behaviour of their learners (Maree, 2007, p.10).

The purpose of this chapter is to present the research methodology that was followed while observing the learner with ASD, and to provide parents and Foundation Phase teachers with characteristics of EI that would be useful in supporting learners with ASD. The research methodology consists of the research design and methods that were employed to answer the research questions pertaining to this study.

3.2 RESEARCH DESIGN

Thomas (2013, p.70) defines a research design as being the blueprint or design route of the investigation which the researcher uses to conduct the study. Blueprints are a step-by-step framework of what needs to be done (Mouton, 1996, p.107). It relates directly to the answering of a research question while still maintaining internal validity (Bless, Higson-Smith & Kagee, 2006, p.130). For the purpose of this study, the research design includes the interpretive paradigm, the qualitative approach and multiple case study used in the research.

3.2.1 RESEARCH PARADIGM

The term paradigm originated from the Greek word *paradeigma*, said to mean "an unchanging model" and believed to be “a fixed set of assumptions (beliefs) about the way inquiry should be conducted” (Thomas, 2013, p.73). Babbie (2013, p.32) explains a paradigm as a model or framework of how our observations and reasoning are organised. Wagner, Kawulich and Garner (2015, p.53) distinguish between positivist and constructivist/interpretivist paradigms, each with its own framework of assumptions regarding the nature of reality.

Denzin and Lincoln (2005, p.91) explain how the research process encompasses four major dimensions, namely ontology, epistemology, axiology and methodology. Creswell, Hanson, Plano and Morales (2007, p.238) expound that researchers enter the process of inquiry having their very own philosophical assumption about the reality of nature (ontology), how they know what is known (epistemology), the inclusion of their values (axiology), the nature in which their research emerges (methodology), and their writing structures. The opinion of an individual, however, “is not an objective fact of nature; it is a point of view, a paradigm” (Babbie, 2013, p.33). Maree (2007, p.54) states that “a paradigm, for qualitative research, focuses on people’s social construction of their ideas and concepts.” In this regard, Thomas (2013, p.75) maintains that the social world is perceived subjectively, and it is therefore necessary to adopt an interpretivist mindset in qualitative research. Interpretivism denotes the act of analysing people and understanding how each individual’s unique world is constructed, and how those differing views interrelate and connect with our own realities (Thomas, 2013, p.75). It is only through experience of our own ontologies that we are able to develop a vicarious experience (Denzin & Lincoln, 2005, p.99), and to interpret the expressed views and behaviour of others (Thomas, 2013, p.75).

Eloff & Ebersöhn (2004, p.380) and Maree (2007, p.21) evaluates interpretivism as an approach that strongly relies on hermeneutics – the philosophy and methodology of interpreting verbal and non-verbal forms of communication (Maree, 2007, p.58) – and phenomenology, which is the study of objects/phenomena as they appear in our human experience (Mahlo, 2011, p.87).

This study was situated in interpretivist paradigm, which according to Wagner, Kawulich and Garner (2012, p.55) addresses the world and how others experience it. This paradigm is suited to my study, as I endeavoured to observe and understand subjective accounts and perceptions that might explain the world of learners with ASD, and also how their caregivers experience it. The purpose was to produce reputable characteristics for both parents and the Foundation Phase teachers who need to support these learners in an inclusive classroom. This was realised through social constructions such as language (via interviews). I relied on the centrality of subjectivity (my participants' views of the phenomena at hand) to gain the necessary knowledge to satisfactorily complete this task.

Interpretivists are known to prefer "naturalistic" settings where they are able to gain "a feel for the environment" without impeding the processes of data collection such as observations and interviews (Burton & Bartlett, 2009, p.21; Thomas, 2013, p.76). Burton and Bartlett (2009, p.21) mention that an interpretivist researcher is rigorous and use meaningful orientated methodologies that rely on a subjective relationship with the participants. The table below represents features of interpretivist paradigms and how each relate to my study.

Table 3.1: The Interpretivist paradigm and how it is applicable to this study

Interpretivist Item	Relationship to features of this study
Aim of Inquiry	The aim of inquiry was to understand and interpret the lived experiences and the multifaceted nature of learners with ASD, and the teachers who support them in an inclusive environment.
Ontology	My study included multifaceted realities that are socially constructed.
Epistemology	I conducted a subjectivist inquiry. Through interviews, a narrative and observations, I constructed my own meaning based on my interaction with the participants and their surroundings.
Methodology	I conducted my study and analysed the data utilising naturalistic scientific approaches such as phenomenology and hermeneutics. Phenomenology is the study of a phenomenon, namely ASD. Hermeneutics is the interpretation of the dialectics. My modes of data collection comprised observations, semi-structured interviews and a narrative.
Axiology	My values need to be understood so that they remain relative and inseparable from the study and do not compromise the validity of my findings.

3.2.2 QUALITATIVE APPROACH

Henning, Van Rensburg and Smit (2004, p.31) state that “a qualitative study is a study presented largely in language and is about the meaning constructed from the language that presents the data.” It is an approach that does not collect numeric data only, but pays special attention to the "qualities" of lived experiences (Hogan, Dolan & Donnelly, 2009, p.3). Merriam (1998, p.7) explains that qualitative research is conducted in an “effort to understand situations in their uniqueness as part of a particular context and the interactions thereof.”

A purpose of this study was to explain how the parent and Foundation Phase teacher can be emotionally intelligent when supporting a learner with ASD. I therefore adopted a qualitative research design, which enabled me to collect data using an interpretive and naturalistic approach through empirical methods (Mertens, 2014, p.225). In using this inductive approach, Mertens (2014, p.225) explains how it helps a researcher to “make sense of a situation without imposing pre-existing expectations on the phenomena under study.” In this particular study, semi-structured interviews were conducted and a narrative was obtained to ascertain what the participant’s subjective experience was of the specific social phenomenon being studied.

Merriam and Tisdell (2015, pp.14-17) identified four characteristics as key to understanding qualitative means of inquiry. Table 3.2 below explains how these features apply to the current study and why a qualitative approach was best suited for this particular research.

Table 3.2: A qualitative approach and how it is applicable to this study

Features of a qualitative approach	Description of the feature	How the feature is applicable to the study
1. Focus on meaning and understanding	Qualitative research encompasses the participants emic social experiences and the understanding thereof.	Maree (2007, p.257) states that open-ended questions are one way of understanding a phenomenon. I encapsulated this notion by obtaining information in narrative and by conducting a semi-structured interviews with two parents with children who were diagnosed with ASD, and the one learner’s teacher.

Features of a qualitative approach	Description of the feature	How the feature is applicable to the study
2. Researcher as primary instrument	A human instrument is virtuous as people are responsive and adaptive to understanding the phenomena under study.	I practiced interpersonal means of collecting data by conducting face-to-face interviews with my participants.
3. An inductive approach	Qualitative researchers build on theories from their observations and intuitive interpretations garnered from being in the naturalistic setting of the participants.	I carried out an inductive approach in my study by working reflexively on my data, so I could focus my inquiry on deriving abstract, yet all-inclusive themes.
4. Fosters rich description	The descriptive nature of qualitative inquiry is illustrated by the fact that it is not numerically grounded, but solely based on in-depth descriptions of the participants and phenomena.	I fostered a rich and in-depth collection of data by not only making use of multiple data collection sources (observation, narrative and semi-structured interviews), but also by focusing on the participants' meanings, understandings and descriptions.

The objective of a qualitative approach is defined by Ary et al. (2013, p.449) as the need to understand human and social behaviour from an emic perspective (the study of cultural phenomena from the researcher's point of view). Since the purpose of this study was to open up the possibilities of EI to parents and Foundation Phase teachers in their support of learners diagnosed with ASD, I chose to harness a qualitative form of inquiry. This approach assisted me in understanding the natural school-setting as lived by the participants, and the impact that this may have upon the teachers who devotedly attempt to assist learners with ASD.

3.2.3 TYPE OF DESIGN

3.2.3.1 Multiple case studies

In conducting phenomenological research, a researcher aims to explain how "one or more individuals experience a phenomenon" from an emic perspective (Johnson & Christensen, 2012, p.48). It also explains how representing data accurately relies on retrospective reflection (Anderson & Anderson, 1998, pp.122-123). My decision to conduct a qualitative phenomenological research study lends itself to these

definitions. It is only with this approach that I was able to, from an insider's perspective, accumulate the rich and in-depth data that was needed to understand the social experiences and meanings based on the unique paradigm of reasoning (Mahlo, 2011, p.88) by learners with ASD and the respective stakeholders who assist these learners in an inclusive setting. I conducted a multiple case study to gain such knowledge. The first study involved a family with a young son with ASD. The relationships with the son's wider contexts (i.e. his mother and teacher) were also studied. The second case was specifically chosen to allow for a reflective case report. The idea was that the father would look back on the experiences of his two sons, thereby enabling him to give guidelines, in retrospect, about characteristics of Foundation Phase teachers that may be employed in supporting FP learners with ASDThis case provided the researcher with an ex post facto view on the positive and negative circumstances that the family experienced with having two sons with an ASD diagnosis in an inclusive school setting. The relationships within the realms of the two sons' wider contexts (i.e. their parents and teachers) were also studied and from this reflective case, potential constructive outcomes arose such as what could be incorporated or considered when teaching young learners with ASD in the Foundation Phase. Both cases answer to the requirement of representing "a particular instance", which Rule and John (2011, p.3) describe as the circumstances or situation of a particular person, thing or action".

Merriam and Tisdell (2015, pp.39-40), Ary et al. (2013, p.32) and Anderson and Anderson (1998, p.121) all refer to a case study as providing a methodological perspective that provides a rich heuristic analysis of data, in seeking meaning and understanding of reasons why certain phenomena occur within a real life context. In conducting a dual case study, a more convincing interpretation of the data gleaned by being in the field could be secured.

The purpose of multiple case studies in this research was to examine the contextual variables (such as emotions) that may tentatively hinder and/or assist learners with ASD in an inclusive classroom. It aims to "identify the various interactive processes at work, to show how they affect the implementation of systems" (Bell, 2014, p.9). This affects the way in which children learn (Hamilton & Corbett-Whittier, 2012, p.37).

3.3 RESEARCH METHODS

Research methods delineate how and where the collection of data takes place, as well as how this data is organised and presented to depict and illustrate the themes, meanings and essences of the experience that have been investigated (Moustakas, 2011, p.266).

In the following section, the role of the researcher, the data collection, data analysis and the interpretation thereof will be elucidated.

3.3.1 ROLE OF THE RESEARCHER

In conducting research from an interpretive paradigm, the researcher collects the data (Creswell, 2013, p.187). My duty as researcher in this study, according to Rossman and Rallis (2003, p.33), involved understanding that research can result in the finding of multiple realities. Creswell (2013, p.187) advises that it is imperative for the researcher to remain in reflexivity with his or her biases, in order to generate a trustworthy and credible narrative.

In the first case study, my role as researcher was to collect data by means of observations, and semi-structured interviews within a naturalistic context, “from a member’s perspective, but also influence what I observe due to my participation” (Flick, 2009, p.312). I immersed myself into a social world for a period of one day, wherein I observed behaviours and listened to conversations between participants while taking part in the activities within the environment (Bryman, 2001, p.292). As part of my role as researcher, participants were made aware of my overt status and I regularly engaged with participants in their daily lives (Bryman, 2001, p.301). I physically collected data by means of field notes and semi-structured interviews (Berg, Lune & Lune, 2004, pp.230-231).

In the second case study, my role as researcher was to collect data by means of a narrative and a follow-up semi-structured interview with the father of the two sons with ASD. I listened to the experiences of the father and observed his emotions during the interview.

3.3.2 PARTICIPANTS AND RESEARCH SITE

This section details the research location and delineates its participants, i.e. learners with ASD, their parents and a teacher.

3.3.2.1 Participants

I selected my participants using purposive sampling. Taber (2013, p.79) defines purposive sampling in qualitative research as being non-random and composed of "elements that contain the most characteristic, representative or typical attributes of the population that serve the purpose of the study best." Data collected in purposive sampling is gathered from a subset of the target population (Cohen, Manion & Morrison, 2013, p.143). This is why it is of cardinal importance that the researcher is deliberate and clear in stating the criteria that is necessary to select participants who will aid in formulating "typical and divergent" data suitable to inform an understanding of the phenomenon. This is done purposefully to answer the stated research questions (De Vos, Delport, Fouché & Strydom, 2011, p.392). As my study relates to ASD, I intentionally selected a learner who have been diagnosed with ASD to collect valuable data. The selection of this participant were made in collaboration with the principal of the specific school whereby learners had already been diagnosed with ASD by certain physicians. In this study, the phenomenon under investigation was the lived experiences of children with ASD, and how their care-givers (parents and the one learner's teacher) coped with the associated challenges. Purposive sampling was employed to gather rich information on the phenomenon of interest (Van der Stoep & Johnson, 2008, p.187).

I selected a Foundation Phase learner, who was diagnosed with ASD, for this study with focus kept on the "characteristics of a representative sample" (Bless, Higson-Smith & Kagee, 2006, p.106). Access was gained by obtaining the necessary permission from the parents and the school principal, therefore no consent form was required in that respect for the learner.

(a) Learners as participants

I selected one Foundation phase learner, who was diagnosed with ASD, from the intended school for this study and to obtain my data. Access was gained by

obtaining necessary permissions from all the relevant gatekeepers. Data was collected via observations only. No interviews were held with the learner and therefore no consent form was required in respect of the learner.

(b) Parents as participants

Two parents of these learners (respectively) were my main participants, since my focus was on the phenomenon of identifying EI characteristics that parents and teachers should acquire and practice when supporting learners with ASD in the classroom. Semi-structured interviews were used to collect this data by recording existing knowledge of what parents expected from their children's teachers.

In case study one, the interview with the learner's parent (mother) was conducted at the learner's school, at a convenient time for the participant. The interview was conducted in the vice-principal's office, without disturbance. The parent was presented with a consent form while I briefly explained the study's objectives to her once more. I made her aware that all interviews would be recorded and transcribed, and that nobody else but myself would have access to this raw data. I impressed on her my hope that these outcomes would contribute to future research, while reassuring her that identities would not be revealed, as pseudonyms will be used in all in my reports.

In case study two, the interview with the two children's father was conducted at a venue where the participant works. It was conducted at an appropriate time in a quiet boardroom where we would not be disturbed. The parent was presented with a consent form, and I again delineated the aims and objectives for the research. I stated that I hoped my findings could be used to better support future learners with ASD in a classroom. The father provided a retrospective view on how Foundation Phase learners with ASD may be more effectively supported. I explained how I would record the interview, that his and his family's identity would be kept anonymous by means of pseudonyms, and that I would be the only person to have access to this information.

(c) Teacher as participant

As part of case study one, I selected one Foundation Phase teacher who teaches learners with ASD, as participant. The interview with the learner's teacher was conducted in her classroom at the selected school, at a convenient time for her. The teacher was presented with a consent form as I briefly explained the objectives of my study again. I stated that I hoped these outcomes would not only contribute to future research, but moreover assist teachers when supporting learners with ASD. I stressed that all interviews would be recorded and transcribed, that only I would have access to the raw data, and that her identity would be safeguarded by means of a pseudonym.

3.3.2.2 Research Sites

The location for the first case study was also the location where I identified my participants. As my study pertained to qualitative inquiry, I needed the research to be carried out in its natural setting (Maree, 2010, p.51). The research site was at a school providing specialised education to learners who have been diagnosed with ASD in the region of Pretoria. English is the medium of instruction at the school.

A vital consideration during selection of this research site, was the fact that the learners with ASD spend a large part of the academic day on the school premises. Data was therefore collected in a setting that the participants were familiar with, posing no risk to their safety. This suburban school accommodates learners within a structured learning environment. The size of classes range between seven and nine learners. Its curriculum is not only outcome-based, but is also cross-curricular and is adapted to the needs of learners. Members of staff are trained through international training institutions, e.g. TEACCH, PECS and Makaton, which are training facilities specialising in visual and augmentative communication learning. As the study pertains to ASD, I found this school's premises ideally suited for the study.

Other specifications were instrumental in selecting the research sites for case study two. First, the narrative was completed in the safety and comfort of the participant's own home. The follow-up interview was conducted at the participant's job office in a

suburb of Pretoria. Since it was a setting where the participant felt comfortable with no risk to safety attached, more valuable and trustworthy data could be collected.

3.3.3 DATA COLLECTION

Creswell (2012, p.118) defines data collection as a set of interrelated endeavours to gather information that may assist a researcher in answering the emerging research questions. Anderson and Anderson (1998, p.163) assert that all information is based on "observable and measurable data". As a participant-observer in the case of the Foundation Phase learner, I was able to collect primary data about the phenomenon understudy in the learners' class (Maree, 2007, p.37). In a qualitative approach data is ideally gathered, in an ethical manner, without imposing on the views of the participants (Creswell, 2002, p.227). I obtained a narrative, conducted semi-structured interviews and noted my observations as means to collect suitable data for this study. These techniques are discussed in more detail below.

3.3.3.1 Documents

Flick (2009, p.353) defines a document as a "standardised artefact" that is "produced in personal activities and require a contextualised interpretation." They are not merely a tool in data collection, but also a form of communication in a specific version of reality (Flick, 2009, p.355).

3.3.3.2 Drawings

Encounters with children often require a focused activity to engage the child's interest and make him/her feel more at ease. This strategy facilitates time for observations and the asking of questions (Thomas & Jolley, 1998). Lev-Wiesel and Liraz (2007, p.65) indicate that children are wont to expressing themselves through drawings, rather than language. Drawings "enable children to express their experiences, to communicate feelings and ideas in an acceptable manner" (Lev-Wiesel & Liraz, 2007, p.66). In an effort to acquire such a relaxed disposition with my learner-participant, I invited him to draw a picture of his teacher as this could illuminate the unwritten words he uses to express his thoughts (Lichtman 2012, p.175). As Eames and Cox (1994, p.235) state, many learners diagnosed with ASD are exceptional at drawing. My reason for this, is that there is a correlation with

general intelligence and observation skills, which in turn, has an effect on drawing ability. Learners on the ASD spectrum are intelligent, although they experience learning difficulties. Empirical evidence confirms that drawings "are useful tools for gaining information about a child's perception" (Lev-Wiesel & Liraz, 2007, p.66).

A narrative inquiry was included to elicit further descriptive information from the learner regarding his drawing. Narrative inquiry is a means of gathering information through storytelling (Losh & Capps, 2003, p.239). It examines the way in which humans experience their realities (Lev-Wiesel & Liraz, 2007, p.67). Narratives were used in this study to investigate how the learners with ASD perceive their teachers and how they cope with their situations in an inclusive classroom.

Although learners with ASD are not considered to have deviant speech development in comparison with neurotypical children, Kanner states that these learners could display signs of selective mutism, which is characterised by a child's inability to communicate effectively in certain settings (Wing, 1991, p.94). Losh and Cappa (2003, p.239) mention how narratives develop into adulthood and although learners with ASD find this form of communication challenging, it is a useful communicative tool through which learners with ASD can make sense of their experiences.

3.3.3.3 Observations

"Observing humans in natural settings assist our understanding of the complexity of human behaviour and interrelationships among groups" (Lichtman, 2012, p.165). Amongst several available observation methods in qualitative studies, I selected being a participant-observer. This is uniquely accommodating as it allowed me to view and understand the reality of my one learner-participant, while actively engaging myself in the tasks that he was involved in (Wagner, Kawulich & Garner, (eds.). 2012, p.152). By observing the teacher of the learner with ASD, and by examining the narrative and answers from both case studies, I was able to make comparisons and establish whether or not they had similar or different experiences in teaching or parenting learners with ASD. I could also establish how these experiences could potentially contribute to the EI characteristics I intended to formulate for teachers to assist learners with ASD. Similarly, in observing the

learner with ASD, I gained insight into the ways such learners cope with this disorder in an inclusive setting.

Observation was a useful means of triangulating the data that I had gathered while interviewing parents and the one teacher (Wagner, Kawulich & Garner, 2012, p.152). The technique of observation allowed me to record continuous yet reflexive notes on the phenomena I witnessed in an objective and standardised way (Bless, Higson-Smith & Sithole, 2013, p.189). As my study dealt with multifaceted aspects in a case study of three learners with ASD, my observations attested to various elements that are involved in the functioning of learners with ASD.

3.3.3.4 Semi-structured Interviews

An interview is a specialised form of communication between the researcher and his/her participants for the purpose of gaining knowledge about a specific phenomenon (Cohen, Manion & Morrison, 2011, p.409). As I wanted to gain an understanding about the lived experiences of learners with ASD in an inclusive setting, I interviewed the parents and teacher to contribute data directly relevant to my noted observations within the classroom.

Anderson and Anderson (1998, p.183) propose designing interview questions around the objectives that the researcher wishes to achieve in his/her data collection. The aim of conducting interviews was to elicit information that would be best suited to answering my research questions. I therefore conducted semi-structured interviews – with the parents and teacher – which involved the answering of a set of predetermined questions (Maree, 2010, p.87) that can be written in an interview guide (Welman, Kruger & Mitchell, 2005, p.166). My semi-structured interviews provided an opportunity to use open-ended questions, and answers evoked by my original questions honed the subsequent ones (Basson, 2014, p.44). Semi-structured interviews were translated in to English by the researcher.

The duration of each interview was approximately twenty minutes. Digital audio tapes and detailed field notes were used as it ensured a full record of comprehensive feedback that I could use to continuously reflect on while identifying emerging themes. Participants were assured of confidentiality and anonymity, and all raw data will be safe-guarded by the university for a period of fifteen years.

3.3.3.5 Narrative Inquiry

A narrative approach typically focuses on the lives of individuals and relies on their written or spoken words as told through their own stories (Ayres, Kavanaugh & Knafl, 2003, p.876). The purpose of this narrative was for the father to be able to give an account of his life and his family experiences having two sons with ASD. The father was initially unable to travel to Pretoria to conduct an interview and it was arranged to conduct a narrative inquiry, with a follow-up interview to be held at a later stage.

3.3.4 DATA ANALYSIS

Qualitative data analysis follows an inductive process where the researcher pragmatically organises and interprets the collected data, noting themes and typical regularities while working in an iterative development (Cohen, Manion & Morrison, 2011, p.537). These themes cover an explanation, understanding or interpretation of the people and situations (Maree, 2010, p.99), necessary to make sense of the collected data.

Data collection and the analysis thereof is an ongoing and cyclical process (Maree, 2010, p.81) whereby the researcher is able to refer back to the research and refine the analysis thereof. I followed the data analysis approach as portrayed in Creswell (2013, p.85). The procedures followed in the analysis and interpretation of my source data will now be concisely illustrated.

Step 1: *Data collection*

Data was collected from within the two research sites.

Learner: participatory observations and narrative inquiry
Parent: semi-structured interviews and narrative inquiry
Teacher: semi-structured interview and observation

Step 2: *Organising and preparing data*

Interviews were transcribed. Field notes and narratives were taken from observations and contributed to the data set.

Step 3: *Coding of data*

Once all the data was collected and organised in preparation for analysis, I heuristically read through the data and got a holistic overview of its contents (Creswell, 2013, p.85). I then coded the interviews and observations by hand, line by line, until relational themes emerged (Creswell, 2013, p.85).

Step 4: *Interrelating patterns*

Once certain distinct themes were identified, I was able to cluster similar themes and list the most common topics. I worked cyclically, reviewing the data continually to detect if any other themes emerged (Creswell, 2013, p.85). I could only move on to step 5 once I had reached theoretical saturation (Bassey, 1999, p.83).

Step 5: *Interpretation of sorted data, returning to field*

Data was investigated and interpreted thoroughly. Had the data been judged as insufficient, I would have had to return to the research locations and obtain additional data, until acceptable standards of research could be achieved.

Step 6: *Writing of report*

In this final section of the process, I provided detailed explanations of all my activities, and knowledge gained. The themes and codes that were identified in data assisted me in generating analytical findings and answers to the research questions, all of which was included in a narrative report.

After completion of all my interviews, I transcribed each interchange on a computer, compared content, and searched for themes. The field notes taken while observing the learner's social contexts and behaviours were used to enhance and contribute to these themes. It was necessary to read through all my raw data repetitively in order to gain a holistic overview of the gathered information. Each theme was colour coded to facilitate detection of thematic patterns (Creswell, 2013, p.85).

The data collected determined whether it was necessary to return to the research site and acquire further data. As I was satisfied with my quantity and quality of data, it was not deemed necessary.

3.4 TRUSTWORTHINESS

Hogan, Dolan and Donnelly (2009, p.7) argue that it is inevitable that a researcher's worldviews will influence the embraced approach, the implements used and the unique interpretations bestowed on the data and its findings that eventually emerges. They add that it is essential for researchers to remain reflexive of their own social position and to thoroughly survey their own dispositions, as this may affect the dependability of the study. Maree (2010, p.113) regards trustworthiness as being the "acid test of your analysis, findings and conclusions." Schwandt (2015, p.299) believes that trustworthiness "portrays the quality of your inquiry process and product." In the following section, the steps – categorised under four aspects of trustworthiness – that were taken to ensure the accuracy and credibility of my findings are discussed.

3.4.1 DEPENDABILITY

In qualitative research, dependability refers to the logical, traceable and consistent research processes completed throughout the study (De Vos et al., 2011, p.420). It also determines whether methods used in a particular study could potentially be simulated by other researchers and participants in other research settings (Miller & Glassner, 2004, p.285). Since it is often difficult to replicate fieldwork, I ensured my data was dependable by firstly making use of conventional methods of recording and analysing data, such as those mentioned previously by Creswell (2013, p.85). Secondly, by allowing an external auditor (my supervisor) to oversee inter-rater reliability with regards to procedures followed and data coding, as well as my final conclusions (Schwandt, 2015, p.263).

3.4.2 CONFORMABILITY

Conformability refers to the measure of objectivity of the data and whether or not it can be supported by researchers who have conducted similar studies (De Vos et al., 2011, p.421). In the pursuit of conformability of my own results I investigated the

studies and writings of external researchers, by means of a literature review on the topic of my study. The advice of critical readers, knowledgeable on Foundation Phase learners, ASD as well as EI, were taken into account throughout my entire research process. External examiners were requested to review my dissertation on completion. De Vos et al. (2011, p.421) confirm that another way of ensuring conformability is to involve an external auditor who may review the study and evaluate its strengths and weaknesses. My supervisor acted as an auditor as described – not only did she guide the research process but also reviewed the findings and my interpretations thereof to ensure the trustworthiness of this study.

3.4.3 CREDIBILITY

In qualitative research, because the researcher is the primary data collector, it is imperative that he/she addresses the question of how congruent the findings are with the subjective realities of their participants (Merriam & Tisdell, 2015, p.213). Credibility refers to the degree of unbiasedness that the researcher imposes upon the study (Johnson & Christensen, 2012, p.264). Bassey (1999, p.74) encourages the amateur researcher to be consistently candid throughout the research process. To ensure credibility of data in this study, I employed a variety of data collection methods to enable easier triangulation of data (Maree, 2007, p.297). I made my study available to the participants to minimise the possibility of accidental fabrications (Payne & Payne, 2004, p.236). The use of field notes helped me to recognise and address any biases that may have entered the data set.

3.4.4 TRANSFERABILITY

Mertens (2014, p.430) states that transferability refers to “the extent to which the findings of one study can be applied or generalised to other situations” (Mertens, 2014, p.430) involving the same context. I believe my study could be transferable to other studies involving learners with specific learning disabilities, as the results may guide teachers in supporting these learners.

3.5 ETHICAL CONSIDERATIONS

“Ethics is the justification of human action, especially as those actions affect others” (Schwandt, 2015, p.89). They are the principles that uphold the things we believe

as having worth (Johnson & Christensen, 2012, p.99). Measures are needed to ensure the participants are treated respectfully and in a "culturally and ethically appropriate manner" (Hedges, 2011, p.3). As a qualitative research approach may be quite intrusive in collecting data, ethical considerations must be upheld to guarantee the participants' continuous safety and confidentiality (Maree, 2007, p.300).

An ethical approach is of prime importance in this study as some of the participants are considered minors. My first duty here was to apply for ethical clearance from the Ethics Committee at the University of Pretoria. Once permission was received to conduct my study, I commenced with my research procedures. Ethical measures applicable to this study are outlined below.

3.5.1 INFORMED CONSENT/ASSENT AND VOLUNTARY PARTICIPATION

Informed consent/assent can only be obtained from participants once the participants have become familiar with an overview of the study's purposes, and how confidentiality and their anonymity will be sustained (Maree, 2007, p.300). For the purpose of this study, adult participants (parents and teacher) were issued with a consent form wherein the research process and measures of confidentiality and anonymity were explained. Participants were informed that pseudonyms would be used and any participation would be on a strictly voluntarily basis, meaning that they had the right to withdraw from participating at any point (see Appendix A).

Participants were informed that data contributing to this study will be concealed in the Early Childhood Education Department at the University of Pretoria for a minimum of fifteen years, as stipulated by university policies.

3.5.2 PROTECTION FROM HARM

Maree (2007, p.300) stresses the importance of letting participants understand that they may withdraw from the study at any point during proceedings, if they prefer to. They should be assured that they will not suffer any "physical and psychological harm" (Maree, 2007, p.300).

In this study, all my participants were asked to provide consent/assent before any data collection procedures commenced. Research outcomes and relevant data collection processes were discussed at the time. This allowed the participants opportunities to ask questions and feel assured that they know all they need to know. Participants were guaranteed that data collection would be conducted simultaneously with their normal daily programmes, and would not affect the priority of education for their children.

The participants' identities were concealed by providing pseudonyms, and all information shared by them was kept strictly confidential in compliance to standards as stipulated by the Ethics and Research Statement, provided by the Faculty of Education of the University of Pretoria. Furthermore, where applicable, collection of data was conducted at research venues which were familiar to the participants, negating any physical and psychological risks.

3.5.3 PRIVACY, CONFIDENTIALITY AND ANONYMITY

Maree (2007, p.300) states that researchers are ethically bound to protect the identities of every participant and the information obtained from them. Definitions of privacy, confidentiality and anonymity below are followed by explanations of measures taken by myself as researcher to adhere to each ethical prescription.

Johnson and Christensen (2012, p.116) define privacy as the control to which other people have access to the study. My study aimed to endorse my participants' rights to privacy by allowing the participants to choose the time and circumstances of information sharing.

Johnson and Christensen (2012, p.116) stipulate that confidentiality requires an agreement between researcher and participant regarding confidential usage of information obtained from the latter. I respected my participants' confidence by using pseudonyms to avoid the risk of having any information tied to their real identities.

Anonymity means in practical terms that the identity of each participant is known only to the researcher (Johnson & Christenson, 2012, p.116). The anonymity of the participants in this study was secured through the use of pseudonyms, and by

conducting all interviews at a time and place not only convenient to the participants, but where the possibility of disturbances were minimised.

3.6 CONCLUDING REMARKS

In this chapter the research methodology used to empirically determine the experiences of one learner with ASD, his mother and teacher, as well as a father of two sons with ASD, was discussed. A qualitative research approach was followed to acquire an in-depth knowledge of the topic. Multiple case studies secured representative sampling of the target population. The variety of data collection methods contributed to the construction of an understanding of the lived experiences of learners with ASD, through the eyes of parents and a teacher. These experiences assisted in determining emotional intelligent characteristics which caregivers should display to support learners with ASD. A discussion of the analyses of the data and the interpretation of the findings will follow in the next chapter.

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CHAPTER 4
DATA COLLECTION, ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

The purpose of this study was to investigate how Foundation Phase teachers and parents are able to apply their emotional intelligence (EI) when supporting learners with autism spectrum disorder (ASD) in the classroom and at home. This phenomenological research employed a qualitative approach, and as delineated in Chapter 3, two case studies were used. The data collection techniques, as previously discussed (see 3.3.3), included an observation, semi-structured interviews as well as a narrative inquiry. Other techniques such as observations and semi-structured interviews allowed me opportunities to actively engage with my participants, and not merely view but also understand the subjective reality of my participants (Wagner, Kawulich & Garner, 2012, p.152). Pre-determined open-ended questions were used to initiate the empirical inquiry, and all answers evoked by my original questions determined the follow-up questions (Basson, 2014, p.44). In addition, this chapter provides an overview of the analysis and interpretation of the qualitative data collected. Themes were identified from the data generated and these are supported by direct quotations from the participants which they voiced during the semi-structured interviews. All findings discussed in this chapter are related to relevant literature reviewed in Chapter 2, based on the theoretical framework that underpinned my study, and linked to the research questions posed in Chapter 1.

The two case studies that formed the basis of my empirical inquiry are elucidated in the next section.

4.2 DATA ANALYSIS: CASE ONE

The purpose of my empirical inquiry was to gather information on ASD and to determine what qualities emotionally intelligent teachers and parents should possess in order to accommodate and support learners with ASD in the Foundation Phase classroom and at home. A set of pre-determined questions were used in conducting semi-structured interviews. Follow-up questions were then asked when

clarification or more information was required. Once my interviews with the parents and teacher were concluded, I transcribed each interchange on a computer to facilitate content comparison, coding and detection of interrelated themes. Field notes taken while observing the learner's social contexts and behaviours were used to enhance and contribute to those codes.

Through inductive and iterative processes I pragmatically organized and made sense of the collected data, noting any themes and typical regularities (Cohen, Manion & Morrison, 2011, p.537). Once distinct themes were identified, I was able to cluster similar ones together and list the most common topics. Cogency and validity were added to my findings by systematically matching them to each of Bronfenbrenner's contextual systems as expounded in Chapter 2. This modus operandi enabled me to effectively group and interpret the received information in the pursuit of matching my literature with the collected raw data.

4.2.1 DESCRIPTION OF CASE ONE

The participants' right to privacy, confidentiality and anonymity was respected throughout the study (Maree, 2007, p.300), and all identities were safeguarded through the use of pseudonyms (see 3.5.4).

Table 4.1: The participants of case one and their pseudonyms

Participant	Pseudonym	Status
Son	John Doe	Learner with ASD
Mother	Jane Doe	John Doe's stay-at-home mother
Teacher	Sarah Smith	Class teacher at a special school for autism

My field work was set to be conducted at a government school for autistic children. I initially observed all the learners in the class I had been assigned to, and it took little time to identify "John Doe" as a higher functioning autistic young boy. I spent the day observing John's routines, his style of learning, behaviour and relationships with his teacher and peers in the classroom.

"Sarah Smith" is John's class teacher, responsible for teaching John everything from effective management to scholastic material such as basic mathematics.

Sarah has been teaching at this school for several years, and has a basic education degree in Foundation and Reception phase. Sarah has also completed an honours degree in Augmentative and Alternative Communication (ACC), and attends annual workshops to keep her knowledge of autism spectrum disorder relevant.

I was about to start with my observations when I noticed that parents were not making their way up to the classrooms to drop off their children. Upon enquiry, Sarah informed me that parents were requested not to drop off their children at the ingress to the classroom, but downstairs at the entrance to the school premises. The purpose of this policy was to instil a sense of independence in the children. My initial impression regarding this was that parents were being kept from "interfering", as Sarah mentioned that parents do not often understand the manner in which some teachers apply discipline at the school. I then noticed that classrooms were well resourced, though few of these resources were purchased materials. Most objects in and around the school buildings had either been crafted by the teachers or the learners themselves. Every classroom had a learner-teacher ratio of 9:1, with a class assistant assigned to every teacher for preparation, cleaning and monitoring purposes. Nine children attended the class I observed, but only two learners were female.

The playgrounds were small – leaving little room to run around in – yet adequately resourced with several jungle gyms and various other sensory experiences the children could indulge in. There were usually four or more staff members on duty watching over the children while they played. The children were aware of their presence but seldom required assistance.

"John Doe" is an only child and son to a well-educated Afrikaans mother and father. He is currently nine years of age and lives with his parents in an affluent suburb in Pretoria. While he was between the ages of 4 and 5 years, he was diagnosed to be on the autism spectrum. Likewise, John also suffers from comorbid disorders that often accompany autism, such as attention deficit hyperactivity disorder (ADHD) and West syndrome. John was diagnosed with West syndrome at the age of two. This is a severe form of paediatric epilepsy characterised by “infantile spasms, abnormal hypsarrythmia and mental retardation” (Glauser, Clark & McGee, 2000, p.91). According to his mother, "Jane Doe", it is also known as 'the jack-knife fit'

because their heads can often be seen touching their toes. John is currently on medication for ADHD. His dose has recently increased from 28mg to 40mg of Strattera and the family consults a paediatrician twice annually.

It was not until I introduced myself to Mrs Doe (Jane) that I learned that she was already interested in participating in the study. Jane seemed approachable and prior conversations with staff members at the school revealed her kind personality to me. She kept to the arranged time and schedule of our interview. Another early impression of her was that she was anxious to contribute, as she sat on the chair's edge, eagerly awaiting her first question.

Peculiarities in John's development (e.g. repetitive baby speech; no success in potty training) were observed before the age of two. Mr and Mrs Doe sought medical advice, and requested that the nursery school conduct a full assessment to establish if he displayed characteristics of being autistic. The results of those assessments directed John's parents to remove him from the nursery school and enrol him in his present school; an English medium school with specialised curricula for learners with ASD.

Jane Doe is a retired nurse and at present stays at home to raise John. This decision was made due to fiscal considerations, and to enable Jane to apply all her attention to John. Although the father's occupation was not revealed to me, Mr Doe is currently the family's sole breadwinner, and is a member of the school's Parents Association Board. The school principal had earlier mentioned to me that Mr Doe is a protective father, and that my interaction with the family should be kept amicable. Jane admitted that they do not have "normal kids". This turned out to be not only a new "*learning experience*" for Jane and her husband, but also a "*lonely thing*", as the couple have since lost friends and family who do not understand the context of John's disorder, and who seem unable to accept the difficulties associated with raising such a cognitively unique child.

4.2.2 INTERVIEW DATA

Two interviews were conducted with voluntary participants, namely Jane Doe and Sarah Smith, the teacher. Data from the interviews (discussed below) had been thematically analysed to supply distinct information and/or factual material. This

data was primarily collected for analytical purposes that would produce original research results, to validate research findings.

4.2.2.1 Parent data

Hoping to make Jane feel comfortable during the interview, I opened the conversation by asking how she was doing. She observed me closely while I wrote her name on top of my interview paper, and we soon shared a laugh as she noted that I had spelled her (real) name correctly – apparently her name is frequently misspelled. We then proceeded with the official interview in a friendly atmosphere (refer to Annexure 7.6).

Judging by Jane's responses to my questions, I could sense that a lot of apprehension prevails in her life. She has to cope with demands many wouldn't understand, as she has to care for her child in a world that seems oblivious to the growing prevalence of the syndrome affecting her son. Jane described the hardship of not having family members or long-term friends available to turn to, in times of either mourning or celebration. She uttered how "*socially it is a learning experience*", and how they have "*lost a lot of friends and family along the line.*"

Jane's description of her experience of being a parent of a child with ASD is akin to "*a lonely thing*". I asked her when John had first been diagnosed as being on the autism spectrum, to gain an understanding of how long the family has felt socially excluded. Jane informed me that it happened while John was between the ages of 4 and 5 years. Jane continued explaining that they have lost friends and family due to the fact that "*there is not a lot of people outside that understand autism*" and thus "*can't cope*" with the demands and challenges that it brings. Jane then revealed that *"it is easier to have friends of your own that's got circumstances that are the same as your child.*" Jane spoke about being a full-time nurse formerly, but when John commenced with his career at his current school, she and her husband needed to make a decision whether it would be worth their while to "*pay the bus fee and the aftercare, that amount would have taken my whole salary almost.*"

John's parents did not see much value in hiring an au pair and decided that it would benefit the family financially and John holistically, if Jane stays at home during the day. Her nursing career left Jane with time enough to become patient and devoted

to John's daily needs. This also played a role in the Doe couple's experience of social exclusion.

To gain even deeper insight into this period of social exclusion, I asked more questions about the process of John being diagnosed as residing on the autistic spectrum. Jane mentioned that they had first begun to notice peculiarities in John's development before the age of two, but that doctors only diagnosed him with West syndrome at the time. It took two to three years before teachers, doctors and parents realised something else was wrong. It was thanks to a visit to a well-known paediatrician that John was diagnosed *"about three years later, I think it was at the age of 4 or 5.*"

Jane talked about some of the collective characteristics a child with ASD could display, such as difficulty in social communication, and restricted and repetitive patterns of behaviour. Jane mentioned how John had not been "*potty trained yet,*" and that "*he wasn't speaking. … he was speaking, whe-whe-whe, like a baby.*" I asked her whether John accepts changes in routine easily and she replied "*No… it depends what it is. If we go, last year we went, for the first time we took him on an aeroplane to go to Cape Town and we prepared him. So if you wake him up in the morning you must say, 'John we are going to school today.' And sometimes it takes half an hour to an hour before he puts on his clothes. It is not always, you can't just… sometimes… you can't just tell him okay come, stand up, we are going there and there.*" This reply reminded me of the reviewed literature mentioning learners having difficulties tolerating changes to their routine, or any differences in their known environment. John prefers fixed plans to be laid out.

Jane appeared less stressed after my initial questioning and seemed willing to continue talking about these difficulties. With a relaxed posture, Jane did not hesitate to confide that John's speech developed rapidly after being enrolled at the school he is attending. I asked how long John had been registered at the school and she responded that John "*has now been here from, this is the fourth year.*" This response prompted me to question her about the qualities that a teacher would need in order to firstly accommodate and then support a learner with autism. Jane stated that one would need "*a lot of patience, empathy and love working with children that's got autism, not just special needs, but autism itself. I don't think*

normal… my sister is a teacher and she won't cope here. I think it must be your personality and you must really love to work with children with autism."

I extended my questioning to the matter of training, and asked Jane whether she had any advice that pertains to student teachers considering a career in teaching learners who were diagnosed along the autism spectrum. She felt it was of considerable importance that they "*make time to actually work at a school like this… at least two to three months. Emotionally I think to be a teacher like that, I think you must be special. I think it is a lot of emotional ups and downs and frustration as well.*"

Upon my enquiry of the significance of the relationship between a parent and a teacher, Jane at first spoke of how her family – and herself in particular – needed the emotional support that is unfortunately not always forthcoming when raising a son with autism. Mr and Mrs Doe visited an organisation for autism (the organisation's name escaped her), but recounted that "*we didn't find the kind of support that we thought that we were going to get.*" However, at the onset of John's diagnosis and enrolment at the school, Jane managed to find the support she desired in one of John's former teachers: "*If I had a problem like John was doing this at home, then she would come to me and say, 'okay mom, if he is doing this, try this.' If you have a problem we can talk to the teacher*".

John is Mr and Mrs Doe's only child and since this is their only frame of reference regarding child-rearing, they sought outside support. Besides the teacher mentioned above, Jane felt that "*there is not much support outside, especially for parents.*" Although this teacher has since retired, Jane reiterated her helpfulness in providing her with "*some information to read*". Due to the Doe family's experiences regarding friends and wider family's struggles in accepting John's situation, this teacher "*gave me Afrikaans literature to give them so that they can read in plain terms what is autism and that*".

Other than scheduled parent-teacher sessions, Jane stressed that the relationship between children, their parents and their teachers should be reciprocal. Jane felt that when parents have a problem, then they should not "*wait for the teacher to come to you, you must go to the teacher and say I am experiencing this… what do*

you think, can we do this, can we do that, can we do something extra?" Jane confirmed that the teachers at John's school have been supportive and very accommodating to them. She quantified an emotional breakdown that John experienced two years earlier, and how his teacher helped them to adequately assist John, and within *"a week's time he was evaluated by the speech therapist and the occupational therapist and teacher and we had a meeting with my husband and me and talking about what happened and why it happened.*"

I noted that Jane regularly referred to her encounters with John's preceding teachers. She specified how "*the teachers, all three those teachers were great, I loved them a lot.*" However, it did not cross my mind to question this at the time. It was only during the course of my analysis, having remembered that this year was John's fourth year in this school, that I grew curious and began to question whether John had had only three teachers, whether he perhaps repeated a year, or if there was ever any contest experienced between a teacher and the Doe family.

Jane voiced another frustration: how the school struggles to convince some parents to volunteer at the school's important annual fundraising week. She expressed her frustration in seeing how potential profits from this event getting channelled instead towards getting "*students to work at the market*". Jane believed that, had some parents shown interest in volunteering, that more "*money could have gone to the school*" instead, especially since the event is only "*once a year … for a week*". Jane understandably felt that "*some parents just don't care*", as such volunteering efforts "*is not difficult work*", and that parents only needed to set "*two hours*" of their time aside to help the school in their effort.

Jane voluntarily admitted that she is available to assist at these fundraisers since her husband and herself had earlier decided it would be best for her to resign from her nursing profession, in order to prioritise the needs of her son, John.

4.2.2.2 Teacher data

Given the prior introduction to the teacher, "Sarah Smith", and my meeting with the school's principal, the interview with Sarah was crisp and to the point, and her answers were brief. Sarah came across as confident and skilful, yet somewhat impatient to get the interview over with. I was interested in gaining a perspective on

Sarah's experience of learners with autism. She described her experiences with autistic learners as "*emotionally, physically and spiritually tiring work*", and how a student needs to be sure about selecting this occupation as "*you don't always get the feedback that you want, you don't get the recognition.*" When I asked Sarah to elaborate on the cognitive, social and emotional experiences of these learners, she responded by describing how these learners experience a "*developmental delay of their understanding*". When prompting her to elaborate on the kind of social challenges she experiences, she stated that learners like this are "*not aware of their social surroundings, they don't know how to interact and they can't read social ques, they can't read facial expressions. So, everything has to be visual within the social surroundings.*" Emotionally, learners with ASD are either "*on a very high level of emotion or low level, but they don't understand their emotions. So that is why whenever they experience an emotion you have to tell them what it is and how it makes you feel and with that they link the two together that this is how I feel, this is how I look – and there they learn their emotions.*"

Sarah was a bit mindful of the term "emotional intelligence", but she gave a few examples of characteristics that she felt teachers should possess in order to be successful at teaching learners with ASD. Most characteristics provided by Sarah agreed with those listed by Jane Doe. She verified that a teacher in this line of work would need to have "*patience. They have to be very strict. They have to have… uithouvermoë… ag what… perseverance. And they just have to stick with their guns, if they know this then they know how to do it.*"

I enquired what advice would Sarah give to student teachers hoping to start a career teaching autistic learners. She didn't stray from the refrain that they need "*to have a very strong personality [and] the passion to do this*."

Those characteristics cited by Sarah are deemed essential when dealing with learners on the autism spectrum. In my understanding, however, it is one thing to possess such characteristics, but another thing to be able to apply them in a classroom filled with learners who individually demand your emotional understanding all of the time. This thought led me to enquire as to how a teacher could apply EI skills when working with learners with autism. Sarah explained that the way to do this is by always being "*a step before anybody else. If they see*

something is happening, they have to already know what they are going to do when this behaviour escalates or if they show this behaviour or emotion or anything."

I asked Sarah how significant she believes a teacher's relationship is with the parents of a learner with ASD. Here she exclaimed that teachers hope to foster a close bond with parents and that it is of paramount importance that "*you have to know what they expect of you and they have to know what you expect of them.*" I queried how she personally goes about building relationships with her learners' parents. She communicates with parents via "*diaries that we write in every week or so.*" She mentioned having a "*WhatsApp group that I chat to them on regularly.*" When electronic communication is not sufficient, then Sarah tries to consult "*most of them after school at the end of the day.*" Sarah further informed me that teacher-parent discussions are held "*three, four times a year where we basically friendly-force them to come to school, so that we can chat with them.*"

Unlike Jane Doe, Sarah does not experience the financial burdens a family may carry; however, her industry is still dependent on municipal funding and support to make the school function at optimal performance. In an attempt to gain awareness of the kinds of training that is available to teachers in special needs schools, I asked what support teachers at the school actually receive. Sarah praised the existence of workshops but was disappointed in the limited number "*of them [that] are not always applicable to the special need schools.*"

Sarah expressed a regret that *"there is not always so much support for autism, so you always have to go and look out there for something new or do your own research and stuff.*" When I asked her if she conducts her own research, she replied that the school receives "*a lot of articles. We belong to a book club that sends books and magazines to us with all the new research and everything.*" Sarah is eager to do a Masters Degree in Learning Support, but the only way that research is conducted at the school itself at present, is by means of the books and articles mentioned.

Curious to know the reasons why, I thought it may be related to funding issues at the school, and asked her whether the school received annual monetary remuneration from the government. Sarah replied that they "*give us some money*

per year that we have to apply on research and resources. But we also have the school's funding that comes from the government that helps us with everything."

Wanting to find out more regarding the school's fundraising efforts, I queried whether the fundraising event previously mentioned by Jane was the only such event every year, and how much of its profits the school benefits from. Sarah informed me that they also hold a market at the end of every year where exhibitors' products are displayed. "*We sell them and we get 25% of the profit, and that we use for the next year to fill in all the gaps and the resources and everything.*"

4.2.2.3 Observation data

My observations allowed me to study John's behaviour inside the classroom and how he interacts with other learners. John was reprimanded on several occasions for his outbursts like shouting out answers, fidgeting or forgetting to adhere to his daily timeline. John could then be observed retreating to a submissive and inaudible state. John was quite cognisant why he was being disciplined and made every attempt to improve his demeanour and behaviour; however, due to his comorbid condition of ADHD, such efforts proved futile after a few minutes. At no point was there any guidance on learners' feelings or instructions how to handle feeling that way. The learners were given frequent time-outs whereby they needed to eat lunch, read a book on the carpet, or go outside for recess. I noticed how the learners would sit parallel to one another in the classroom. There was no conversation held amongst the children or their teacher. Some would often, when they could, read a book out loud, but for most learners it remained a quiet picture-reading lesson.

John was one of the learners who would read out loud, and would only read short sentences where facts were given. John was highly interested in gaining knowledge about the concept explained in a book, and he would often appear as if he were lecturing me about the information. John was highly aware about my presence and quickly sought my attention, attempting to strike up a conversation with me about the latest *Transformer* movie. It was after this conversation that I learned how John had developed a fascination for robotics and heroism. This premise was further cemented after witnessing John acting out what I thought was a reflection of something an intuitive friend would do – to stand against all injustices. A young

fellow peer in class had been ill treated by an older school mate, when John quickly spoke up regarding this prejudice.

I was surprised to see that all learners, regardless of age, loved playing on the jungle gyms, and especially the merry-go-round. John, however, remained at my side discussing Batman and his natural nemesis, Superman. John came across as quite confident and was always aware of where the teacher was and when she was looking at him in a classroom situation. Not only was he adept at answering the teacher's questions, but he was always the first to shout an answer out or raise his hand. John can count up to 10 but he had trouble remaining focused at times. During his mathematics lesson on simple 2D shapes, he found it challenging to cut on the lines. His spatial awareness and planning was good when having to stick those shapes onto one page, considering that he had been told that he "will never develop after 5 years of age and he will never go to a normal school." John would always try to sit next to me during activities, and remarked at a later stage that he could not wait to see me again the following day.

Sarah Smith teaches a class of nine learners of varying ages, though they are approximately on the same level of cognitive functioning. She appeared very confident in her aptitude, as if it was just routine, and she did in fact do the same things every day. John performed with ease, handling the interchanging between activities well, and never indicated signs of distress regarding a change in timetable. I then noticed the timeline on the cupboard doors leading in to the classroom. These timelines laid out the events for that specific day, with every day's activities being different. The learners had clearly been informed as to the day's happenings and would need to physically place the event on to the Velcro strapped timeline when there was a change in activity preparing them for the next "subject".

No physical contact was made with either of the children anytime during the day and the communication with the learners was pithy and austere. The learners gave an impression of being tense and somewhat hesitant to defy any instructions provided by their teacher, Sarah. Learners who challenged her were swiftly chastised. It may have been due to my presence that Sarah felt a need to keep a productive classroom – there was, however, never an observation of a loving demeanour. During recess I was asked to watch the learners play outside, while

Sarah never extended an invitation to observe her in her fulfilling all her responsibilities as a teacher of autistic learners. No comment can therefore be made regarding individual educational plans or academic assessments provided to learners at the school, as it seemed that such information was too confidential for outsiders to access.

During my observation period, the only time I witnessed teachers approaching parents happened once after school hours when parents came to collect their children. Most parents came up to the classroom and made enquiries as to how the day had gone. The teachers then discussed positive or negative aspects and any measures of discipline involved. On my return to my assigned classroom I enquired about these discussions with parents, and Sarah informed me that these events happen three or four times annually. Parents are then invited to sit in on lessons and observe the behaviour and relations in the classroom. I then questioned Jane Doe regarding this and her experiences of such an arrangement, but she knew of no such system where she could attend lessons, and that the only time she had visited the classroom was when she was specifically invited to meet with John's teacher to discuss her son's progress. All necessary communication (school letters, behaviour update, et cetera) is made via a school diary. I had consulted this diary before, in order to reach out to the parents of the intended learner-participant in my study. The impression I gained is that, like in many schools, parents do not often look at these diaries and therefore tend to miss crucial information. My suspicions were validated when a parent I had hoped to interview failed to look at her son's diary, necessitating me to find an alternative family to contribute to the research.

During an informal conversation with Sarah, her acknowledgement of government funding differed from her previous response to my earlier inquiries (see 4.2.2.2). In my initial questioning of governmental funds, Sarah smirked as she looked at me and said that it amounts to very little. Having learned about the market at that time, and being a supporter of such an idea, I was curious to know if the school would hold another market in this year. Sarah, however, mentioned in passing that they will not be having a similar market event this year, and that alternative fundraising methods are being considered. This left me wondering whether it was because of concerns mentioned by Jane during our interview, or whether this was due to other reasons that I was not privy to.

4.2.2.4 Drawing

I sought and received permission from John's parents as well as Sarah Smith to allow John the opportunity to draw an image of his teacher (Sarah). Although permission was granted, both sets of parties warned me about their concerns if John would be able to carry out and complete this activity. These concerns were prompted by his inability to remain focused on a topic, his motor coordination skills and mental representation of the subject.

After my interview with Sarah was conducted, I eagerly tended to this planned exercise. I turned towards John while he was sitting quietly next to me in class. I pulled out an A4 sheet of paper and gently asked John to fetch his stationery. His face lit up at the thought that he might be asked to make a drawing. John went to fetch his stationary items, systematically organised them first, and then brought only the HB pencil and his colouring pencils. On his return I asked him if he would like to draw me a picture of his teacher, Sarah Smith. He quickly said "*yes*". While remaining at his side, I left John to concentrate on drawing.

As he began to draw his image, I recalled Jane informing me during her interview that "*he is now intermediate.*" That struck me as a significant remark as John's drawings were embryonic in content, compared to learners in my school who were in the same phase. It made me realise how naïve I was having expected John's drawing skills to be on a similar level with neurotypical intermediate phase learners. I realised that such expectations may have been based on his age and not necessarily based on mental or physical capabilities. The realisation truly sunk in that although John was chronologically nine years old, he was of a far younger age with regards to mental development. John's drawing – see the following page – verified this realisation.

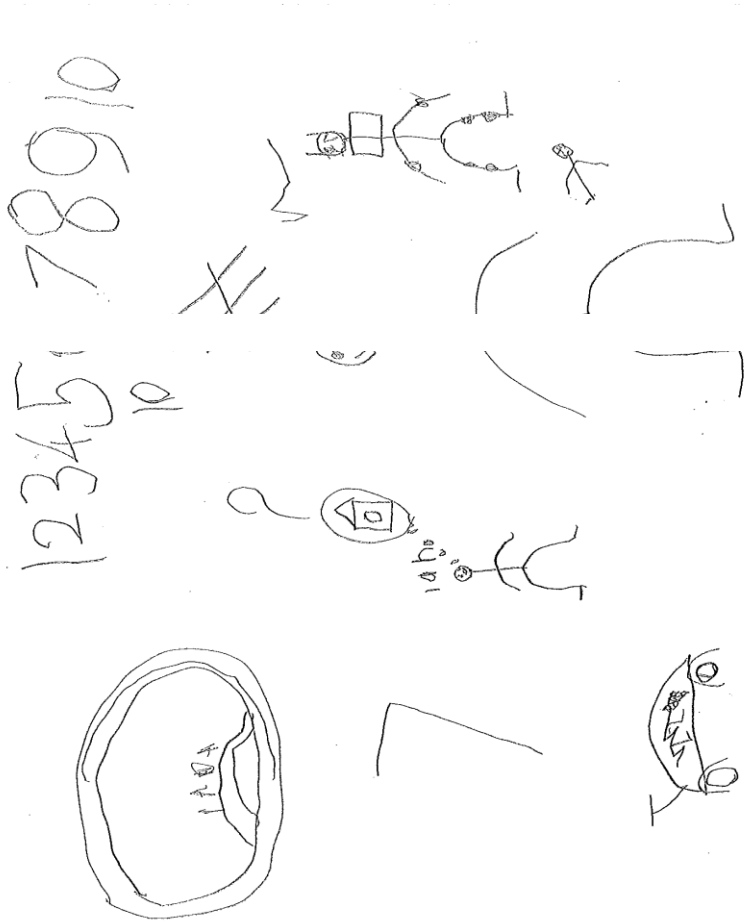

Figure 4.1: John's drawing of his teacher

John made use of stick figures to represent humans in his story. When asked what he liked about his teacher, John replied that his teacher "*likes a baby*". When asked what he does not like, John said that "*teacher has a baby so she must come back.*" After John drew his teacher and a baby – with no further detail added – he said he was happy with it and felt no need to add anything else. Subsequently, John lost focus on this activity and needed constant encouragement to stay on task. Although my encouragement had some effect, most efforts were futile and additions to the drawing only reflected John's obsessions – i.e. the transformer 'Optimus Prime', which can be seen above Sarah's baby in the drawing. Above the transformer robot, John transcribed the numbers 1-10, noting: "*Anything I need to buy some money. This money, one, two, three, four, five, six, seven, eight, nine, ten. Ten monies is, buy toy. Optimus Prime.*" John attempted to communicate that that is the amount of money needed for him to purchase one of these transformers.

Although John‘s ADHD acted out a self-fulfilling prophecy, I feel that I have gained crucial information about his perception of his world in the drawing he finally presented.

In summary of case study one, it is clear that the lifelong nature of ASD in a child has severe implications on the adults in their lives – particularly the parents, as they are faced with a range of challenges and emotional consequences in raising the child. Mr and Mrs Doe had to face the loss of expectations of raising a neurotypical child and deal daily with uncertainties regarding not only John’s future, but also the family’s future. It is common knowledge that it is already a significant challenge to raise any 'normal' child, but due to John’s disorders and problematic behaviour, often prompted by changes in his environment and routines, Mr and Mrs Doe’s task of parenting became much more demanding and difficult. This inevitably led to little social support to buffer the increased stresses associated with raising a child with special needs. It had a financial impact as well, since John’s parents have to meet the ongoing costs of specialised education programmes, and they have had to make all necessary sacrifices to give their child, John, the life that he now has.

Importantly, it was noted that Jane Doe and Sarah Smith both believe that, though the teacher’s skills play a crucial part in the learner’s social developmental progression, it is in fact the teacher’s EI that proves to be most vital element in teaching children on the autism spectrum to think and behave in a socially acceptable manner. Having a close working relationship with John’s teacher proves to be one of the effective ways for Jane Doe to support and meet her son’s learning needs. Since there are multiple forms of communication between parent and teacher, they are a dominant team with a common goal: providing John with the best possible educational experiences. Although money does not determine everything, the diagnosis and therapies involved with ASD can be very expensive. Government funding is provided annually and private fundraisers are held in an effort to sustain an enabling environment for the children dependent on such assistance.

4.3 DATA ANALYSIS: CASE TWO

The "Barnett" family's case piqued my interest for this study, since they have two sons with ASD. Although these sons are older than John Doe, this case was specifically useful in gaining a retrospective view on the development of children with ASD, and the experiences gained by parents while raising these children. This perspective aided me in understanding how the sons were diagnosed and what life was like for the two boys growing up, in relation to family interactions and school experiences. Steve provided me with a reflective look at what the Foundation Phase school-life was like for his two boys, and some changes that he would have liked to be implemented with the specific teaching of his two sons during the Foundation Phase years. He lives in the Eastern Free State and seldom travelled to Pretoria. We initially arranged to conduct only a narrative inquiry. Thankfully, due to work commitments, Steve was able to travel to Pretoria, enabling us to meet and allowing me to conduct a semi-structured interview as well.

4.3.1 DESCRIPTION OF CASE 2

The second case in this study consists of only one person, "Steve Barnett", who is the father of two sons with ASD.

Table 4.2: The participants of case two and their pseudonyms

Participant	Pseudonym	Status
Father	Steve Barnett	Father to three sons, two of whom have ASD

Steve Barnett has recently been appointed as a trustee on the board of a company trust, to which Mr Hanlon (my father) is an administrator. At the culmination of one of the trust's annual meetings, Steve coincidently and informally conversed with Mr Hanlon about having children as unique as his own. In the event, Steve disclosed that two of his three sons were diagnosed as having ASD. Mr Hanlon then explained that he was aware of someone busy studying the syndrome. Since Steve had earlier informed Mr Hanlon that there was very little understanding of ASD, he recognised the opportunity to make a contribution to a study and asked Mr Hanlon to set up a meeting with me. During a subsequent routine visit to my parents' workplace, my father told me of his encounter with a young gentleman with

extraordinary circumstances, having two sons diagnosed with ASD. As I was frustrated at that point in finding a primary source of investigation for my study, I eagerly made contact with Steve, asking him if he would be interested to participate. He graciously agreed and hence our professional relationship began to develop. Since Steve is not able to travel to Pretoria regularly, I proposed that he write a narrative instead, with a follow-up interview to be arranged at his earliest convenience.

Steve Barnett is a young, Afrikaans speaking gentleman and successful commercial farmer who lives with his wife and three sons in the Eastern Free State. He is a loving father to his three sons. After a visit to a doctor's consultation offices, the doctor revealed how Steve's eldest son displayed characteristics of being autistic. Steve did some research of his own and inevitably came across the term ASD. Upon further research, Steve concluded that the characteristics modelled by his sons were exactly that which were ascribed to ASD. Mr and Mrs Barnett birthed a second son who was then diagnosed along the autism spectrum as well. Both sons are currently in a mainstream school, and in an effort to maintain routine Mr and Mrs Barnett enrolled their eldest son as a boarder. "Riaan", the eldest son, is 15 years old and "Willem", the middle son, is 12 years old. Both sons are extremely close to their mother and were diagnosed as having ADHD when they were "*more or less in Grade 2.*" Riaan is presently administered Concerta and Willem Ritalin. In his Grade 3 year, Willem was diagnosed with ASD. Despite Steve's own research and knowledge of ASD, doctors did not formally diagnose Riaan with ASD until he reached his first year in high school. During a telephonic conversation, Steve stated that it necessitated a conference with his sons' teachers before they were made aware of his sons' conditions. Not much is known about ASD where the Barnett family lives, and little is done to assist his sons in a mainstream school.

4.3.2 DATA FROM THE NARRATIVE

Some of the prompts that I gave Steve to write about included: his experience of being a parent with two sons that have been diagnosed with ASD, what support the family had received from the community and what accommodations were made available to the sons. Steve related his experiences as a father of two sons with

ASD in the form of a narrative, with a follow-up interview scheduled thereafter for further clarification of aspects included in the narrative.

A narrative approach typically focuses on the lives of individuals and relies on their written or spoken words as told through their own stories (Ayres, Kavanaugh & Knafl, 2003, p.876). The purpose of this narrative was to enable Steve to give an account of his life and his family experiences, having two sons with ASD. Since the Barnett family lives far away from Pretoria it was arranged that Steve would contribute a written narrative, and if possible, a follow-up interview would be held at a later stage.

To gain a dependable impression of what Steve's life as father of two children with ASD is like, I requested him to elaborate on his experiences. Due to ASD falling on one side of the autism spectrum, very often the characteristics of these learners vary. As this family has two sons with ASD, I was interested to find out what the characteristics are of each of the sons. Steve mentioned that, from his observations, his sons are very similar because they both appear to "*not see or realise what is going on*" around them; however, indirectly, they absorb the happenings because "*if you ask them about it they know what has happened.*" Steve added that they have a remarkable ability to completely "*ignore something that does not interest them.*"

Steve explained how both Riaan and Willem do not respond well to change and "*will only go with me anywhere if I have not warned them the previous evening that I want them to go with me the following day.*" He related how Riaan and Willem need to be made aware of impending visitors "*prior to the visit*" or else they "*are not welcome!"* This, unfortunately, applies to family members as well. Steve found that the greatest area of concern is in a "*social context*", explaining that his sons "*do not easily greet someone on their own."* He mentioned that his eldest son Riaan "*will come home on a Friday afternoon, after I have not seen him for a week, and carry on talking where he left off the previous Sunday evening, without greeting me at all.*" Socially, the sons find it problematic to make new friends "*because they normally have a monologue and cannot hold a dialogue.*" It also does not help when "*the subject that they talk does not fit in with what is happening around them*. *This obviously causes friends to lose interest and makes them very lonely.*" Steve has

noticed that Riaan and Willem often fail to detect certain communicative conventions, such as jokes and sarcasm. When these situations happen consistently, it may lead "*to a meltdown that they are unable to handle.*"

Steve claimed that people in and around his area regard them "*as a normal family*" until closer interaction takes place. Although one would assume that having the same diagnosis would bring the two sons closer together, it has in fact not – they are "*not close at all*". The two sons do, however, "*have an extremely close relationship with their mother, especially if there is a crisis, they only want to talk to her.*" He explained further how, in primary school, accommodations were made for each son, but that circumstances changed when the elder Riaan reached high school. He clarifies how he and his wife were informed not to "*label the children*" and that you either "*… cope or fall behind!"* Upon further clarification, Steve posited that there seems to be a far larger "*understanding for children with ADHD or dyslexia*", and feels that teachers are not able to "*cope with children that are somewhat different*" and who have ASD.

There is, however, one teacher at Riaan's high school who looks after him. Although Riaan does not attend classes with this particular teacher, he has observed that Riaan is unique and allows him to "*sit with him in his class every break.*" This "*prevents him from being bullied.*" Steve sadly confided that because there is such little understanding of the syndrome, the older his sons get, the harder it becomes for them to make friends and hence do not "*enjoy school very much*". Steve felt that should there have been this same support, in terms of personal attention and unconditional acceptance from teachers in the Foundation Phase, that his sons would have gained the necessary social skills more effectively in an integrated environment. He further explained how their "*emotional development lags in comparison to their friends*", and how he hopes that they will be able to catch up on this. However, he often stands helplessly watching how his sons are growing lonelier as time goes by. Steve and his wife were already very well concerned about the effect that mainstreaming could have on their sons' self-esteem in the Foundation Phase, as they could clearly see that the empathy needed for the boys' peculiar behaviour, was absent. Although Steve would have preferred home-schooling for his children, he and his wife felt it would be in their sons' best interests to remain in their current school, for their "*social knowledge is*

more important in our view than the academic knowledge, which they can achieve later in any event."

I prompted Steve for qualities he felt that a Foundation Phase teacher should have in order to effectively teach learners with ASD. Steve replied that it is very important for parents and teachers to work collaboratively, but that he does "*not know what characteristics such a teacher should have*" because "*he does not know someone like that*", who would be able to support such learners. He remains "*confused most of the time as to how to deal with them*", by himself.

Regarding expenses, Steve states that no cost is too much. He gratefully pays for his sons' tuition, boarding and "*a tutor (educational student) […] that rotates classes with Riaan to assist him, from grade 4 until the end of this year in grade 6*". Steve is only concerned about the support that his sons require, and will stop at no expenses to see them receive proper support.

4.3.3 INTERVIEW DATA

After realising that I needed further clarification on certain aspects, I contacted Steve via email. Fortunately, he had been planning a trip to Pretoria and this provided me with the opportunity to interview him.

To gain a complete and clear understanding of the two sons' disposition, I prompted Steve to elaborate further on his sons' behaviour, temperament and character. Steve related how Riaan does not like to study, yet is strategic in games like chess, and because his reading age is more advanced than his peers he is often found reading a lot of English books. Willem, the middle son, enjoys drawing snakes and birds.

As mentioned in Steve's narrative, the two boys do not cope well with change. Steve also mentioned that teaching and socializing a child to be flexible and adaptable, should start at a very young age, and be instilled in the Foundation Phase. Here the teacher is the appropriate person to teach these skills. Upon further enquiries, he explained that although this is a problem, as "*long as they are with us, you know, in a family way, everything goes very well with them.*" Steve believes this is related to the "*security*" of being in a nuclear family.

I was curious to find out exactly what Steve meant when he narrated that his sons experience emotional meltdowns, so I enquired about manifestations and symptoms of a typical meltdown. He elaborated how both boys will cry endlessly, but the severity of the emotional meltdowns depends on their personality. Willem "*is more of an extrovert so he has many meltdowns in a week, and will swear and shout at others.*" Riaan, "*who is more of an introvert, experiences major meltdowns, but only a few every year.*" Although Steve and his wife "*live from day to day dealing with all sorts of crises*", he added that as long as his two sons "*know what is going to happen*" the meltdowns are few and far between.

Quite often parents of such children find themselves becoming somewhat fractious, and this is sometimes only tamed with tranquillity, and support received from others. I therefore asked Steve whether the rest of the family is supportive of the two boys. He replied, "*yes, some of them. They are not really you know… they are not used to them.*" I then enquired what the implication was for the youngest son, having two older brothers with ASD. Steve explained that although the relationship between Riaan and Willem is wrought, each relationship with the youngest son is not. He mentioned that the youngest son's "*relationship with the two sons separately is good but when all three of them are together, they irritate each other because of the ASD.*" Steve explained that the youngest son has a strong personality, but will often face adversity from his peers because of his brothers' "*attitude*". However, although this is not a pleasant situation for the youngest brother to deal with, he quickly handles it. His relationship with his brothers is far more important to care what others think of him or his family.

I enquired about adversities that the family encounters as Steve spoke of his wife. He observed that she is highly emotional and will often cry herself to sleep at night. He explained further how his wife spends all of her time ensuring the well-being of her children. Often, she will "*stay in town till about 18h00 sometimes 19h00, just to help with the homework and make sure it is done well.*" Having little support provided by the wider family, I was interested to know how understanding the community is and whether there is any real awareness of the autism spectrum. Steve claimed that their community "*think they are*" aware of the autism spectrum, but that they are actually in denial regarding how to cope with such affected learners.

Steve had mentioned in his narrative that teachers felt that he and his wife should not continue to "*label*" their children. I was interested to find out exactly what this meant. He explained how he felt that the teachers were right to an extent, because labelling one's child could result in stereotyping, which may cause an overreaction to the behaviour of a labelled child that would normally be tolerated in another child. Steve further reiterated that the sooner a learner with ASD receives "*sound, consistent and appropriate services in the Foundation Phase"*, the better his chance for success later in life.

Regarding the status of the relationship between Mr and Mrs Barnett and the teachers, he would often express how important it is for him that parents and teachers work collaboratively. He felt that teachers in the Foundation Phase were particularly interested in learning about the syndrome and accommodating the sons. Whereas, further-on in their sons school careers, Steve had been asked not to approach the teachers directly but to go "*through the channel*", so that when any problem arises, then the remedial specialist would confront the teachers. Steve felt that despite what is already known, there is still much to learn about ASD. Steve agrees that Foundation Phase teachers and other professionals who work with learners with ASD need to address the characteristics of ASD while combining the medical and educational needs of the child. For a learner with ASD to maximise his/her potential, Steve felt that is critical for families to play a part in the decision-making years (Foundation Phase years) for the education of their child.

When asked what would be beneficial for Riaan and Willem to learn better or to cope better, Steve said that Foundation phase teachers need to be precise in their instructions and "*make sure [the children] know what to do.*" He added that he wishes Foundation Phase teachers would understand that children like this, especially his sons, "*are not able to take a book out, sit down, take a pencil and listen… it's not like that.*" Steve expressed how difficult it is for a child with ASD to move from class to class, or to "*change from here to there.*"

This led me to questioning Steve about the qualities that a Foundation Phase teacher would need in order to teach such learners successfully. He felt that a Foundation Phase teacher would have to be "*patient, strict, respectful*", and should be able to acknowledge these learners. He confided that Riaan sees "*himself as a*

spook, as the ghost of the school" because "*nobody sees him*". Without hesitation, Steve continued to clarify that a Foundation Phase teacher who teaches such learners, should ideally only cover one or two subjects throughout an academic day in order to eliminate firstly the stress of changing classes every thirty minutes, and secondly the continuous feeling of having to get organised and prepared all over again. In Steve's experience, he found that the biggest problem was "*when they stay in the same class they cope but when they start changing classes they don't cope.*" He explained how each lesson at the respective schools are only thirty-five minutes long, but that it takes his sons "*twenty minutes to get ready*", and when they are finally ready to listen, "*half of the class is gone, it's already done.*" At least if the day consisted of only one or two subjects, the periods can be longer "*and they will stay with you the whole time.*"

Steve felt that Foundation Phase teachers should use the learner's strengths more and incorporate a lot of technology, as "*they are very good with the technology*" and it can assist them with handwriting. He reflected some more on the question and added after a while that someone who teaches such learners should have a general "*passion*", as it is laborious yet also "*entertaining*" to work with such special children as his.

Although Steve happily pays for his sons' tuition, boarding, medication and a tutor (previously mentioned), I requested some details regarding actual expenses involved in caring for two sons who were on the autism spectrum. Steve then listed some of his main expenses: the "*hostel is R48 000 a year and the school fees are now about R85 000 to R90 000 a year […] Concerta costs about R3 500 per month*", and the tutor costs "*R3 800*". Steve is the sole breadwinner of the family, while his wife stays at home. Steve eagerly seeks the support that his sons need and will stop at no expense to help them receive this. Their schools receive all grants and/or funding from the government. When asked what fundraisers are done, Steve did not know and could not tell me of any that he has ever been informed about. Steve did mention that the Government funds Grade 00 classes for each Grade. According to Steve they are "*the only school or one of two schools in the Free State that's got that privilege.*" It is comprised of only fifteen learners and is a class for the children who struggle or who are "*behind with reading or calculations.*"

Steve appeared confident yet relaxed while talking to me. He kept to our arranged interview schedule, spoke freely of his life experiences with little prompting required, was willing to elaborate on issues, and is eager to spread awareness of ASD. Steve is a loving father who really wants to "*do the regular things that everybody else did with their boys at that age, you know, like go to rugby*", but he realises that although "*they are a little bit different*" we should not seize to recognise, accept, and celebrate those differences. This notion reminded me about what C. Joy Bell once said: "*We are all equal in the fact that we are all different.*"

4.3 THEMES AND CATEGORIES

Braun and Clarke (2006, p.14) postulate that thematic analysis is very common in qualitative research, whereas Aronson (1995, p.1-2) asserts that themes allow for recording patterns across similar data that are important to the description of a phenomenon, and are associated to a specific research question.

Categories are developed using content analysis. Similar information is first ordered and then examined so that major commonalities or themes may be identified (Hsieh & Shannon, 2005, p.1278). The following table is a summary of the themes and categories that emerged from the raw data pertaining to the study.

Table 4.3: Themes and categories that emerged from the collected data

System	Theme	Category
Microsystem	Disposition	• Development • Meltdown • Isolation
Mesosystem	Impact on the family	• Socialisation • Family-life • Finances
Exosystem	Teacher qualities	• Emotional intelligence (EI)
Macrosystem	Support	• Community relationships

The table overhead represents the categories and themes signified in the raw data. Each theme is a representation of each of Bronfenbrenner's social systems.

4.4 DATA INTERPRETATION

The Oxford Advanced Learner's Dictionary defines the term "interpretation" as "the particular way in which something is understood or explained". The following interpretations explain how meaning is derived from analysis of the relevant data. The theoretical framework, literature findings and my personal observations formed the basis in interpreting these findings, hence references shall be made to all three.

Children with ASD present various characteristics which complicates their behaviour and especially social demeanour (see 2.2). The aim of my study was to guide teachers and parents how to use EI in supporting learners with ASD, and therefore the interpretation of my data will be presented with constant references EI, and how the associated characteristics may support the child with ASD.

While interpreting the collected data, aspects of environmental influences and development of a child on the autism spectrum were revealed. I classed my findings of both case studies into the four main themes: disposition, impact on the family, teacher qualities and support (see table 4.3). A discussion, according to each theme, follows here.

4.5.1 DISPOSITION

The Oxford Advanced Learner's Dictionary (Hornby, 2005, p.423) defines the term "disposition" as "the natural qualities of a person's character" and as "a tendency to behave in a particular way".

The first theme to emerge from my data relates to the inherent characteristic and behaviour patterns of learners with ASD. Categories which relate to this theme include development, isolation and meltdowns.

Since learners with ASD do not have any physical distinguishing characteristics, people expect these learners to behave normally. However, as made evident in the aforementioned cases, key capabilities affected in a learner with ASD include central coherence, which refers to a limited ability to understand context, social-emotional functioning, communication, language, restricted patterns of interest, stereotyped behaviour, sensory motor ability and executive functioning (see 2.2 and

2.4.1.1). This corresponds with what the Diagnostic and Statistical Manual of Mental Disorder (2013, p.32) refers to when stating that there are no medical tests to identify ASD, and that diagnoses are made based on these behavioural manifestations. As discussed in both cases, all three boys with ASD seemed to demonstrate all of these indices. The prevalence of ASD is rising dramatically and it remains problematic that many people are still oblivious to the unique characteristics and support needed by this particular population – including those in the familial, professional and social orbits of affected children (see 2.3).

Urie Bronfenbrenner's ecological systems theory studies human development in the context in which the person finds him/herself. The environment in which one grows up in, plays a substantial role in affecting one's ability to nurture the healthy development of children (see 2.4). More often than not, a child is very susceptible to environmental influences as these are linked to critical periods in the child's life, and inevitably affects his/her maturation process (see 2.4.1.1 a). As recognised by both families, all three children experience difficulties regarding changes and the handling of their emotions. According to my observations and interviews with parents, John and Willem seem to be extroverts and their emotional meltdowns may be due to inherent ineptness to cope socially. Willem, for instance, is described by his father as throwing tantrums, swearing and shouting at others. Riaan, however, is an introvert as he displays characteristics of internalizing his feelings, rather than projecting on external sources. This corresponds with literature reporting that learners with ASD have an emotional maturity level that is significantly lower than their chronological age, and when placed under duress they cannot access the "thinking brain". Bogdashina (2006, p.48) refers to this as "mind-blindness" (see 2.4.1.1 d). Learners who suffer from this condition tend to have difficulty expressing their own emotions and therefore may act in a way perceived by others as being irrational; hence the description of an emotional meltdown.

Due to a lack of awareness of many common social behaviour manifestations of learners with ASD, many on the autism spectrum experience social isolation. As mentioned in case study two, Riaan and Willem were unable to maintain healthy social relationships since they lack the ability to understand social cues, interpret concretely, and have certain language comprehension problems. This corresponds with Attwood's (1997) descriptions of children with ASD as having low social

motivation since they struggle to meet society's moral standards, role expectations and demands for acceptable behaviour (see 2.4.1.1 d). They have the same needs for acceptance, friendships and social interaction, but due to their inability to grasp social cues, those social parameters become difficult to maintain for learners on the autism spectrums. In my laconic interactions with John, I felt as if he was reaching out to me for some form of psychological affection, however little was required. It made me realise that I was the only constructive and friendly human interaction that this young boy had enjoyed the entire day long. It made me question whether he was starved of stimulation, or whether his attention to me was just his way of appreciating that someone had noticed him, and wanted to engage him. This again brought me to the realisation how children like John, Riaan and Willem are very conscious of their contextual circumstances, and that our interactions with them have a generous influence on their life trajectories.

Teachers who are socially and emotionally competent are especially resourceful and helpful to children with learning difficulties (see 2.5). Since learners spend a great amount of their time in a school setting, it can be assumed that the formal learning context and the development of a learner's social-emotional competencies are greatly influenced by the teacher. Social-emotional competent teachers can assist these learners as they are able to comprehend the feelings of others, relate to children and motivate them, know how to manage the feelings manifested by isolation and inflexible behaviour, and able to maintain discipline in a warm and caring environment. Those abilities would be enhanced when teachers have caring, understanding, warm, friendly, patient and accepting personalities (see 2.5).

4.5.2 IMPACT ON THE FAMILY

The second theme that emerged from my data is related to the tremendous emotional and financial strains of taking care of a child with ASD. Categories which relate to this theme are socialisation, family-life and finances.

Family patterns of interaction can be and are indeed put under strain when there is a child who has been diagnosed with a neurodevelopmental disability like ASD (see 2.4.1). Having listened to Jane Doe's and Steve Barnett's empathic responses, I could sense that there was some degree of disconnection that both families had felt

towards society as a whole. When a child has been diagnosed on the autism spectrum, it could easily be classified as a family epidemic (Solomon & Chung, 2012, p.251). The ripple effect that this may have on a family is astronomical in terms of the family dynamics. The autism-related issues that families experience are probably similar, irrespective of the severity of the symptoms, and therefore it is highly advised that parents build up a network of individuals who are able to provide practical and emotional support, while raising children on the autism spectrum (see 2.4.1.2).

In case study one, Mr and Mrs Doe found their family and friends to be unsupportive, because of their son John's characteristics. With insufficient resources to cope socially without familial support forthcoming, the Doe family felt isolated, and the father described as being 'protective' by the school principal. My greatest concern regarding this is how John's social and cognitive competence is compromised by this isolation of the family, especially in the light of Heiman and Berger's (2008) declaration that a child's meaning and understanding of the world is brought upon by the adults that are present in their lives (see 2.4.1). One's psychosocial development is dependent on how you fit in and where you belong (see 2.4.1.1 d).

Steve Barnett found his family to be somewhat supportive of his sons; however, he also experienced that the rest of his family and the wider community are not familiar with the term, autism spectrum disorder. Due to such conceptual unfamiliarity, community members in general are not used to interacting with children who have been diagnosed as such. Steve would frequently remind me that, although the family is open to sharing about their lived experiences, individuals who are in the occupation of teaching have very little interest in finding out more about the autism spectrum, its characteristics and learning about effective ways of dealing with associated behaviour.

In my opinion, it is imperative that all adults – not only their parents – within John, Riaan and Willem's personal spheres learn to be sensitive, responsive, engaged and provide positive stimulation to them, to help these learners realise the developmental value of relationships and its function in normal child development (see 2.4.1.1 d). Children with ASD should not be subjected to variations in the

quality of their interactions with family or other adults they're familiar with, as this surely inhibits a maintaining of optimal levels of their development (see 2.4.1.1 d). Due to the described behaviour problems, irritability and reduced initiative on the part of John, Riaan and Willem, their family and friends clearly found it difficult to adjust to the children's unusual characteristics, and it seemed that the adjustments needed surpassed their awareness. Having said that, it is also easy to understand why relationship processes are difficult to develop. Social support networks are so critical for humans to cope, and to manage all the stressors in our lives (see 2.4.1.1 d).

Many people are unaware of the costs associated with raising a child on the autism spectrum – it indeed presents a great fiscal challenge. Parents are primarily responsible for the education, health and safety of their children. This sort of responsibility places an enormous pressure on both the economic and psychological well-being of a parent. All these variables play a crucial role in understanding the impact and implications of caring for a child with ASD (see 2.4.1.1 d).

John Doe's parents found it did not make sense to continue to have both parents working when the identified schools transportation and aftercare fees would have consumed Jane's salary on its own. Instead of spending all Jane's hard-earned money on those external facilities, they felt that it would be in John's as well as the family's interest if Jane terminates her nursing contract, in order to drop John off at school and fetch him in the afternoons herself. No other expensive services would thus be necessary.

Steve Barnett reiterated Jane's sentiments, stating that having a child (in his case, two children) on the autism spectrum, affects every member of the family in different ways. Steve's income is shifted towards providing treatment and interventions for their sons, to the exclusion of other (lesser) priorities. Schools themselves face several concerns regarding funds required to manage a school that is both enabling and successful. However, even though Jane and Steve admitted that the schools receive government funding, Jane highlighted continuing concerns about the fiscal constraints at John's school, mentioning how fundraisers (e.g. market events) are still held to assist in garnering more funds needed to cover

educational expenses. It follows logically that the identified schools would need a drastic increase in their funding if the education system wants to transform and pursue its envisaged outcome of fulfilling its inclusive policy (see 2.4.3.2).

4.5.3 FOUNDATION PHASE TEACHER QUALITIES

The third theme to have emerged from the data is related to the qualities that parents and Foundation Phase teachers believe should be present when dealing with a child with ASD – qualities that all relate to EI. Emotional intelligence is defined as the ability to reason intelligently where emotions are concerned (see 2.4.2.1).

Although learners with ASD exhibit normal to high intelligence, problems with social interaction and inflexible behaviour present challenges in an education situation – both at home and at school. Those aspects demand a specific response from caregivers to sufficiently accommodate the learner with ASD. Literature indicates that a quarter of a million of these learners receive special education due to ASD. Schools therefore need to adjust appropriately to meet the specific needs of these learners (see 2.2, 2.4.1.1 d). One way that the identified school in case one managed to do this, was keeping the amount of learners in a classroom minimal. The ratio of boys to girls at the school is in line with the prevalence of ASD as literature indicates: more boys than girls are affected, with an international ratio of 7 boys for every 4 girls.

Formal education is very important to learners with ASD as it helps to develop their special interests, and generate general competence levels high enough to allow independence in their adult life (see 2.4.1.4). However, the skills of the Foundation Phase teacher play a significant role in the educational success of these learners. Since these learners do not meet chronological age expectations, they do not benefit from the traditional mode of teaching, and therefore a lot of the instructional material needs to be adapted (see 2.4.1.4). Literature indicates that Foundation Phase teachers in mainstream schools require more assistance when providing for these learners; my own observations reveal that the Foundation Phase teacher, Sarah Smith, seemed qualified and confident in adapting the learning material for the mental age of the learners in her classroom, at her school. In the case of Steve

Barnett, it was only the primary school Foundation Phase teachers that seemed eager to learn more about the autism spectrum, and more willing to assist Steve's sons to cope with the curriculum holistically.

Advanced teaching skills are not the only assets required from a good Foundation Phase teacher for disabled children. Emotional intelligence is considered to be a key factor as well. Foundation Phase teacher-learner relationships are influenced by a Foundation Phase teacher's EI, therefore it is advised that priority is given to the enhancement of Foundation Phase teachers' EI, to secure positive classroom environments (see 2.5). Learners with ASD show sensitivity to Foundation Phase teachers' feelings, as a Foundation Phase teacher's personality unconsciously affects the mood and behaviour of learners. All learners on any spectrum should be treated with respect at all times, and those affected by disorders should have Foundation Phase teachers who remain empathic, and who do not feel that they can control learners' behaviour (see 2.4.1).

Throughout the conducting of both case studies, Jane Doe, Sarah Smith and Steve Barnett all consistently reiterated that Foundation Phase teachers should have a passion for teaching such learners. They should also be patient, strict and empathic, since the emotional investment involved in teaching special needs learners may take an eventual emotional toll on the Foundation Phase teachers as well. Keeping the increasing prevalence of this disorder in mind, my participants' testimonies emphasise the need for Foundation Phase teachers to receive more training in EI, and knowing how to apply it in a classroom with learners who have ASD (see 2.5). Literature states that not enough training is currently provided to Foundation Phase teachers, and therefore many educators lack the capacity, confidence and resources to effectively teach learners with ASD (see 2.4.2.1). An emotionally intelligent classroom is one that is governed by a caring and engaging Foundation Phase teacher (see 2.4.2.1). However, from personally observing John's classroom, very few signs of engagement could be noted – little affection was shown towards the learners. This is one example illustrating the ways in which Foundation Phase teachers contribute to the development of learners' social-emotional outcomes. By being in a position to coach these learners during every conflict situation, a Foundation Phase teacher acts as a role model. If Foundation Phase teachers display prosocial behaviour, it will foster respectful attitudes and

appropriate communication amongst their learners. Resourceful Foundation Phase teachers who provide environments that are physically and psychologically safe for their affected learners, are able to develop these learners' social and emotional competencies (see 2.5.6).

4.5.4 SUPPORT

The last theme to emerge from my data was related to the social support that families with children who have ASD, receive. Parent-teacher collaboration is essential in the education of learners on the autism spectrum (see 2.4.2.1). Interactions between parents and teachers are the most common source of social interchange and have proven to influence the academic and social development of children (see 2.4.2.1). In this context, John Doe's parents and John's teacher (Sarah Smith) have developed a collaborative and effective relationship that focuses on communication. Not only has the teacher set up different forms of communication (e.g. WhatsApp and homework diary), but the parents themselves feel comfortable enough to approach Sarah when problems arise, and they are willing to participate in fundraisers for the optimal development of the school attended by their son.

However valuable this is, Jane Doe finds it difficult to make friends of her own and to receive support from her family and community. Jane and her husband sought to mobilise information and networks from specific organisations pertaining to the autism spectrum, but had little success. Steve Barnett repeatedly mentioned that he believes it very important that parents build relationships with their children's teachers. At the same time, teachers need to be receptive of this and work collaboratively with parents (see 2.4.2.1). Steve found it quite difficult to develop a relationship with Riaan's teachers, as he was not allowed to see them personally, instead getting directed to only work through official channels. Other than regular school newsletters, Steve has no means of communication with his sons' teachers. He also found that the general community think they are able to cope with such learners, when in fact they know barely anything about ASD and associated issues.

Since many families of children with ASD experience misunderstandings or face judgmental attitudes based on misinformed stereotypes, it is of paramount

importance that the public's awareness continues to be built. As is often the case with such stereotypes, they are more often than not fallacies. They are deeply upsetting for families, reinforce misinformation and sometimes limit what people with the condition can achieve, making it more difficult for them to get their needs recognised and to access the right support (see 2.4.1.4). Widespread understanding of the autism spectrum would improve every aspect of the learners' lives, increasing the chances of an early diagnosis and support, lowering incidents of bullying at school and improving employment prospects. Stereotyping would need to be continuously challenged if we wish to change how the world regards these children, and improve the way in which they are handled. ASD can have a profound effect on both the individuals and their families, but continual understanding and support from the community can make a vital difference (see 2.4.1.2). It is profoundly important that parent and teachers maintain healthy communication practices between themselves, as it will inevitably establish the capacity to support their children, and when key decisions have to be made.

4.6 SYNTHESIS OF EMPIRICAL FINDINGS

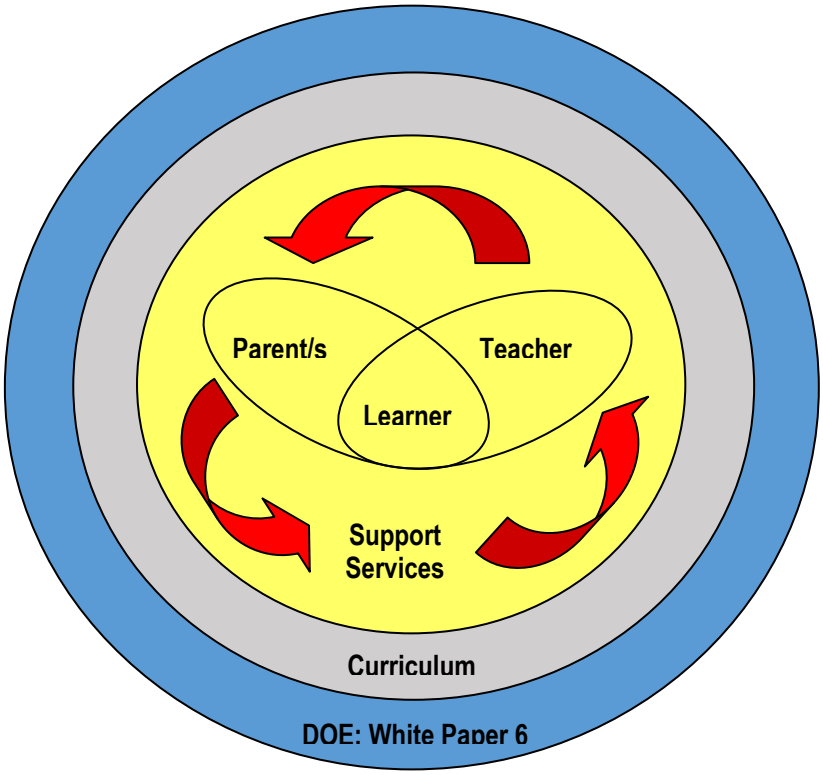

Figure 4.2: Ecological systems impacting learners with Autism Spectrum Disorder

This illustration provides a visual representation of all the elements involved when having to deal with the learner with ASD.

For the purpose of this study, the microsystem is magnified to elucidate the EI characteristics that parents and teachers could put in to practice when supporting learners with ASD in the Foundation Phase. These characteristics are represented in the following diagram (figure 4.2).

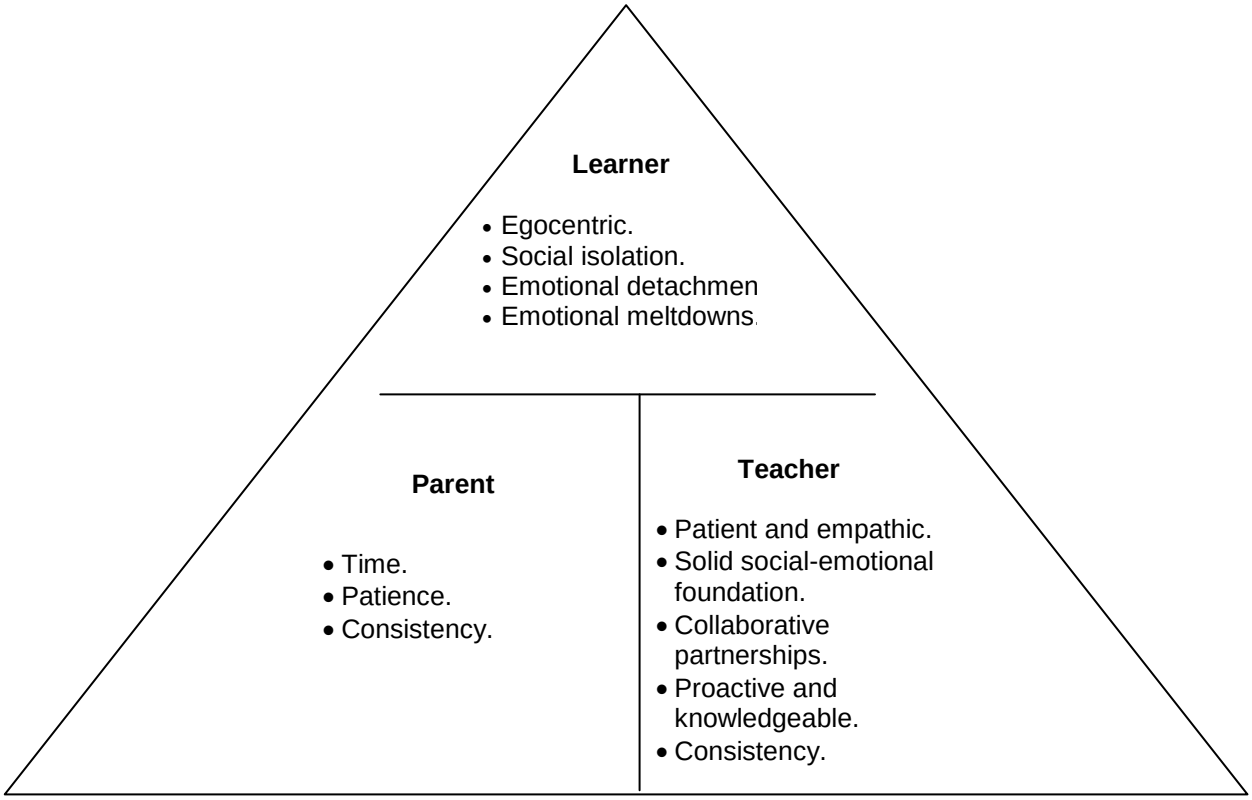

Figure 4.3: Emotional intelligence characteristics that parents and teachers can use when supporting learners with Autism Spectrum Disorder

Figure 4.3 is an enlarged version of the interrelated microsystems in the life of a learner with ASD. I consider a triangular shape as appropriate since parents and teachers form the base (or foundation) of the pinnacle, being the learner with ASD in this instance. With this type of structure in place, many learners with ASD may be able to either overcome or lessen the impact of some symptoms, and ultimately learn to become productive members of society.

This category of disability requires special approaches to education, however. As posed in my findings, the more prevalent indicators presented in a learner with ASD include: egocentrism, social isolation, emotional detachment and emotional meltdowns. These indicators are crucial in identifying the kind of EI characteristics required by many parents and teachers who support learners with ASD. Having studied the aforementioned indicators, learners with ASD require special educational support during their educational careers, to provide them with better access to curricula, and to further their individual strengths. This special educational support crucially relies on the EI of the involved parents and teachers.

Parents and teachers who portray EI characteristics can support learners diagnosed with ASD to overcome the negative impact of the four main indicators of ASD learners. Further on, these characteristics involve: spending quality time with the children, consciously modelling patience for their deficiencies, and by being consistent in behaviour and planning, in order to eliminate any causes for meltdowns. For teachers, these characteristics are not much different from those of parents. An emotionally intelligent teacher would be one who epitomises a solid emotional foundation and who does not let undesirable emotions affect the way that she deals with her learners; a teacher who loves her learners unconditionally; a teacher who is empathic and patient with their disabilities; a teacher who is willing to work collaboratively with parents at all times for the learners' best interests; a teacher who is at all times consistent, proactive and who can act as an advisory support network that parents can approach.

Figure 4.3 presents a concise but visually effective summary of, firstly, the characteristics of a learner with ASD, and secondly, the EI traits that a parent and teacher could utilise when supporting a learner with ASD in an inclusive classroom environment.

4.7 CONCLUSION

This chapter presented the research findings, based on data gathered through interviews, observations, a drawing and a narrative. Themes and categories that emerged from the data analysis guided the interpretation thereof. The empirical study supported the predominant purpose of this research, which was to determine

qualitatively how teachers as well as parents may practice emotional intelligence to support and accommodate learners with ASD in a mainstream classroom. The research data was thematically analysed by making use of the literature findings, the theoretical framework as well as the empirical findings. The themes and categories that emerged laid the following elements bare: the participants' perceptions of the characteristics of ASD, the experiences of teachers who teach learners with ASD, the behavioural characteristics of an ideal emotionally intelligent teacher, and what parents expect of teachers who teach learners with ASD.

My research and literature review revealed that the experiences of teachers who are teaching learners with ASD play a crucial role in building relationships between teachers and parents, and that EI is a determining factor in the successful relationship between teacher and learners, as well as teacher and parent.

The data interpretation process provided reasons why EI is so important when dealing with learners along the autism spectrum. Furthermore, my theoretical insights summarised in chapter 2 correlated with the research findings and outcomes presented in this chapter.

The following and final chapter provides a conclusion based on the study's stated purpose, research questions and all results of the study. Resultant recommendations will also be presented.

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CHAPTER 5
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

Chapter 4 presented the empirical findings that emerged from the data collected through semi-structured interviews, observation, a narrative and a drawing. Chapter 5 concludes this dissertation with a summary of literature and empirical findings, answers to the research questions, and recommendations to involved entities based on research outcomes.

5.2 SUMMARY OF LITERATURE AND EMPIRICAL RESEARCH FINDINGS

This section contains a summary of the reviewed literature for this study as well as a summary of the empirical research findings.

5.2.1 SUMMARY OF KEY LITERATURE FINDINGS

Autism spectrum disorder (ASD) is a multifaceted, neurodevelopmental disorder, with various factors influencing the development and manifestation thereof. Sufferers experience significant difficulty in social communication, restricted and repetitive patterns of behaviour and interests, motor clumsiness and an atypical use of language (see 2.2). Although developmental concerns can be revealed before three years of age, most diagnoses only take place between four and six years of age. In order to study the reality of learners with ASD in classrooms, Bronfenbrenner's ecological systems theory was employed as a theoretical lens to explore relevant literature and design a research method. This theory suggests that humans develop within a specific context; in order for an individual to develop holistically, the person cannot be divorced from the social networks that surround him/her (see 2.4). Therefore, the external environment plays a role in affecting the healthy development of an individual. Bronfenbrenner identified four different yet interdependent environmental systems that can exert external influences on the development of the person: the microsystem, mesosystem, exosystem and macrosystem (see 2.4).

The microsystem refers to the proximal and innermost region of the individual – an immediate face-to-face setting. In this study, the microsystem consisted of the learner with ASD, and the respective relationships between learner and parent, and between learner and teacher (see 2.4.1). The mesosystem refers to the point where two social microsystems merge (see 2.4.2). In this study, the mesosystem comprised the combination between home and school environments. Parent-teacher relationships are shown to influence children's developmental outcomes, particularly in the case of learners with ASD (2.4.2.1). The exosystem is an environment in which the individual is not directly involved in, but affected by, as set out in 2.4.3. In this study, the exosystem comprised the accessibility of the curriculum, and the support systems that are available to the teacher who teaches learners with special needs. The macrosystem is the values and beliefs that a child forms with reference to his/her unique personal experience (see 2.4.4). In this study, the macrosystem comprised the ways in which the Education White Paper 6, which contains the Inclusive Education policy, impacts not only the learner with ASD, but also the teacher who is responsible for the development of learners diagnosed with ASD.

In assisting others to learn, one needs to realise the emotional component of it. Charles Darwin (1982) once concluded that it is not the strongest or most intelligent species that survives, but rather the one that is most adaptable to change. In order for a teacher to "survive", one must be adaptable and therefore emotionally intelligent. This term refers to the ability to monitor one's own emotions, discriminate amongst them and use those skills to guide one's actions and thinking (see 2.5). Teachers who are emotionally intelligent develop an emotional cognition, which directly enhances their behaviour towards their learners (see 2.5.5). Teachers with high emotional intelligence (EI) provide good examples of pro-social behaviour. To be identified as emotional intelligent, an individual needs to encompass the following four domains: self-awareness, self-management, social awareness, and relationship management (see 2.5). Teachers can use these skills to create effective classroom environments that are conducive to learner development and success. Teachers with an advanced EI would be able to effectively assist learners with ASD, by implementing the required social-emotional curriculum in classes (see 2.5.6).

5.2.2 SUMMARY OF EMPIRICAL FINDINGS

A multiple case study was implemented in this study, involving two cases. This first case consisted of semi-structured interviews with both the mother and teacher of a learner with ASD (who also contributed a drawing) at a school in a suburb of Pretoria. The second case consisted of a narrative and a semi-structured interview with a father of two sons who have ASD. In conducting these interviews, collated with the narrative, drawing and field notes recorded during observations of a learner in the specified school, I gained sufficient data related to the implications of having a child with ASD in a classroom, and the emotional intelligent characteristics teachers should have in supporting these learners. Through inductively analysing and interpreting the data, the following research findings were made:

5.2.2.1 Disposition of the learner with autism spectrum disorder

A child with ASD is particularly susceptible to their various environmental influences (see 4.5.1), and will often be seen seeking the company of individuals and/or environments where they feel cared for. Since learners with ASD experience difficulties with socialisation, social isolation, emotional detachment, emotional meltdowns and the theory of mind notion, teachers who are socially and emotionally competent in the classroom can be a great source of comfort to these learners.

5.2.2.2 Impact on the family

Both families represented in this study experienced a degree of disconnection from society when their sons were diagnosed with ASD. Unfortunately, the effect of such a diagnosis made of members in a family, has shown to ripple through social and familial circles, causing the immediate families to feel isolated (see 4.5.2). Many friends and family members, who are not aware of the nature of the disorder and associated adjustments needed to be made, found it difficult to modify their interactions with these children, resulting in disintegration of relationships.

My research revealed to me that families with children who have ASD, need to build up support networks consisting of individuals who are able to provide the practical and emotional support needed in situations like these. As stated in previous chapters, this sort of responsibility adds enormous pressure on both the economic

and psychological wellbeing of a parent. Many outsiders are unaware that successfully providing for an autistic child is a fiscal feat, especially considering the economic troubles facing the country in this age. As mentioned by the families in the study, additional expenditures for special schooling, special equipment and health cover are some of the variables to consider when trying to fathom the implications of caring for children with ASD (see 4.5.2). Education officials need to investigate how learners with ASD could be integrated into schools at no additional cost to parents.

5.2.2.3 Teacher attributes

Although learners with ASD possess normal to high intelligence, difficulties posed by irregular social interactions and inflexible behaviour present challenges in the educational realm (see 2.2). These difficulties demand specialised responses from teachers who have to accommodate learners with ASD. It is very important for learners with ASD to receive formal education, as it helps them to foster special interests and sustain a level of competence needed to achieve independence in their adult lives. However, the competencies of the teacher play a crucial role in the success of these learners (see 4.5.3). A teacher's EI will reflect on the kind of relationship he/she initiates with the learner with ASD. In order to nurture prosocial behaviour in an environment that is physically safe and psychologically beneficial for learners, teachers need to receive professional training in EI, and instruction on how to apply such traits in the classroom (see 2.5).

5.2.2.4 Support

Both the respective mother and father in the two cases testified to social isolation, revealing that parents of children with ASD may experience a general lack of support from friends, family and their communities (see 4.2.2.1, 4.3.2, 4.3.3 and 4.5.2). The occurrence of people tending to avoid families who have children with ASD indicate that the public has not been properly exposed to information regarding this growing phenomenon. In this context, the relationship between parents and teachers become crucial, as these relationships seem to be amongst the most important existing forms of support for parents (see 4.2.2.1, 4.3.2, 4.3.3 and 4.5.3). Interactions between parents and teachers constitute the most common

source of social interchange and have proven to influence the academic and social development of a child, especially in the case of learners with ASD (see 4.5.4). However, this level of interaction appeared to decline the older the children got. The families and their sons were beginning to experience some or other form of isolation from their extended community, family members and friends (see 4.5.2). Understanding and support from society will make a significant difference to affected households, but at present the public awareness of ASD is still rudimentary (see 4.5.4).

5.3 CONCLUSIONS

Knowledge gained during research, and empirical findings presented in this document, allows answers to be provided to the respective research questions (see 1.3). These answers will be used to formulate final conclusions to the research study. Since the answers to sub-questions are incorporated into an answer to the main research question, the sub-questions will be answered first.

5.3.1 SUB-QUESTIONS

5.3.1.1 Secondary research question 1

What are the characteristics of learners with autism spectrum disorder?

No two individuals with ASD are the same. Since there are no physical distinguishing characteristics, all diagnoses are made based on behavioural manifestations (see 2.3). According to literature and my findings, the collective characteristics of learners with ASD include:

- An intense obsession with a narrow range of subjects: Learners with ASD are far more interested in intellectual pursuit than they are skilled at conversing with people, and hence will often be found drawn to certain selected fixations. These fascinations should be embraced by the teacher to capitalise on the strengths of the learner with ASD.
- Repetitive routines: Learners with ASD prefer consistency in their daily lives and when there is a disruption in the regular flow of activities, it may result in an outburst or in severe cases, an emotional meltdown. Although

learners with ASD do not often experience such intense outbursts, it may be triggered by an unexpected change in routine, and an inability to cope with resulting changes in their emotional state.

- Central coherence difficulties (limited ability to understand context): Learners with ASD can easily detach themselves from a social environment, especially if the activity or topic does not interest them. This generates a special challenge for a teacher explaining learning material when a learner with ASD decides not to pay attention. It is the ability to remain focused on a task that allows one to understand its value and context. If a learner with ASD experiences severe difficulties with this trait, the learner may have trouble deriving any meaning from a mass of details or instructions.

- Difficulty with social-emotional functioning, communication and executive functioning: These characteristics are grouped together since they function parallel. A learner with ASD experiences difficulty identifying and assessing his or her emotional state and the emotional state of others, a trait known as theory of mind. Theory of mind is related to a low EI. An individual possessing a high emotional intelligence can facilitate skilled interpersonal communications and smooth relations with others, which are also described as diplomatic skills. Since learners diagnosed with ASD exhibit characteristics associated with low EI, they frequently encounter difficulties in situations where conversational finesse is called for. The uninhibited anxiety that these learners experience when trapped in an uncomfortable conversational situation causes reactions that may appear inappropriate to neurotypical persons. Learners with ASD arrive at most obvious and highly literal meanings during conversations, and resultantly fail to detect any emotional subtexts implied. It is a challenging circumstance for learners with ASD, since they are unable to decode all the emotional complexities in the realm of EI. This emotional regulation allows neurotypical learners to maintain an even keel when faced with adversity or frustration. Unfortunately, since learners with ASD struggle with this ability, their executive functioning is compromised and they may either delay getting

started or find a way to avoid it altogether. The learner's emotional reaction is the inhibitor to productivity.

5.3.1.2 Secondary research question 2

What do parents expect of teachers who teach children with autism spectrum disorder?

Learners with ASD show sensitivity to the personalities of their teachers (see 2.5 and 4.5.3), hence parents expect their children's teachers to:

- Possess a calm demeanour: A phlegmatic temperament has much to offer a classroom of diverse learners and their individual learning needs. Having a fuse that is very long and almost appearing to be immune to anger allows a teacher to approach the learners on their level, and is helpful in paying attention to their individual needs. A teacher with a calm demeanour understands that inner turmoil ruins focus on a situation, and will find it easier to forge strong learner-teacher relationships in a classroom that is bound to provide comfort for learners with ASD.
- Be empathic: To be empathic means to be able to sense and value what another person is experiencing emotionally. The importance of this skill has become increasingly recognised in the educational arena, as learners tend to regard their teachers as role models. Therefore, a teacher setting a good emphatic example may prompt learners to consider the consequences of their actions, and help them realise the importance of being cognisant of other persons' feelings. It plays a vital role in conversational diplomacy, and knowing how to interact with others in a constructive way.
- Be able to determine the cause of a breakdown through problem solving: Since learners with ASD find communication challenging, it can be a direct cause of frustration. Learners with ASD also experience a phenomenon known as theory of mind, which is an inability to identify and assess emotional states (of themselves and others) and causal attribution. Such frustrations or problems can happen concurrently, therefore a learner with ASD may not know the best way to self-soothe or find an appropriate behavioural solution to an unwanted social circumstance. Teachers of learners with ASD need to be able to model situations that require

flexibility, thereby assisting the learners to assess or attribute their circumstances with more success. Teachers would have to remain calm and empower learners with ASD by not only allowing them to make their own decisions and choices, but by providing ample opportunities to practise those skills that will reinforce their latent independent skills.

5.3.1.3 Secondary research question 3

What are the experiences of teachers with children with autism spectrum disorder in the inclusive classroom?

According to the research, teachers are finding the presence of learners with ASD becoming more prevalent (see 2.2). Common challenges experienced by teachers in their classes are delays in cognitive functioning, low social motivation and emotional outbursts from such learners (see 4.2.2.2). However, not enough training is provided to teachers to cope with those challenges and therefore they often lack the capacity, confidence and resources to manage all situations competently (see 2.4.2.2). Many teachers are still burdened with remnants and attitudes of the pre-democratic education system, and fail to implement new and innovative teaching methods to assist learners with ASD in inclusive classroom settings.

5.3.1.4 Secondary research question 4

What are the behavioural characteristics of an ideal emotionally intelligent teacher?

EI is a confluence of developed abilities. An ideal emotional intelligent teacher embraces the following characteristics, and will be able to model the prosocial behaviour attributed to these features:

- Emotional self-awareness: Individuals with this ability are able to recognise subtle shifts in their own emotions, and understand how their emotions affect their own behaviour and decisions (see 2.5.1).
- Managing own emotions: Individuals with this ability can take responsibility for their behaviour, and understand that emotions do not dictate our performances. Such individuals are able to control their emotions, and to harness suitable emotions for different occasions (see 2.5.2).

- Well-developed empathy: Such individuals are able to use situational and expressive cues to recognise and infer the emotions of others (see 2.5.3).
- Self-motivation: These are individuals able to tap in to their personal drive and harness inner strengths to achieve and improve themselves. It ideally focuses on an individual's commitment to their goals or readiness to react to a particular situation or opportunity. It bolsters optimism and resilience to challenges (see 2.5.4).

5.3.2 Main research question

What characteristics relating to emotional intelligence can a Foundation Phase teacher/ parent use when supporting learners with autism spectrum disorder?

Bronfenbrenner collated a theory on the premise that healthy human development is affected by the external environmental systems in which a person is brought up (see 2.4). He espoused a view that individuals belong to subsets of a social organisation and that the interdependent interaction of each environmental system directly shapes the social reality which the individual experiences (see 2.4). One of these systems that is highly relevant in the development of a learner with ASD, is the mesosystem. For the purpose of this study, the mesosystem consisted of the relationship between the parents and the teacher of the learner with ASD. Since a learner with ASD presents a multitude of indicators that would require special approaches to education (see 2.2), my findings concluded that a collaborative relationship between parents and teacher is vital in securing the healthy development of these learners. Both parents and teachers of learners with ASD need to display certain EI characteristics that would allow these learners to feel physically and psychological safe. According to my findings and what has been revealed in relevant literature, in-depth training is necessary and should become integral to parents' and teachers' knowledge base before the implementation of EI can be successful.

With reference to my findings and the literature that I consulted, the following EI characteristics and features were found to be imperative for parents and/or teachers:

- Time investment: Parents in both study cases consciously spend quality time with their sons by actively participating in their particular interests. This attentiveness to their hobbies shows the learners that their parents and teachers value their contributions and enjoy spending time with them. The time spent with these learners testifies to the indirect teaching of social-emotional skills needed for positive interpersonal communication.
- Patience and empathy: Although learners with ASD possess normal to high intelligence, it is their inhibited social interaction and inflexible behaviour that overwhelms or frustrates many parents and teachers. Patience and empathy is needed to sufficiently manage such occasions. Parents and teachers need to consciously and constantly remind themselves to remain calm and patient – practice may be necessary. Constantly reinforcing the necessary social-emotional skills is imperative for these young learners to later realise their full potential. Learners with ASD are known to suffer emotional meltdowns due to their inability to cope socially and emotionally. This knowledge can empower parents and teachers when they are capable of understanding what learners are experiencing emotionally, reacting appropriately to assess the cause, and calming the situations (solving the problems) through prosocial behaviour.
- Being proactive and knowledgeable: Since ASD is becoming increasingly prevalent amongst learners, it is necessary that all teachers who will be responsible for teaching such learners remain informed with all ASD-related developments. Since many teachers act as advisory networks for parents, it is imperative that their knowledge is up-to-date, and that parents are continually well-informed. Teachers should be proactive in their efforts to establish rapport with the families of learners with ASD, and continuously stay in communication with them, and consult with them if interventions may be needed to tend to the personal needs of these learners.

5.4 RECOMMENDATIONS

Based on the findings of this research, the following recommendations are made for the Department of Education, parents and teachers with learners who have ASD.

5.4.1 RECOMMENDATIONS FOR THE DEPARTMENT OF EDUCATION

5.4.1.1 Recommendation 1

The Department of Education should invest in more schools that devotedly serve the needs of learners with ASD, at no additional costs to parents. Only individualised practices can address the primary areas of concern, and the learner may be able to either overcome or lessen the impact of symptoms if such support is provided.

5.4.1.2 Recommendation 2

The Department of Education should capitalise in the training of its collegiate employees, and ensure that students are thoroughly trained at implementing and incorporating the Department's inclusive policy by utilising EI in the classrooms.

5.4.2 RECOMMENDATIONS FOR PARENTS

5.4.2.1 Recommendation 1

Parents should read short stories with social messages that would reinforce the importance of the traits of EI. Stories with social messages that are short will hold the child's attention and expose learners to everyday situations and social skills that can assist the child in internalising social cues, and develop appropriate responses, in everyday circumstances.

5.4.2.2 Recommendation 2

Parents should have family discussions that include the child with ASD, whereby the family discusses their personal feelings and thoughts. It can be useful to children if everybody discusses in their presence how a certain situation made them feel and what they thought, as it can help to prevent later tantrums or emotional meltdowns.

5.4.3 RECOMMENDATIONS FOR FOUNDATION PHASE TEACHERS

5.4.3.1 Recommendation 1

Teachers should acquaint themselves with the characteristics of ASD, to enable them to detect the relevant cues, and suggest early diagnosis and/or interventions when necessary. Teachers should collaborate with mental health practitioners continuously, as they are able to implement interventions and contribute to the knowledge base.

5.4.3.2 Recommendation 2

Teachers should utilise visual organisers to highlight daily routines, as learners ought to be made aware of any changes in the routine ahead of time. Consistent routines and fixed classroom structures reduce anxiety, and is a key element in managing a learner's behavioural deficits.

5.4.3.3 Recommendation 3

When providing multi-step directions, teachers should pause between instructions and determine whether learners comprehend what was said. This may prevent a learner with ASD from becoming overwhelmed with information and resultant frustration, which precedes emotional meltdowns. Teachers should realise that their emotional responses will impact their learners positively or negatively. Teachers therefore have to acquire the habit of talking to the learner with ASD in a soft voice, which will assist the learner to understand what he is feeling.

5.4.3.4 Recommendation 4

Children with ASD suffer frequently from anxiety. Teachers could develop safety phrases that learners with ASD may use to express themselves, when they get confused or unsure what to do in a situation. These expressions could be shared with the peers in class, so that when the phrase is uttered, anyone would be able to offer assistance, or attract the attention of an adult who can assist.

5.5 CONCLUSION

The aim of this research was to study how teachers could use emotional intelligence to support learners with autism spectrum disorder in an inclusive classroom. This chapter concludes the research, first by means of summaries of various literature sources and the empirical research findings. Answers to the research questions were formulated, with recommendations then issued to the Department of Education, and to parents and teachers with children/learners with ASD in their households and classrooms.

The empirical findings highlighted the collective characteristics of individuals with ASD, and the familial and social implications – on emotional and financial levels – that may result from a family member being diagnosed with this neurodevelopmental disorder. It was enlightening but also alarming to realise the scale of actions required to assist learners with ASD to be able to adjust to and cope with society.

This study proved to be very stimulating as it allowed me to gain insight in the characteristics of emotionally intelligent teachers, and how these characteristics influence the behaviour of a learner with ASD. The study illuminated the role that EI play in the classroom, and how it influences the educational tone of the classroom. Emotional intelligence assists teachers in the following ways: designing lessons that utilise learners' strengths and abilities; establishing behavioural guidelines that promote intrinsic motivation; coaching learners to handle conflict situations; and to exhibit prosocial behaviour such as respectful and appropriate communication. I trust that these findings will contribute to the education and benefit of young learners with autism spectrum disorder.

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ANNEXURES

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7.1 – ANNEXURE A: PRINCIPAL CONSENT FORM

Dear Principal,

APPLICATION TO CONDUCT RESEARCH AT UNICA SCHOOL FOR AUTISM

I am a student at the Early Childhood Education Department at the University of Pretoria. I am currently busy with my Masters (Med) degree conducting a research project entitled: *Using emotional intelligence (EI) to support learner's with autistic spectrum disorder (ASD) in the Foundation Phase*.

The purpose of this study is to investigate how Foundation Phase teachers accommodate learners with autistic spectrum disorder (ASD).

The aforementioned study will include a multiple case study whereby two learners, their parent/s and the learners' respective teacher/s will be accepted as research participants.

The project will include the following activities:

- *Drawing:* The child will be asked to take part in one drawing activity over the course of a total of 3 school days. The learner will be requested to draw his/her teacher. Thereafter, the learner will be asked to discuss his/her drawing with the researcher. This activity will last approximately 30 minutes to 1 hour. The drawing will be collected and included in the research.
- *Observation*: The learner will be observed unobtrusively while he/she is conducting activities at the school over the course of a total of three school days. All behavioural patterns will be recorded in a journal which will be called "Field Notes".
- *Interviews*: Semi-constructed interviews will be conducted with the parent and teacher of the learners. Insight will be sought so as to find out what parents expect of teachers who teach their children with autistic spectrum disorder (ASD), in an inclusive classroom, and what the experiences are of Foundation Phase teachers with learners with autistic spectrum disorder (ASD) in the classroom. All semi-structured interviews will take place throughout the academic school day and will last approximately 20 minutes. All interviews will be recorded for transcription purposes later in the research.

The participation of the parent/s and teacher in this project is completely voluntary. In addition to your permission, the parent/s will also be asked if they would like to take part in this project. The teacher and the parent/s are free to withdraw from the project at any time and for whatever reason during the course of the research.

The information that is obtained during this research project will be kept strictly confidential and will not become a part of the child's school record. Any sharing or publication of the research results will not identify any of the research participants by name. Pseudonyms will be used in order to protect the identity of the parent/s and the teacher/s as well as the school.

Should you have any further questions or require additional information, please feel free to contact:

Laura du Plessis (Miss)
Lauralie1988@gmail.com

Please kindly indicate whether or not you would like UNICA School for Autism to participate in this project by completing the letter of consent, below.

Yours faithfully,

L du Plessis (Miss)	MG Steyn (Dr)
Principal researcher	Supervisor

INFORMED CONSENT FOR RESEARCH

I, principal of UNICA School, am aware of the research procedures for the study. I give permission for the study to take place at UNICA School and for the researcher to have contact with students at this research site.

_____

Print name

_____ _____

Signature Date

☐ I would like a copy of the results of this study (Please provide your email address/s, below).

_____

7.2 – ANNEXURE B: TEACHER CONSENT FORM

Dear Teacher,

APPLICATION TO CONDUCT RESEARCH WITHIN YOUR CLASSROOM

I am a student in the Department of Early Childhood Education at the University of Pretoria. I am currently busy with my Masters (MEd) degree conducting a research project entitled: *Using emotional intelligence (EI) to support learners with autistic spectrum disorder (ASD) in the Foundation Phase.*

The purpose of this study is to investigate how Foundation Phase teachers accommodate learners with autistic spectrum disorder (ASD) in their classrooms. The aforementioned study will include a case study which will involve one learner, their parent and the learners' respective teacher as research participants.

The project will include the following activities:

- *Drawing:* The child will be asked to take part in one drawing activity over the course of a total of 3 school days. The learner will be requested to draw his/her teacher. Thereafter, the learner will be asked to discuss his/her drawing with the researcher. This activity will last approximately 30 minutes to 1 hour. The drawing will be collected and included in the research.
- *Observation*: The learner will be observed unobtrusively while he/she is conducting activities in the classroom over the course of a total of three school days. All behavioural patterns will be recorded in a journal which will be called "Field Notes".
- *Interviews*: Semi-constructed interviews will be conducted with the parents and teachers of these learners. Insight will be sought so as to find out what parents expect of teachers who teach their children with autistic spectrum disorder, in an inclusive classroom, and what the experiences are of Foundation Phase teachers with learners with autistic spectrum disorder in the classroom. All semi-structured interviews will take place throughout the academic school day and will last approximately 30 minutes. All interviews will be recorded for transcription purposes later in the research.

The participation of the parent, teacher and the learner in this project is completely voluntary. In addition to your permission, the parent and the learner will also be asked if they would like to take part in this project. The project will be explained so that the learner can understand, and the learner will participate only if he or she is willing to do so. The teacher, the parent and the learner are free to withdraw from the project at any time and for whatever reason during the course of the research.

The information that is obtained during this research project will be kept strictly confidential. Any sharing or publication of the research results will not identify any of the research participants by name. Pseudonyms will be used in order to protect the identity of the parent/s, the learner, the teacher/s as well as the school.

Should you have any further questions or require additional information, please feel free to contact:

Laura du Plessis (Miss)
Lauralie1988@gmail.com

Please kindly indicate whether or not you would like UNICA School for Autism to participate in this project by completing the letter of consent, below.

Yours faithfully,

L du Plessis (Miss)	MG Steyn (Dr)
Principal researcher	Supervisor

INFORMED CONSENT FOR RESEARCH

I, the teacher of _____, have read the above information regarding this research study on *Using emotional intelligence (EI) to support learners with autistic spectrum disorder (ASD) in the Foundation Phase,* and consent to participate in this study.

_____

Print name

_____ _____

Signature Date

☐ I would like a copy of the results of this study. (Please provide your email address/s, below)

_____

7.3 – ANNEXURE C: PARENT CONSENT FORM

Dear Parent/s

I am a Foundation phase teacher but also a student at the Faculty of Education, Department of Early Childhood Education at the University of Pretoria. I am currently busy with my Masters (MEd) degree conducting a research project entitled: *Using emotional intelligence (EI) to support learners with autistic spectrum disorder (ASD) in the Foundation Phase.*

During the course of my literature review, I came across very interesting sources which indicate that learners with autistic spectrum disorder require exceptional teachers who should display specific characteristics. The focus of my study will therefore be on the teacher. You and your child are being invited to participate in the above research study. The purpose of this study is to investigate how Foundation Phase teachers may apply emotional intelligence when supporting a learner with autistic spectrum disorder in an inclusive classroom.

In order to obtain the necessary information, your child will be requested to make a drawing of his/her teacher. As children cannot always express themselves, verbally, research indicates that drawings can elicit more in depth information.

The aforementioned study will include:

- *Drawing:* Your child will be asked to take part in one drawing activity over the course of a total of three school days. Your child will be requested to draw his/her teacher. Thereafter, your child will be asked to discuss his/her drawing with the researcher. This activity will last approximately 30 minutes. The drawing will be collected and included in the research.
- *Observation*: I shall visit your child's class for a period of three days in order to observe the teacher, as well as the relationship between your child and the teacher. Your child will be observed unobtrusively while he/she is conducting activities at the school over the course of a total of 3 school days. All behavioural patterns will be recorded in a journal which will be called "Field Notes".
- *Interviews*: Semi-constructed interviews will be conducted with you as the parents so as to gain insight into the expectations you have of your child's teacher. All semi-structured interviews will take place at a time that is convenient for you. The interview will last approximately 30 minutes. Interviews will be recorded for transcription purposes later in the research.

The participation of you and your child is completely voluntary. In addition to your permission, your child will also be asked if he or she would like to take part in this project. The project will be explained so that your child can understand, and your child will participate only if he or she is willing to do so. Only those children who have parental permission and who want to participate will do so. The parent and the child are both free to withdraw from the project at any time and for whatever reason during the course of the research.

The information that is obtained during this research project will be kept strictly confidential and will not become a part of your child's school record. Any sharing or publication of the research results will not identify any of the research participants by name. Pseudonyms will be used in order to protect the identity of you, your child as well as the school.

Should you have any further questions or require additional information, please feel free to contact:

Laura du Plessis (Miss)
Lauralie1988@gmail.com

Please kindly indicate whether or not both you and your child would be willing to participate in this project by completing the letter of consent, below.

Yours faithfully,

_____	_____
L du Plessis (Miss)	MG Steyn (Dr)
Principal researcher	Supervisor

INFORMED CONSENT FOR RESEARCH

I, _____, parent of _____ hereby grant permission for both parent and child to take part as a research participant for the study entitled *Using emotional intelligence (EI) in supporting learners with autistic spectrum disorder (ASD) in the Foundation Phase*.

_____	_____
Signature	Print name
_____	_____
Printed Name of Child	Date

☐ I would like a copy of the results of this study.(Please provide your email address/s, below)

7.4 – ANNEXURE D: LEARNER CONSENT FORM

Dear learner,

My name is Laura du Plessis. I am a student at the University of Pretoria. Right now, I am trying to learn more about how teachers can help children to learn easier in the classroom. I want to ask you to draw a picture of your teacher, and then to talk about the picture to me.

You may be helping me to understand how teachers can help children to learn easier in the classroom. You will first get the chance to know me a little bit better as I will be visiting your classroom. If you agree to help me, I can promise you that I won't show anyone your picture, but I will include this in a book about my research. I will not tell anybody your name or your school's name. There are no right or wrong answers.

You are allowed to talk about this with your parents before you decide if you want to be in my project or not. Your parents will also be asked to be in this project too but even if your parents say "yes", you may still say "no" and decide not to be in the project. If you would not like to be a part of the project, you do not have to be. It will be completely up to you. No one is going to be upset with you if you don't want to be in the study. It will also be alright if you decide to stop being in the project even after we have started with it.

You will be welcome to ask questions during the project. If you have any questions about the project later on, you are always welcome to phone me or ask your teacher or even your parents.

Would you like to draw a picture of your teacher and talk about it with me?

If you decide to be a part of the research, you can sign your name on the next page. If you sign your name on the next page, it means that you agree to take part in this project. You are welcome to change your mind any time for any reason.

Yours faithfully,

_____	_____
L du Plessis (Miss)	MG Steyn (Dr)
Principal researcher	Supervisor

INFORMED CONSENT FOR RESEARCH

_____ _____

Printed name and surname Date

I have explained this study to _____ and answered any questions he/she had had to ask. I have informed _____ that he or she can stop the project at any time and can ask questions at any time. From my observations, the child seemed to understand and agreed to take part in the project.

7.5 – ANNEXURE E: PARENT INTERVIEW QUESTIONS

What characteristics should a teacher have to firstly accommodate and then support your child's emotional and social needs?

What is your experience of being a parent with a child/children with Autistic Spectrum Disorder (ASD)? What are some of the challenges that you face?

7.6 – ANNEXURE F: TEACHER INTERVIEW QUESTIONS

What training/credentials/degree have you completed in order to make you so good at teaching learners with Autistic Spectrum Disorder (ASD)?

What behaviour challenges do you experience with learners with Autistic Spectrum Disorder (ASD) in your classroom?

What, in your opinion, are some of the characteristics that teachers should have when teaching learners with Autistic Spectrum Disorder (ASD)?

How important is the relationship between you (the teacher) and the parents of the child with Autistic Spectrum Disorder (ASD)?

What support do you receive from the Government/DBST/other schools in developing your training to support such learners?

Do you receive any resources/training/funding in your attempt to support learners with Autistic Spectrum Disorder?

What advice can you give to young teachers who have learners with Autistic Spectrum Disorder (ASD) in their class?

7.7 – ANNEXURE G: PARENT NARRATIVE QUESTIONS

At what age were your two sons diagnosed with autistic spectrum disorder?

Do they experience any other sort of comorbid disorders with these diagnoses? Do your sons require any medication?

What is your experience of being a parent with two son's that have been diagnosed with Autistic Spectrum Disorder? What are some of the challenges that you face?

How are your family patterns of interaction? Are your son's close with one another? Do they open up to you? How do you cope with the challenges of these interactions?

Do you receive a lot of support from the community?

Do you find your relationship with your son's teachers a necessity? How would you describe this relationship? Do you, as parent, receive any support from your son's teachers?

What characteristics should a teacher have to firstly accommodate and then support your child's emotional and social needs?

Have any accommodations been put in place at school for them to be able to cope with the demands of their school career?

Is the curriculum accessible to your sons?

Does the school get any remuneration for support services rendered to your children?
